

## **LIFE INSURANCE AND ANNUITIES (A) COMMITTEE**

Life Insurance and Annuities (A) Committee April 7, 2022, Minutes

Accelerated Underwriting (A) Working Group March 24, 2022, Minutes (Attachment One)

Accelerated Underwriting (A) Working Group Feb. 23, 2022 (Attachment One-A)

Accelerated Underwriting Educational Paper Draft Jan. 25, 2022 (Attachment One-A-1)

Accelerated Underwriting Educational Paper Draft Mar. 4, 2022 (Attachment Two)

## Draft Pending Adoption

Draft: 4/12/22

Life Insurance and Annuities (A) Committee  
Kansas City, Missouri  
April 7, 2022

The Life Insurance and Annuities (A) Committee met in Kansas City, MO, April 7, 2022. The following Committee members participated: Judith L. French, Chair, and Peter Weber (OH); Carter Lawrence, Vice Chair (TN); Jim L. Ridling (AL); Karima M. Woods represented by Philip Barlow (DC); Colin M. Hayashida represented by Melissa Hamada (HI); Doug Ommen (IA); Vicki Schmidt (KS); Marlene Caride (NJ); Barbara D. Richardson (NV); Adrienne A. Harris represented My Chi To (NY); Cassie Brown and Mike Boerner (TX); Scott A. White and Craig Chupp (VA); and Nathan Houdek (WI). Also participating was: Fred Andersen (MN).

### 1. Adopted its 2021 Fall National Meeting Minutes

Commissioner White made a motion, seconded by Commissioner Caride, to adopt the Committee's Dec. 15, 2021, minutes (*see NAIC Proceedings – Fall 2021, Life Insurance and Annuities (A) Committee*). The motion passed unanimously.

### 2. Adopted the Report of the Accelerated Underwriting (A) Working Group and the March 4 Draft *Accelerated Underwriting in Life Insurance Educational Report*

Commissioner Arnold gave the report of the Accelerated Underwriting (A) Working Group. She said the Working Group met Feb. 23 and March 24 in lieu of meeting at the Spring National Meeting. She explained that during each meeting, the Working Group reviewed the most recent draft of the *Accelerated Underwriting in Life Insurance Educational Report*, and stakeholders were given an opportunity to highlight their comments. She said the Working Group unanimously adopted the March 4 draft of the Educational Report during its March 24 meeting.

Commissioner Arnold explained that the Educational Report started with an outline exposed for public comment in late 2020. She said an ad hoc group made up of six or so state insurance regulators convened to draft the Educational Report and synthesize comments that were incorporated into subsequent drafts. She explained that starting with the outline, sections of the report were completed and released for comment, with each set of comments incorporated into the next exposure draft. She said stakeholders had many opportunities to comment as the paper was developed, which included the ability to comment on previous sections in light of later sections. She explained that the first section of the report was exposed for comment in May 2021, additional sections were exposed in July 2021, the entire paper was exposed for comment in November 2021, and a revised draft was exposed for comment in January. The March 4 draft was exposed for a final two-week comment period to identify any novel issues or errors of fact, and it was adopted by the Working Group on March 24.

Commissioner Arnold said the Working Group made every effort to keep this document narrowly focused on accelerated underwriting in life insurance, recognizing that there are a lot of other groups at the NAIC working on related issues, including the Innovation, Cybersecurity, and Technology (H) Committee and several of its working groups. She explained that the Educational Report is intended to impart information gathered by the Working Group through presentations. It identifies issues and makes broad recommendations, largely following the lead of the NAIC Principles on Artificial Intelligence. Commissioner Arnold emphasized that the Working Group does not envision this Educational Report being the final word on accelerated underwriting in life insurance, rather it provides a solid start.

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Ms. To asked for more information about what the Working Group plans to do next, specifically whether it plans to address the questions forwarded by Birny Birnbaum (Center for Economic Justice—CEJ) during the Feb. 23 meeting. Commissioner Arnold said she envisions the Working Group working on regulatory guidance, which it can accomplish under its current charge. She said there will be a need to coordinate and be consistent with the efforts of the other groups working on similar issues, particularly the Innovation, Cybersecurity, and Technology (H) Committee and its work on algorithmic auditing. She said there is a specific need for guidance for state insurance regulators with respect to accelerated underwriting in life insurance, and she envisions the development of specific questions states could ask and approaches to take.

Mr. Birnbaum said he participated, along with Brendan Bridgeland (Center for Insurance Research—CIR) and Peter Kochenburger (University of Connecticut School of Law), and he did not think the Educational Paper was particularly good. He said it did not say anything other than watch out for unfair discrimination, which is so obvious and vague it is almost not worth mentioning. He encouraged the Working Group to work on specific guidance for the use of accelerated underwriting. He gave a couple of examples of specific guidance he would like to see. He mentioned that consumer protections in place for the use of credit information in home and auto insurance should be extended to life insurance. He also said the use of facial analytics is known to be biased against people of color in law enforcement and should be targeted for regulatory review if it is used in accelerated underwriting. Mr. Kochenburger said he agrees with Mr. Birnbaum and would like to see specific recommendations around transparency, which the Educational Report rightly highlights as a recommendation. He said specific guidance for state insurance regulators, consumer, and industry about what transparency means and how it is to be accomplished in the context of increasingly sophisticated models and without special expertise is the kind of specific recommendation that he would welcome from the Working Group.

Commissioner Houdek made a motion, seconded by Commissioner Lawrence, to adopt the report of the Accelerated Underwriting (A) Working Group, including its March 24 (Attachment One) and Feb. 23 (Attachment One-A) minutes, as well as the March 4 draft *Accelerated Underwriting in Life Insurance Educational Report* (Attachment Two). The motion passed with New York abstaining.

### 3. Heard a Federal Update on the Implications of the DOL Fiduciary Rule

Brooke Stringer (NAIC) explained that the U.S. Department of Labor (DOL) indicated that it is planning to work on a revised Fiduciary Rule for retirement advice, and the Government Relations (EX) Leadership Committee is interested in feedback from the Life Insurance and Annuities (A) Committee and its stakeholders.

Ms. Stringer said state insurance regulators, the DOL, the U.S. Securities and Exchange Commission (SEC), and the Financial Industry Regulatory Authority (FINRA) all have a role in the administration and enforcement of standards for retirement plans and products within their jurisdiction. She said depending on the financial products offered and the financial services provided, an insurance agent could be subject to overlapping regulations at the state and federal level, particularly if they work with products or provide services related to 401(k) plans covered by the federal Employee Retirement Income Security Act of 1974 (ERISA). She said it is anticipated that the DOL will soon unveil a new Fiduciary Rule for retirement advice this spring.

Ms. Stringer explained that the DOL started its work on a Fiduciary Rule in 2010, which was withdrawn. Then, the Obama administration proposed and finalized a Fiduciary Rule for retirement plans. In that rule, the definition of fiduciary required that retirement advisors act in the best interests of their clients and put their clients' interests above their own. The NAIC has not taken a position on that Fiduciary Rule, but it submitted two comment letters over the years that were included in the meeting materials.

Ms. Stringer explained that in 2018, the U.S. Court of Appeals for the Fifth Circuit vacated the Obama administration's Fiduciary Rule for retirement advice. She said in 2020, the Trump administration released its own

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proposed rule. That new rule included exemptions to fiduciary conduct if providers adhered to “impartial conduct standards” modeled after the SEC’s Regulation Best Interest. The Trump administration rule was supposed to go into effect in 2021, but the Biden administration delayed enforcement through early 2022.

Ms. Stringer said since last year, the DOL has indicated that further guidance would be forthcoming, and the potential for further rulemaking was included on its regulatory agenda. She said the NAIC does not know specifics, but it believes the DOL guidance is likely to revisit the definition of fiduciary, along with potential additional changes to the existing prohibited transaction exemptions.

Patrick C. Reeder (American Council of Life Insurers—ACLI) said a fiduciary standard is not a bad standard, and it is an appropriate legal standard for situations where there is an ongoing relationship providing financial advice. He said the problem with the DOL proposal is that it is a fiduciary-only approach, which would eliminate commission-based sales; i.e., the way that lower and mid-range clients buy products. He said the DOL should recognize the changes that have taken place since 2017. He said both the SEC’s Regulation Best Interest standard and the NAIC best interest revisions to the *Suitability in Annuity Transactions Model Regulation* (#275) provide a strong standard of care that is vigorously enforced. He said state insurance regulators have a strong story to tell, and the DOL needs to hear from the NAIC.

Jason Berkowitz (Insured Retirement Institute—IRI) said the states have done a great job adopting the best interest revisions to Model #275. He said a fiduciary relationship is appropriate when there is a special relationship of trust and confidence. He said the best interest standards emulate the fiduciary standard but ensure that the small and mid-sized savers are not disadvantaged. He said he does not agree with assertions that annuity suitability is not robust, and he said the regulatory environment has changed. He encouraged the NAIC to reach out to the DOL and to report how things are working.

Micah Hauptman (Consumer Federation of America—CFA) said there are gaps in the current regulatory framework. He said he does not believe consumers’ reasonable expectations are being met. He said the DOL should require a fiduciary duty, regardless of what products are being sold or how they are being sold. He said consumers all expect and deserve high quality advice without the taint of conflicts of interest.

#### 4. Adopted the Report of the Life Actuarial (A) Task Force

Mr. Boerner said the report of the Life Actuarial (A) Task Force was included in the materials, but he is going to highlight three of the efforts going on at the Task Force. He said the first topic was the economic scenario generator (ESG). In 2017, the American Academy of Actuaries (Academy) informed the Task Force that it did not have the resources to continue to maintain the prescribed ESG. He said the need for a replacement ESG was further heightened in 2019 when the Financial Stability (E) Task Force noted a potential deficiency in the prescribed ESGs related to a limited reflection of extended periods of low and even negative interest rates. At that time, the Financial Stability (E) Task Force requested that the Valuation Analysis (E) Working Group assess the macroprudential risk to insurance organizations in the U.S. with a focus on variable annuity writers.

In July 2019, the Life Actuarial (A) Task Force and the Life Risk-Based Capital (E) Working Group requested that NAIC staff consider issuing a Request for Proposal (RFP) for a vendor to build and maintain a new ESG to be used in the determination of statutory reserves and capital. Mr. Boerner said development of this RFP included extensive work with state insurance regulators and ESG subject matter experts (SMEs) from the life insurance industry. He said the NAIC issued the RFP in March 2020. Six companies submitted proposals, and Conning was selected as the ESG vendor and approved by the Executive (EX) Committee in September 2020.

After the contract with Conning was in place, state insurance regulators worked in ESG Drafting Group calls with Conning, NAIC staff, and industry SMEs. He said there were weekly calls over most of the past year to develop

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recommendations to the Task Force and the Working Group for a June field test. He said these recommendations relate to scenarios from a Treasury model, scenarios from an Equity model, and scenarios from a Corporate Bond model.

Mr. Boerner explained that some of the significant collaborative work over this past year includes: 1) development of acceptance criteria for the Treasury model, which included statistics and input from SMEs; 2) development of scenarios by Conning for an alternative Treasury calibration requested by SMEs. These scenarios are included as one of the proposed Treasury models to field test; and 3) work performed by Conning to alter the international equity indices, as requested by SMEs, to align the fund's expected returns on a risk/reward basis relative to the U.S. large cap fund for the Equity model.

Mr. Boerner also said another example of the collaborative work is the plans for Conning to work on the development of a Simplified Corporate Bond model, which is requested by SMEs to have full transparency for this model. While Conning's Corporate Bond model reproduces key dynamics of bond returns, some of the information in their model is proprietary. Given the amount of work needed to develop this Simplified Corporate Bond model, it will not be available for the June field test, and the Conning Corporate Bond model will be used instead. However, the intent is for the Simplified Corporate Bond model to have similar scenarios to the Conning Corporate Bond model so the use of the Conning model will be relevant for this June field test.

Mr. Boerner said weekly ESG Field Test calls have now replaced the weekly ESG Drafting Group calls to expedite preparation for the June field test. These calls continue to have industry SME representation. He said achieving the June field test is very important to help determine the impact on industry reserves and capital and help state insurance regulators understand the materiality of technical issues brought up by the industry SMEs. He said there are other weekly ESG planning calls, which include ACLI and Academy representation to support planning for future efforts and calls of the ESG initiative. He said joint Task Force and Working Group calls will also continue. He said the upcoming April 14 joint call will include discussion of comments requested on an exposure regarding models proposed for the June field test.

Mr. Boerner said some key next steps prior to the ESG June Field Test include: 1) any refinement of the recommended ESG models for field testing; 2) building out field test specifications, instructions for participants, and a results template; 3) determining the final set of field test participants and field test product coverage; and 4) preparing the necessary scenario sets for delivery to field test participants.

Mr. Boerner said next steps after the June field test include: 1) analysis of the field test results; 2) adjustments of ESG models, as appropriate; 3) development of the Simplified Corporate Bond model, as mentioned previously; and 4) planning for a field test early next year of expected adjustments to models.

Mr. Andersen gave an update on the Asset Adequacy Testing Actuarial Guideline. He said the Asset Adequacy Testing Actuarial Guideline was part of a coordinated NAIC effort regarding the oversight of the increase in private equity and complex assets in the life insurance industry. He explained that the Task Force is focused on aspects related to reserve adequacy, and it is working to help ensure life insurers involved in complex assets will be able to pay claims even if those assets do not perform as expected.

Mr. Andersen said the Task Force met March 31 to discuss comments on a first draft of an actuarial guideline that would provide documentation and sensitivity testing requirements on life insurers engaged in such activity. He said he expects that a guideline will be adopted by the NAIC at the Summer National meeting. He explained that partly due to the aggressive timeframe, some of the more controversial aspects that were in the first draft, including application of guardrails that could directly affect the financials of some insurers, will likely be deferred to later discussions that are not part of the aggressive 2022 time frame.

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Mr. Andersen explained that the resulting documentation and sensitivity tests that will likely be included in the 2022 guideline adoption will provide information to state insurance regulators, including: 1) analysis of the risks of the complex assets; 2) details underlying the assumptions on how those assets will perform; 3) expectations on the sophistication of the company models matching the complexity of the assets; and 4) assurance that any counterparty risk related to reinsurance deals are considered and documented. He said he anticipates movement to turn the first draft into a final draft that is ready for adoption over the next several weeks. He said Committee members should follow the activities of the Task Force if they are interested in the topic.

Mr. Weber gave an update on the Indexed-Linked Variable Annuity Actuarial Guideline. He explained that in the summer of 2021, the Life Insurance and Annuities (A) Committee directed the Task Force to set up a subgroup to study index-linked variable annuities (ILVAs) with the charge to: “Provide recommendations and changes, as appropriate, to nonforfeiture, or interim value requirements related to index-linked variable annuities.”

Mr. Weber explained that ILVAs, also known as registered index-linked annuities (RILAs), have become very popular over the past five to 10 years. He said they fill a space in the market in between fixed indexed annuities and traditional variable annuities. He said ILVAs are filed in the states as variable annuity products and are exempted from the *Standard Nonforfeiture Law for Individual Deferred Annuities* (#805). He said the main issue the Subgroup is trying to address is that if a product is exempted from the consumer protection of nonforfeiture requirements as a variable product, then it must behave like a variable product. It is important that values provided at surrender of an ILVA are consistent with how a variable product provides surrender values. Mr. Weber said to that end, the Subgroup exposed a proposed actuarial guideline in November 2021. He said many comments were received and incorporated into a second draft exposed April 1 for a 30-day public comment period.

Mr. Birnbaum said indexed universal life (IUL) insurers are using unrealistic crediting rates with unrealistic expectations. He said state insurance regulators tried to reign them in, most recently with Actuarial Guideline XLIX—The Application of the Life Illustrations Model Regulation to Policies With Index-Based Interest (AG 49) and then Actuarial Guideline XLIX-A—*The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest to Policies Sold On or After December 14, 2020* (AG 49-A), but insurers continue to game the system and illustrate unrealistic and deceptive policy accumulations. He said these discreet fixes are not solving the problem. He said the problem is the illustrations; they do not show risk. He said annuity illustrations requirements do not cap crediting rates, so insurers turn to bespoke indexes created by investment banks by data mining historical experience to falsely present potential future earnings. He said some illustrations show investment returns higher than the cost of a loan, which falsely suggest that it makes sense for people to borrow money to invest in life insurance products. He said insurance producers become de facto investment advisors. He said the Committee needs to address illustrations and engage experts in consumer disclosures to address these issues.

Mr. Boerner made a motion, seconded by Mr. Chupp, to adopt the report of the Life Actuarial (A) Task Force. The motion passed unanimously.

### 5. Discussed Next Steps for the Life Insurance Online Guide (A) Working Group

Director French gave a brief history of the Life Insurance Online Guide (A) Working Group. She explained that the Working Group initially considered developing an online resource that could allow for a deep dive into complex content in a way that would not be possible in paper format. She also said the Working Group struggled with how best to structure the content, as well as how it might look and function.

Director French said the idea of a decision tree came up, but while a decision tree could be a great in theory, it is, for several reasons, beyond the scope of what the Working Group or even the NAIC can undertake. She said her goal is to come up with something achievable.

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Director French explained that the details about life insurance are state-specific. She also said the NAIC is not where people are going to go to find out about life insurance, nor can the NAIC provide any advice about what life insurance to purchase. She said people need to go to their state or an insurance producer.

Director French asked Laura Kane (NAIC) to give an overview of what is on the NAIC website. She explained that information about what is currently on the NAIC website will enable the Committee to better consider what content should be added to the website and what the Working Group can reasonably achieve under its charge.

Ms. Kane gave an overview of the statistics collected for the life insurance pages on the NAIC website. She said there have been 23,147 unique page views over the past year. She explained the breakdown of the percentage of those who viewed the pages. She said 13% were age 18–24, 21% were age 25–34, 23% were age 35–44, 20% were age 45–54, 13% were age 55–64, and 10% were age 65 or older. Of those, the 23% that were age 35–44 spent the most time on page, the 13% that were age 18–24 spent the second-most amount of time, and the 10% who were age 65 or older spent the least amount of time.

Ms. Kane explained that the purpose of the consumer pages is to: 1) educate consumers about the purpose of each insurance type; 2) guide consumers to know what to ask a licensed agent; 3) remind consumers to check their state’s department of insurance (DOI) website to confirm that the agent and the company are licensed in the state; and 4) let consumers know their state DOI is there to help with any questions or issues. She summarized the information that is on the web pages and identified information that she found on some other DOI websites that might be good to consider including on the NAIC website. For example, Kansas has good shopping tips, Nevada has a good “Understand the products you are buying” section, New York has a good statement of purpose around life insurance, and Texas has a good chart comparing the major types of life insurance. Ms. Kane mentioned that the NAIC could consider linking to a glossary of terms, as well as translating the Buyers Guide to Spanish and other languages.

Director French asked for volunteers to work with her staff and Ms. Kane to participate on the Working Group to update the NAIC web pages on life insurance.

### 6. Heard an Update on Workstream Four of the Special (EX) Committee on Race and Insurance

Director French updated the Committee on Workstream Four of the Special (EX) Committee on Race and Insurance. She explained that she is the Workstream Four co-chair, along with Commissioner Caride. She said the Workstream will be focusing its efforts on the marketing, distribution, and access to life insurance products in minority communities, including the role that financial literacy plays. She said the plan is to schedule some presentations focusing on this issue.

Having no further business, the Life Insurance and Annuities (A) Committee adjourned.

SharePoint/NAIC Support Staff Hub/Member Meetings/2022 Spring National Meeting/Life Insurance and Annuities (A) Committee/04-min

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4/7/22

Draft: 3/30/22

Accelerated Underwriting (A) Working Group  
Virtual Meeting (*in lieu of meeting at the 2022 Spring National Meeting*)  
March 24, 2022

The Accelerated Underwriting (A) Working Group of the Life Insurance and Annuities (A) Committee met March 24, 2022. The following Working Group members participated: Grace Arnold, Chair (MN); Nathan Houdek, Vice Chair (WI); Jason Lapham (CO); Russ Gibson (IA); Cynthia Amann (MO); Chris Aufenthie (ND); Lori Barron (OH); and David Hippen (WA).

1. Adopted its Feb. 23 Minutes

Commissioner Arnold said the first agenda item was to adopt the Accelerated Underwriting (A) Working Group's Feb. 23 meeting minutes. During this meeting, the Working Group reviewed comments on the Jan. 25 draft of the accelerated underwriting (AU) in life insurance educational report.

Ms. Amann made a motion, seconded by Mr. Aufenthie, to adopt the Working Group's Feb. 23 minutes (Attachment One-A).

2. Discussed Comments Received on the March 4 Draft of the AU in Life Insurance Educational Report

Commissioner Arnold reminded the Working Group that during its Feb. 23 meeting, the Working Group discussed comments on the Jan. 25 draft of the AU in life insurance educational report. As a result of the comments received on the Jan. 25 draft and the discussions during the Feb. 23 meeting, the report was revised, and the March 4 draft was exposed for a 14-day public comment period ending March 18. Commissioner Arnold said that several interested parties had submitted written comments on the March 4 draft, which are posted on the Working Group's web page.

a. University of Georgia

Brenda J. Cude (University of Georgia) briefly summarized her comment letter. She said that she is concerned that the paper makes no mention of the great need for consumer information and education about AU, yet the paper indirectly makes the case for the need to inform and educate consumers on this topic. She said, at a minimum, she would like the Working Group to consider a charge for the future that could involve creating some language that state insurance departments could use to inform and educate consumers. She also said that these materials could be useful for other educators, as well to help consumers understand this topic. She said she envisions a Working Group similar to the Consumer Information (B) Subgroup to work on consumer-facing materials.

b. ACLI

David Leifer (American Council of Life Insurers—ACLI) briefly summarized the ACLI comments. He said that the ACLI had some minor language suggestions to the paper. He explained that one suggestion was to repeat the language within the definition of AU that says "which may include the use of non-traditional, non-medical data" to other places in the paper where it is not explicitly included.

c. Academy

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Sue Bartholf (American Academy of Actuaries—Academy) said that the Academy’s Life Underwriting and Risk Classification Work Group has been following the work of this Working Group and appreciates that this paper is a high-level synthesis of the presentations provided to the Working Group. She said that the Academy remains concerned that because it is a summary, it does not necessarily capture all of the variations in accelerating underwriting and the different perspectives of those commenting. She said that given that this paper has the potential to become a resource for policymakers, regulators, and others, the Academy has submitted the following language for inclusion in the opening paragraph to explicitly call out the limitations of the paper:

*This paper is a high-level summary of the comments provided to and work done by the Accelerated Underwriting (A) Working Group. It is not intended to be a comprehensive document and does not address all the differences and nuances of accelerated underwriting programs or all underwriting practices used by life insurers. It is a point-in-time paper of the rapidly evolving underwriting process.*

Commissioner Arnold said she appreciates the Academy’s comments and that there are a number of places in the paper that contextualize the information as being representative of this point in time. She said that the Working Group understands that these processes are evolving.

d. Pilotbird

Evgeny Aleksandrov (Pilotbird) said he had submitted comments suggesting that the potential benefits of AU to consumers should have more emphasis in the paper.

e. CEJ

Birny Birnbaum (Center for Economic Justice—CEJ) said that the draft report did not fulfill its charge to “[c]onsider the use of external data and data analytics in accelerated life underwriting, including consideration of the ongoing work of the Life Actuarial (A) Task Force on the issue and, if appropriate, drafting guidance for the states.” He said the definition in the paper does not focus on external data; rather, it incorrectly says that AU may include nontraditional, non-medical data, when that is in fact the distinguishing feature of AU. He said that if all insurers were doing was applying machine learning (ML) and artificial intelligence (AI) to traditional medical data, that would represent an evolution—not the revolution he is seeing.

Mr. Birnbaum also said the report offers no guidance to the states and references only that states and regulators should be guided by current law related to fair trade practices and unfair discrimination and develop and update relevant laws to adapt to developing practices to avoid unfair trade practices and unfair discriminatory practices. He said these statements suggest that no specific guidance, authorities, or resources are needed. He said the report is six years too late to be meaningful or useful. He said the report represents a lack of insight after six years of study. He recommended the Working Group discard the report and refocus efforts on addressing its charge.

Mr. Birnbaum asked for feedback regarding the Working Group’s thinking with respect to the comments he submitted in the form of questions at the last national meeting. He said that the Working Group has not been transparent in its decision-making. He asked why, in particular, the Working Group was not recommending that states apply the same requirements they apply to consumer credit information.

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Commissioner Arnold said that the Working Group hopes, as its next work product, to develop regulatory guidance that builds on the report. She said that the drafting group did discuss Mr. Birnbaum's comments and will likely have future conversations that Mr. Birnbaum is welcome to participate in as it considers what is feasible with current resources.

f. University of Connecticut School of Law

Peter Kochenburger (University of Connecticut School of Law) said he understands that the paper is not likely to be abandoned, but he said he is interested in the reasoning behind why some of Mr. Birnbaum's comments were not included in the paper. He said he is pleased to hear the work is going to continue and asked about the process and whether there was a timeline.

Commissioner Arnold said she anticipates that if the Life Insurance and Annuities (A) Committee adopts the Report, there would then be a discussion of next steps for the Working Group at the Life Insurance and Annuities (A) Committee meeting at the Spring National Meeting. She anticipated that next steps would include work for the remainder of this year.

3. Adopted the March 4 Draft of the AU in Life Insurance Educational Report

Commissioner Arnold said that she appreciates all the comments, but the Working Group is not planning to make any additional changes to the paper.

Ms. Amann made a motion, seconded by Commissioner Houdek, to adopt the March 5 draft of the AU in life insurance educational report (Attachment Two). The motion passed unanimously.

Commissioner Arnold said that the plan is to have the paper go through a final editorial review to fix any grammatical or typographical errors. The Life Insurance and Annuities (A) Committee will consider the paper for adoption at the upcoming Spring National Meeting. Once adopted, it will become a Committee work product, be part of the NAIC *Proceedings*, and posted on the Life Insurance and Annuities (A) Committee page.

Having no further business, the Accelerated Underwriting (A) Working Group adjourned.

SharePoint/NAIC Support Staff Hub/Member Meetings/ 2022 National Meetings/Spring National Meeting/Life Insurance and Annuities (A) Committee/AUWG/AUWG 3-24-22 minutes final.docx

Draft: 3/15/22

Accelerated Underwriting (A) Working Group  
Virtual Meeting  
February 23, 2022

The Accelerated Underwriting (A) Working Group of the Life Insurance and Annuities (A) Committee met Feb. 23, 2022. The following Working Group members participated: Grace Arnold, Chair (MN); Nathan Houdek, Vice Chair (WI); Jason Lapham (CO); Russ Gibson (IA); Cynthia Amann (MO); Chris Aufenthie (ND); Lori Barron (OH); and Lichiou Lee (WA).

1. Discussed Comments Received on the Jan. 25 Draft Accelerated Underwriting in Life Insurance Educational Report

Commissioner Arnold explained that she will be chairing the Working Group in 2022 along with Commissioner Houdek as vice chair. She reminded the Working Group that it last met Dec. 6, 2021, to discuss the Nov. 8, 2021, draft Accelerated Underwriting in Life Insurance Educational Report. As a result of the comments received on the Nov. 8, 2021, draft and the discussions during the Dec. 6, 2021, call, the report was revised; and the Jan. 25 draft Accelerated Underwriting in Life Insurance Educational Report (Attachment One-A-1) was exposed for a public comment period ending Feb 11. Commissioner Arnold explained that the purpose of the virtual meeting today is to discuss comments received on the latest draft.

a. Academy Comment

Linda Lankowski (American Academy of Actuaries—Academy) explained that the Life Underwriting and Risk Classification Work Group of the Academy submitted a comment letter on the Jan. 25 draft Accelerated Underwriting in Life Insurance Educational Report. She highlighted a couple of main points that are raised in the Academy comment letter. She explained that the revisions made to the footnote in the report involving Actuarial Standard of Practice (ASOP) No. 12 need some additional revisions. She explained that the bullet point referencing ASOP No. 12 describes a practice that would not be allowed under ASOP No. 12. The letter suggests revising the current bullet that says, “Non-traditional data may be used to predict mortality, but the actual or reasonably anticipated experience may not correlate to risk of insurance loss” to say, “In accordance with ASOP No. 12, an actuary needs to demonstrate that a relationship between a risk characteristic and an expected outcome exists. This standard applies for any data used, traditional or non-traditional.” Ms. Lankowski also mentioned that not all accelerated underwriting (AU) programs are discussed with actuaries and data scientists, and underwriters do not have standards of practice like actuaries do.

Ms. Lankowski said the Academy comment letter reiterates a couple of points included in the Academy’s previous letter regarding recommendations that indicate that they refer to state insurance regulators’ and form reviewers’ current responsibilities when they would actually be new requirements. She also said this paper, and the definition in particular, is likely to be used in other contexts, and it is particularly important to get it right. She said AU uses traditional and non-traditional data, and the definition of AU needs to accurately reflect that.

b. ACLI Comment

David Leifer (American Council of Life Insurers—ACLI) gave some brief highlights of the ACLI comment letter. He said the comment letter suggests having a more thorough discussion of traditional underwriting before turning to AU and comparing the two.

Mr. Leifer also mentioned that the ACLI continues to have concerns about the definition of AU in life insurance included in the most recent draft of the report. He explained that the ACLI believes that this definition will be used by other groups and in other contexts, which makes its accuracy particularly important. He said the following definition in the Jan. 25 draft is a little too broad:

Accelerated underwriting is life insurers' use of big data, artificial intelligence and machine learning to underwrite life insurance in an expedited manner. For example, a process to replace traditional underwriting and allow some applications to have certain medical requirements, e.g., paramedical exams and fluid collection, waived. What distinguishes accelerated underwriting from traditional life insurance underwriting is the use of non-traditional, non-medical data using predictive models or machine learning.

Mr. Leifer said the ACLI is concerned that this definition may bring in things that are not commonly understood to be AU. He said the ACLI prefers the definition in the Nov. 8, 2021, draft, with a very minor tweak, to the version in the current draft, which would read:

Accelerated underwriting in life insurance is a process to replace traditional underwriting and allow some applications to have certain medical requirements, e.g., paramedical exams and fluid collection, waived. The process generally uses predictive models or machine learning algorithms to analyze data pertaining to the applicant, which may includes both traditional and non-traditional underwriting data provided by the applicant directly, as well as data obtained through external sources.

Commissioner Arnold asked for the ACLI to share the specific things the current definition of AU may include that it should not. She explained that one of the challenges in drafting a definition of AU is that there does not appear to be a common understanding of what AU is or how it is used in practice, so specifics regarding what the ACLI sees as the practical implication of the current definition would be helpful. Mr. Leifer said he would share specifics with Jennifer R. Cook (NAIC) following the meeting.

c. CEJ Comments

Birny Birnbaum (Center for Economic Justice—CEJ) opposed the ACLI proposal to return to the Nov. 8, 2021, definition of AU. He said the ACLI proposal does not define what AU is but rather addresses the purpose of AU. He disagreed with the ACLI comment that the Jan. 25 definition is overly broad. He said the Nov. 8, 2021, definition is not useful in the context of educating state insurance regulators and stakeholders about AU to find a basis for recommendations for insurers and state insurance regulators regarding the use of AU. He said the proposed definition serves no purpose other than to promote AU. He said the proposed ACLI definition fails to identify the key distinguishing factors between traditional underwriting and AU, which is the use of new sources of data intended to be used with predictive modeling.

Mr. Birnbaum asked why the Working Group is not making recommendations based on its research. He said state insurance regulators need to improve their capabilities and authorities to address some of the issues that have arisen with AU in the same way that state insurance regulators who work on homeowners and auto insurance have said they need new authorities and resources. He posed the following questions to understand the Working Group's thinking and start a discussion:

1. Why are you not recommending that states apply the same requirements for the use of consumer credit information in life insurance as those found for personal auto and homeowners, including filing of models for review and limitations on certain types of consumer data, such as medical debt?

2. Why are you not recommending that states routinely require life insurers to report the sources and uses of non-medical information in underwriting so state insurance regulators, and policymakers, stay current on insurer practices?
3. Why are you not recommending that states require life insurers to file AU models with state insurance regulators for review prior to use?
4. Why have you not identified the use of biometric information as a topic of particular concern given the racial bias in facial recognition and other biometric tools? As a corollary, why have you not discussed the Illinois Biometric Information Privacy Act (BIPA) as a model for consumer protection regarding insurers' collection, use, and handling of biometric information?
5. Why are you not recommending that the NAIC expand the scope of its algorithmic assessment resource to include the review of AU models?
6. Why are you not recommending a requirement for insurers to test their AU models for racial bias, particularly given the industry's history of race-based pricing and the racial bias found in various types of non-traditional data?
7. Why are you not recommending that at least the federal Fair Credit Reporting Act (FCRA) consumer protections—i.e., disclosure, access, error correction, recalculation—be applied to all data sources used in AU?
8. Why are you not recommending robust data collection to enable state insurance regulators to examine how insurers' use of AU affects the availability and affordability of insurance, particularly in traditionally underserved communities and markets?
9. Why are you not recommending new training for state market conduct personnel regarding oversight of insurers' AU practices? As a corollary, why are you not recommending that the Market Conduct Examination Guidelines (D) Working Group develop standards and procedures for the market conduct examinations you suggest related to AU?
10. Finally, what is the basis for your conclusion that existing authorities and resources are sufficient for consumer protection?

Commissioner Arnold said the questions Mr. Birnbaum posed provide the Working Group with a lot to consider with respect to future work. She reiterated that the educational paper was purposefully narrowly focused on the current state and making basic recommendations. She said the Working Group hopes to get additional information from the Big Data and Artificial Intelligence (H) Working Group survey looking into AU in life insurance, which would provide some additional information for the Accelerated Underwriting (A) Working Group and inform future work.

Mr. Birnbaum said he has been struck by the movement of this issue around to different working groups within the NAIC, and he asked the Working Group, as the subject matter experts (SMEs), to address the issue of AU in life insurance. He also asked the Working Group to advise the Market Conduct Annual Statement Blanks (D) Working Group to finish the AU edits to the life insurance Market Conduct Annual Statement (MCAS) it is holding pending a final definition by the Accelerated Underwriting (A) Working Group. He said the Working Group needs

to explain that there may be slightly different definitions depending on the context in which they are being used, but if the edits are not finished by June 1, data will not be collected until 2025.

d. Comment from Consumer Representatives

Brendan Bridgeland (Center for Insurance Research—CIR) and Peter Kochenburger (University of Connecticut School of Law) submitted a joint comment letter. Mr. Bridgeland said a current flaw of the paper, in his and Mr. Kochenburger’s opinion, is that there are not enough recommendations. He said he supports the list of questions mentioned by Mr. Birnbaum. He mentioned that the paper states that state insurance regulators should be guided by current law, and it almost seems to suggest that this as an optional practice. The comment letter suggests adding the following language to point to the need for additional action, “When examining accelerated underwriting practices, regulators should be guided by current laws related to fair trade practices and unfair discrimination, and also recognize that the use of big data and artificial intelligence over the last five years has demonstrated that these standards need to be updated to meet these new challenges, and perhaps new regulatory tools added.” He said state insurance regulators should avoid playing catch-up to the practices in the marketplace.

Mr. Bridgeland also suggested that certain practices should be called out as requiring a heightened level of caution. He specifically mentioned that criminal history data has inherent racial bias, and facial analysis and facial recognition programs have a particular potential to lead to unfair outcomes. He mentioned the documentary film “Coded Bias” that the NAIC screened in March 2021, which explored the racial bias of facial recognition technology.

Commissioner Arnold said the educational paper will be revised based on the comments submitted and the discussion today. She said what she hopes will be a final draft of the paper will be exposed for a two-week public comment period limited to new issues and errors of fact. She said the Working Group will meet to consider adoption of the revised educational paper, and it plans to bring it to the Life Insurance and Annuities (A) Committee for its consideration at the Spring National Meeting.

Having no further business, the Accelerated Underwriting (A) Working Group adjourned.

SharePoint/NAIC Support Staff Hub/Member Meetings/Spring 2022 National Meeting/A/AUWG

**DRAFT January 25, 2022**

**Revision marks show changes from the Nov. 8, 2021 Draft**

**Comments should be sent to Jennifer Cook at [jcook@naic.org](mailto:jcook@naic.org) by close of business February 11, 2022.**

Accelerated Underwriting (A) Working Group  
Ad Hoc Drafting Subgroup

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**Appendix A: Additional Procedural Background**

**Appendix B: Machine Learning/ Artificial Intelligence Definition in 6/24/21 Draft Big Data and Artificial Intelligence (EX) Working Group Survey on private passenger automobile (PPA) insurers' use and governance of big data.**

Resources

New York Circular No. 1

## Abbreviated Summary of Presentations

National Association of Insurance Commissioners (NAIC) Principles on Artificial Intelligence (AI)  
Casualty Actuarial and Statistical (C) Task Force Regulatory Review of Predictive Models White Paper

### Introduction

In 2019, the National Association of Insurance Commissioners (NAIC) established the Accelerated Underwriting (A) Working Group to consider the use of external data and data analytics in accelerated life insurance underwriting, including consideration of the ongoing work of the Life Actuarial (A) Task Force on the issue and, if appropriate, draft guidance for the states. In addition, the 2021 charges of the Special Committee on Race and Insurance direct the working group to include an assessment of and recommendations, as necessary, regarding the impact of accelerated underwriting on minority populations. A more detailed procedural background can be found in the appendix. This paper is the output of over a year's work by regulators to understand the current state of the industry and its use of accelerated underwriting. It summarizes what the Working Group has learned over the past year, contextualizes that learning and the topic of accelerated underwriting within other NAIC work and standard regulatory product evaluation processes, and makes recommendations for regulators and insurers when evaluating accelerated underwriting.

Accelerated underwriting in life insurance may provide potential benefits to both consumers and insurers, if applied in a fair and non-discriminatory manner. In order to fairly deliver the benefits of more convenient and cost-effective processes, regulators and insurers should be guided by current law related to fair trade practices and unfair discrimination. Regulators and insurers should continue to monitor accelerated underwriting practices as they develop to avoid unfairly discriminatory practices. Much of the discussion in this paper is framed in these general terms. The Working Group believes the charge to specifically address the impact on minority populations is included in these terms, ~~and we have provided examples to illustrate the impact on minority populations.~~ Future work products of the Working Group may address the charge from the Special Committee on Race and Insurance in more detail.

### What is Accelerated Underwriting?

Throughout this paper, we use the term accelerated underwriting in life insurance. We propose the following as a definition:

Accelerated underwriting in life insurance is insurers' use of big data, artificial intelligence and machine learning to underwrite life insurance in an expedited manner. For example, is a process to replace traditional underwriting and allow some applications to have certain medical requirements, e.g., paramedical exams and fluid collection, waived. The process generally uses predictive models or machine learning algorithms to analyze data pertaining to the applicant, which includes both What distinguishes accelerated underwriting from traditional life insurance underwriting is and the use of non-traditional underwriting data provided by the applicant directly, as well as data obtained through external sources, non-medical data using predictive models or machine learning.

Predictive models examine data sets for patterns to predict and assign the risk category, e.g., a model developer enters data points (potentially hundreds of thousands), and the model finds patterns and identifies future

predictions of risk and assigns an insured to a risk category.<sup>1</sup> Machine learning algorithms are a process or set of rules executed to solve an equation<sup>2</sup>, e.g., a life insurance underwriter uses a set of rules to place an individual insured in a particular risk category. The 'learning' part of machine learning means that those programs change how they process data over time, much as humans change how they process data by learning. Machine learning often falls into two groups: supervised or unsupervised. The difference between the two is whether the program is directed to analyze patterns or is self-automated.

Predictive models or machine learning trains a system to make judgments when exposed to data that is unfamiliar to serve as a substitute for human-centric decision making. These are both subcategories of artificial intelligence, which should not be confused with a static rule-based algorithm.

Life insurance underwriting is the process of determining eligibility and classifying applicants into risk categories to determine the appropriate rate to charge for transferring the financial risk associated with insuring the applicant. Traditional life insurance underwriting involves, ~~among other elements~~ assessing the applicant's physical health, ~~along with among other financial and behavioral elements~~, then determining whether an applicant is eligible for coverage and the risk class to which that individual belongs. Accelerated underwriting relies on non-traditional, non-medical data used within predictive models or machine learning algorithms to perform some of the tasks of an underwriter. The exact parameters of the application of accelerated underwriting vary by insurer.

Presentations made to the Working Group indicated that life insurers use accelerated underwriting in primarily two ways: 1) Accelerated underwriting is used to triage applicants, where unsuccessful applicants are re-routed to traditional underwriting, and successful ones continue through the accelerated underwriting process; or 2) Accelerated underwriting is used to rate applicants based on risk categories.

Most predictive or machine learning algorithms used in life insurance underwriting are in their second or third generation. The COVID-19 pandemic sped up the adoption of accelerated underwriting in the industry as both consumers and insurers looked for options to purchase and write policies that relied more on technology and involved less in-person contact. This has highlighted the need for ongoing monitoring of the machine learning algorithms—both their development and their uses in the marketplace.

Presentations made to the Working Group indicated that adverse underwriting decisions are sometimes reviewed by human underwriters. Companies presenting to the Working Group stated that the accelerated underwriting process is less cumbersome, costs less than traditional underwriting, it expedites the process and requires less

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<sup>1</sup> For a more detailed discussion of predictive models in property and casualty insurance, see the Casualty Actuarial and Statistical (C) Task Force Regulatory Review of Predictive Models White Paper, Adopted by the Property and Casualty Insurance (C) Committee on Dec. 8, 2020.

<sup>2</sup> The Big Data and Artificial Intelligence (EX) Working Group developed a survey to conduct analysis on private passenger automobile (PPA) insurers' use and governance of big data, as used in an artificial intelligence (AI) and machine learning (ML) system. The survey is being conducted under the examination authority of Connecticut, Illinois, Iowa, Louisiana, Nevada, North Dakota, Pennsylvania, Rhode Island, and Wisconsin. This analysis will help inform the Working Group in completing its long-term goals of developing guidance and recommendations to update the existing regulatory framework for the use of big data and AI, including how to monitor and oversee the industry's compliance with the NAIC's AI principles. The survey work may be expanded to other lines of insurance as needed, such as life insurance and homeowners insurance. For the purposes of the survey only, AI/ML is defined as, "an automated process in which a system begins recognizing patterns without being specifically programmed to achieve a pre-determined result." This is different from a standard algorithm that consists of a process or set of rules executed to solve an equation or problem in a pre-determined fashion, and evolving algorithms are considered a subset of AI/ML.

consumer involvement in the purchase and improves the underwriting experience for consumers, shortens issue times, and increases policy acceptance rates.<sup>3</sup>

### General Discussion of Issues and Recommendations

~~Increasing automation of life insurance underwriting~~ Life insurers reliance on an increasingly automated underwriting process that uses non-traditional, non-medical data presents new regulatory challenges. Regulators must ensure that the process is **fair, transparent, and secure**. With regard to accelerated underwriting in life insurance, this concern pertains to input data, the predictive model or machine learning algorithm, and the results of the process. One particular challenge is the potential for **unfair discrimination**. Due to the fact accelerated underwriting relies on non-traditional, non-medical data and predictive models or machine learning algorithms, it may lead to unexpected or unfairly discriminatory outcomes even though the input data may not be overtly discriminatory. It is critical to test the conclusions up front, on the back end, as well as, randomly, to ensure the machine learning algorithm does not produce unfairly discriminatory ratings or ones that are not actuarially sound. Testing can also be important in determining if a machine learning algorithm is accurate across demographic categories. Such scrutiny is especially important when behavioral data is utilized. Behavioral data may include gym membership, one's profession, marital status, family size, grocery shopping habits, wearable technology, and credit attributes. Although medical data has a scientific linkage with mortality, behavioral data may lead to questionable conclusions ~~as correlation may be confused with causation without~~ reasonable explanation.

### Recommendations

Consistent with the ~~a~~ Artificial Intelligence p ~~Principles~~ Principles approved by the NAIC in 2020<sup>4</sup>, the use of accelerated underwriting in life insurance should be fair and transparent to regulators, consumers and policymakers. Companies ~~should be accountable for~~ must ~~operating~~ in compliance with applicable laws, and the process and data companies ~~used~~ needs to be secure. To accomplish these objectives, regulators should dialogue with consumers, life insurers, and third-party vendors to determine if consumer data is being used in problematic or unfair ways or generating unfair outcomes.

Insurers and other parties involved in accelerated underwriting in life insurance should:

- Take steps to ensure data inputs are transparent, accurate, reliable, and the data itself does not have any unfair bias.
- Ensure that the use of external data sources, algorithms or predictive models are based on sound actuarial principles with a valid explanation or rationale for any claimed correlation or causal connection.
- Ensure that the predictive models or machine learning algorithm within accelerated underwriting has an intended outcome and that outcome is being achieved.

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<sup>3</sup> Presentations to Accelerated Underwriting (A) Working Group between Dec. 8, 2018, and Sept. 24, 2020.

<sup>4</sup> See National Association of Insurance Commissioners (NAIC) Principles on Artificial Intelligence (AI) – Fair and Ethical a. AI actors should respect the rule of law throughout the AI life cycle. This includes, but is not limited to, insurance laws and regulations, such as those relating to trade practices, unfair discrimination, access to insurance, underwriting, privacy, consumer protection and eligibility practices, rate making standards, advertising decisions, claims practices, and solvency. b. Consistent with the risk-based foundation of insurance, AI actors should proactively engage in responsible stewardship of trustworthy AI in pursuit of beneficial outcomes for consumers and to avoid proxy discrimination against protected classes. AI systems should not be designed to harm or deceive people and should be implemented in a manner that avoids harmful or unintended consequences and corrects and remediates for such consequences when they occur.

- Ensure that the predictive models or machine learning algorithm achieve an outcome that is not unfairly discriminatory.
- Be able to provide the reason(s) for an adverse underwriting decision to the consumer and all information upon which the insurer based its adverse underwriting decision.
- Take steps to protect consumer privacy and ensure consumer data is secure.
- Have a mechanism in place to correct mistakes if found.
- Produce information upon request as part of regular rate and policy reviews or market conduct examinations.

### Input data

Predictive models or machine learning algorithms within the accelerated underwriting process rely heavily on data and multiple variables. Examples of the variables used by some accelerated underwriting models include customer disclosures, prescription history, digital health records, credit attributes, medical information bureau data, public records, motor vehicle reports, smartphone apps, consumer activity wearables, claim acceleration tools, individual consumer risk development systems, purchasing history, behavior learned through cell phone usage, and social media. Because accelerated underwriting relies on predictive models or machine learning algorithms that use non-traditional, non-medical data, it may lead to unexpected or unfairly discriminatory outcomes, even though the input data may be facially neutral.

### Traditional Data

Traditional data used in life insurance underwriting includes data collected through a traditional underwriting process. This data may include the following:

- Application data, e.g., medical records, prescription questions, vocation questions, financial profile
- Tele-interview
- Medical records
- Data from the Medical Information Bureau (MIB) <sup>5</sup>
- Data from Motor Vehicle Records
- Prescription drug history
- Public records, e.g., criminal records, bankruptcy records, civil litigation, etc.
- Paramedical or medical exam, including EKG's in some instances
- Fluids, e.g., blood, urine, swab/saliva test to determine tobacco usage
- Financial and tax information

### Considerations for use of Traditional Data

- Traditional data has a long and established history in the life insurance industry. Carriers, producers, and consumers are generally familiar with the process.
- Traditional data has a history of usage by insurance carriers. Trained underwriters and producers have years of experience and often understand the process well.
- The relationship of the traditional data elements to the risk is well established and consumers generally understand how most of the elements impact their risk classification or premium charged.
- State statutes and case laws were developed based on the use of traditional data containing consumer protections created under the assumption that this was the type of data collected or reviewed during an underwriting process.
- Presentations made to the Working Group represented that time and costs associated with obtaining and reviewing some types of traditional data are significant.

### FCRA Data

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<sup>5</sup> This data is subject to the Fair Credit Reporting Act (FCRA).

~~Some data used in traditional and accelerated underwriting is subject to the federal Fair Credit Reporting Act (FCRA), which protects the privacy of consumer report information. If an insurer uses data subject to FCRA in its underwriting, which means applicants:~~

- ~~(1) Should have a right to be told if this information is used to deny insurance, and~~
- ~~— Have the ability to request the data a consumer reporting agency is providing to an insurer, and~~
- ~~(1) Have the right to ask a consumer reporting agency to correct any errors in the data.~~

#### Considerations for use of FCRA Data

- ~~• FCRA data is readily available.~~
- ~~• FCRA data is updated regularly.~~
- ~~• FCRA data is already used in life and property/casualty lines of business.~~
- ~~• There is existing regulation and oversight by the Federal Trade Commission (FTC) and Consumer Financial Protection Bureau (CFPB).~~
- ~~• Not all FCRA data is useful/ relevant to life insurance underwriting.~~
- ~~• If there is a dispute about findings the accuracy of FCRA data, a consumer will have to obtain additional information and formally dispute these findings.~~
- ~~• FCRA data is extensive and accessing such data may result in access to non usable credit attributes. In other words, significantly more data may be collected than is needed to determine risk.~~
- ~~• As additional rating factors are introduced via insurance scores or with specific data elements, unfair discrimination, including disparate impact, may be introduced or amplified.~~
- ~~• FCRA data may be used to predict mortality, but there may not be a reasonable explanation for that correlation.<sup>6</sup>~~

#### Non-traditional Data

Non-traditional data used in life insurance underwriting may include the following:

- Public records, e.g., assessor data, genealogy records, ~~criminal records~~, court filings, voter information
- Property/casualty data from adjacent carrier(s)
- Marketing and social data, e.g., shopping habits, mortgage amount/lender, occupation and education, and social media, etc.
- Professional licenses
- Biometric data, e.g., voice recognition analysis, used to determine smoking status, facial analysis, and other analytics based on personal physical features and characteristics
- ~~• Facial recognition~~
- Wearable devices

#### Considerations for use of Non-traditional Data

- Non-traditional data may be used to predict mortality, ~~but there may not be a reasonable explanation for that correlation~~ the actual or reasonably anticipated experience may not correlate to risk of insurance loss.<sup>7</sup>

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<sup>6</sup> See Actuarial Standards of Practice (ASOP) No. 12

<sup>7</sup> See Actuarial Standards of Practice (ASOP) No. 12, Section 3.2.1 (“The actuary should select risk characteristics that are related to expected outcomes. A relationship between a risk characteristic and an expected outcome, such as cost, is demonstrated if it can be shown that the variation in actual or reasonably anticipated experience correlates to the risk characteristic.”)

- As additional rating factors are introduced via insurance scores or with specific data elements, disparate impact across and between demographic groups may be introduced or amplified.
- Non-traditional data ~~may~~ does not have the same consumer protections as FCRA and traditional data. For example:
  - There may not be a clear path for consumers to know how data affected their application and how inaccurate data may be corrected.
  - The type and purpose of data accessed are not required to be disclosed to the consumer.
  - There may be privacy concerns about the extent of the use of non-traditional data.

### FCRA Data

Some data used in traditional and accelerated underwriting is subject to the federal Fair Credit Reporting Act (FCRA), which protects the privacy of consumer report information. If an insurer uses data subject to FCRA in its underwriting, applicants:

- (1) Have a right to be told if this information is used to deny insurance,
- (2) Have the ability to request the data a consumer reporting agency is providing to an insurer, and
- (3) Have the right to ask a consumer reporting agency to correct any errors in the data.

Considerations for use of data subject to FCRA:

- FCRA data is readily available.
- FCRA data is updated regularly.
- FCRA data is already used in life and property/casualty lines of business.
- There is existing regulation and oversight by the Federal Trade Commission (FTC) and Consumer Financial Protection Bureau (CFPB).
- Not all FCRA data is useful/ relevant to life insurance underwriting.
- If there is a dispute about the accuracy of FCRA data, a consumer has to obtain additional information and formally dispute these findings.
- FCRA data is extensive and accessing such data may result in access to non-usable credit attributes. In other words, significantly more data may be collected than is needed to determine risk.
- As additional rating factors are introduced via insurance scores or with specific data elements, unfair discrimination, including disparate impact, may be introduced or amplified.
- ~~FCRA data may be used to predict mortality, but there may not be a reasonable explanation for that correlation.<sup>8</sup>~~

### Recommendations

Existing regulations apply to accelerated underwriting programs in the same way as traditional underwriting programs. State Departments of Insurance (DOIs) have broad regulatory authority to make inquiries into the processes and procedures of life insurers in order to investigate potential unfair trade practices. Complaints about underwriting practices are opportunities for DOIs to review a life insurer's use of accelerated underwriting and data collection methods. Additional DOI actions may include market conduct and on-site examinations as appropriate under existing authority.

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<sup>8</sup> See Actuarial Standards of Practice (ASOP)

Specifically, examiners may:

- Review the life insurer's underwriting practices and underwriting guidelines during an examination or upon initial submission of the policy rates and forms and confirm the proper use of the data elements.
- Request that explanation provided to the consumer for any negative action taken by the life insurer adequately informs the consumer as to why a particular action was taken without the consumer having to make additional inquiries.
- Request information about source data regardless of whether the data or score is provided by a third party.

Form and rate reviewers may:

- Request that the life insurer provides information about how a predictive model or machine learning algorithm will be used.
- Consider requiring the filing of models used to analyze data.
- Consider questioning the extent to which data elements correlate to applicant risk.
- Request information about source data regardless of whether the data or score is provided by a third party.

Life insurers and third-party vendors have a responsibility to understand the data they are using. To accomplish this, life insurers should conduct post-issue audits and data analysis and make these audits and analysis available to regulators upon request. For example, analyses such as evaluating claims and lapse rates may be helpful. Life insurers and third-party vendors should ensure data inputs are accurate and reliable.

Life insurers and third-party vendors should ensure that the external data sources, algorithms, or predictive models are developed with sufficient internal controls and oversight and based on sound actuarial principles with a valid explanation or rationale for any claimed correlation and causal connection.

### Data Privacy

Data privacy—a consumer's ability to retain control over what data can be shared about them and with whom—is not a concern unique to accelerated underwriting in life insurance. Protecting consumer privacy is an issue across all lines of insurance and is the subject of the NAIC Privacy Protections (D) Working Group, formed in 2019 under the parent committee of Market Regulation and Consumer Affairs (D) Committee.

The Working Group's charge is to review the state insurance privacy protections regarding the collection, use, and disclosure of information gathered in connection with insurance transactions, and make recommended changes, as needed, to certain NAIC models and other existing federal or state statutes.<sup>9</sup>

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<sup>9</sup> The Working Group has focused its reviews on the Insurance Information and Privacy Protection Model Act #670, and the Privacy of Consumer Financial and Health Information Regulation Model Act #672 – both drafted in response to the enactment of GLBA, and #668 – the Insurance Data Security Model Act, enacted in 2019/20. With a great deal of research assistance from NAIC Legal Staff, the Working Group prepared a gap analysis – upon which it continues to work. The Working Group is also reviewing the consumer data privacy protections other than those already in these models, such as the numerous provisions contained in federal acts such as the Fair Credit Reporting Act {FCRA}, the Gramm-Leach Bliley Act {GLBA}, the Health Insurance Portability and Affordability Act {HIPAA}, Electronic Health Records {EHR}, etc. The Working Group is also analyzing the various provisions of recently enacted legislation, such as California's Consumer Privacy Act {CCPA} and its Consumer Data Privacy Regulation {CCPR}, Virginia's and Colorado's recently enacted Consumer Privacy Protection laws, certain provisions of the European General Data Protection Regulation {GDPR}, the NAIC's Record

The primary focus of the Working Group is on the six consumer data privacy rights or types of consumer data privacy protections identified in the NAIC's Member adopted *Strategy for Consumer Data Privacy Protections* policy statement. The secondary focus is on issues such as notice requirements and standards, disclosure of information collected, disclosure of shared information, requirements to disclose sources of information, requirements to disclose business purposes, and a requirement to disclose third party involvement. The current assignments for the Working Group are intended to create a framework for the policy statement: defining the parameters of these consumer rights by offering suggested definitions, examples of consumer risks, and what may not be protected in federal laws or not covered under NAIC Model laws.

The Privacy Protections Working Group's policy statement will address the following consumer privacy rights:<sup>10</sup>

- 1) Right to opt-out of data sharing
- 2) Right to opt-in of data sharing
- 3) Right to correct information
- 4) Right to delete information
- 5) Right to data portability
- 6) Right to restrict the use of data<sup>11</sup>

The Accelerated Underwriting (A) Working Group will continue to watch the work of this group. If at any point issues unique to accelerated underwriting arise, we will endeavor to address them in a future work product.

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Retention Model Regulation and the NAIC's Unfair Claims Practice Model Act {UCPA}. There are a lot of jurisdictional issues that remain to be sorted through.

<sup>10</sup> For purposes of the Working Group's paper, the use of the term "right" should be read as a basic protection, or, denoting access to making a request and not as a guarantee of having the requested right acted upon in the manner as the consumer requests.

<sup>11</sup> for purposes of the Working Group's paper there is a distinction between an individual's data and information that results from the use of this data, *e.g.*, the insurance score that results from the use of an algorithm.

## **Appendix A: Additional Procedural Background**

At the 2019 NAIC Summer National Meeting, the Life Insurance and Annuities (A) Committee discussed a referral it had received from the Big Data (EX) Working Group. The Big Data Working Group had discussed the use of predictive models in accelerated underwriting in life insurance, instead of medical examinations and the collection of fluids. The Big Data Working Group agreed that the issue would be most appropriately addressed by the life insurance subject matter experts and voted to refer the issue of the use of external data and data analytics in accelerated underwriting in life insurance to the Life Insurance and Annuities (A) Committee (Committee).<sup>12</sup>

The Committee discussed the referral and acknowledged that there are a multitude of issues surrounding insurers' use of data models and data analytics; issues that extend into many areas of insurance and overlap with the work of several groups at the NAIC. In addition to the Big Data (EX) Working Group, there is the Innovation and Technology (EX) Task Force, the Artificial Intelligence (EX) Working Group, the Casualty Actuarial and Statistical (C) Task Force, and the Privacy Protections (D) Working Group. The Life Actuarial Task Force was also looking at the use of accelerated underwriting in life insurance from an actuarial perspective, including looking at any potential impact on insurer solvency.

The Committee agreed that an effort to delve into accelerated underwriting in life insurance would need to be narrowly focused while taking into account the work of these other NAIC groups touching on the same topic.

Robert Muriel (IL) chaired the Working Group and Grace Arnold (MN) was the vice-chair. The following were Working Group members: Jason Lapham (CO); Russ Gibson (IA); Rich Piazza (LA); Cynthia Amann (MO); Rhonda Ahrens and Laura Arp (NE); Ross Hartley and Chris Aufenthie (ND); Lori Barron (OH); Elizabeth Kelleher Dwyer (RI); Lichiou Lee (WA); Mark Afable (WI). In January 2021, Commissioner Afable became chair of the Working Group and the rest of the membership remained the same.

The Working Group met for the first time on Oct 2, 2019, and developed a work plan to accomplish its charge. The work plan contemplated the Accelerated Underwriting (A) Working Group progressing through three phases with the goal of completing its charge by the 2020 Fall National Meeting. The first phase was focused on information-gathering. The second phase focused on identifying the issues and deciding on a work product, with the final phase devoted to drafting.

During the information gathering phase, the Working Group heard 15 presentations from varying stakeholders, including an academic (Professor Patrick Brocket<sup>13</sup>), insurance companies, consulting firms (Deloitte and Milliman), a consumer advocate (Birny Birnbaum—CEJ), the American Academy of Actuaries, lawyers from 2 Illinois law firms (Foley & Lardner and Edelson), a machine learning assurance company (Monitaur), and a data analytics company (Verisk). Several of the presentations were held in regulator-only meetings when requested by presenters in order to share proprietary and confidential company-specific information.

Regulators from the Working Group volunteered to participate in two ad hoc groups to tackle the second and third phases of its work plan: There was an ad hoc NAIC liaison group to ensure awareness of and coordination with any work, including guidelines or protocols, developed by other NAIC groups, past and present, that related

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to the Working Group. There was also an ad hoc drafting group that agreed to take the information gathered, identify issues, recommend and draft a work product for review and approval by the Working Group.

In November 2020, the ad hoc drafting group shared with the Accelerated Underwriting (A) Working Group a proposed draft outline for an educational report exploring accelerated underwriting in life insurance to provide guidance to regulators, industry, and consumer advocates, and other stakeholders. In February 2021, the ad hoc groups merged.

## **Appendix B: Machine Learning/ Artificial Intelligence Definition in 6/24/21 Draft Big Data and Artificial Intelligence (EX) Working Group Survey on private passenger automobile (PPA) insurers' use and governance of big data.**

### **Artificial Intelligence/Machine Learning (AI/ML)**

AI/ML describes an automated process in which a system begins recognizing patterns without being specifically programmed to achieve a pre-determined result. This is different from a standard algorithm in that an algorithm is a process or set of rules executed to solve an equation or problem in a pre-determined fashion. Evolving algorithms are considered a subset of AI/ML.

#### **Artificial Intelligence / Machine Learning Systems include:**

- Systems that adapt and adjust to new data and experience without manual human intervention.
- Systems that arrive at results for which the outcomes and the stepwise approach toward the outcomes were not configured in advance by a human programmer.
- Systems that dynamically respond to conditions in the external environment without the specific nature of such responses being known in advance to the designers of the systems.
- Systems that utilize neural networks and/or deep-learning algorithms, such as supervised, semi-supervised, and unsupervised learning algorithms.
- Systems that engage in automatic speech recognition, facial recognition, image recognition, text recognition, natural language processing, generation of customer-specific recommendations, automated customer communications (e.g., chatbots with non-preprogrammed prompts), autonomous or semi-autonomous vehicle operation or data gathering, or any other approach that does not require either preprogramming or a manual human intervention in every instance of an action or decision.
- Systems that automatically generate adaptive responses based on interactions with a consumer or third party.
- Systems that determine which data elements to rely upon, in a non-preprogrammed fashion, among a variety of possible alternatives.

#### **Artificial Intelligence / Machine Learning Systems are not:**

- Static "scorecards" that deterministically map consumer or other risk characteristics to treatments or decisions. (However, an AI/ML system may use the output of such static "scorecards" as input data for the AI/ML system to consider.)
- Systems with solely preprogrammed decision rules (e.g., "If A, then B" applied invariably in all situations).
- Tables of point or factor assignments in rating plans.
- Static rate making and/or predictive modeling methodologies, including linear regression, generalized linear modeling (GLM), or generalized additive modeling (GAM). Purely informational static databases, such as databases used to obtain reference amounts for claim settlements, or static databases pertaining to consumer characteristics or experience, regardless of the

amount of information in the database. However, if AI/ML is used to create a static predictive model, that AI/ML system is considered within the scope of this survey.

- Deterministic “phone trees” that navigate consumers through pre-recorded voice prompts.
- Any approach that an insurer could have realistically utilized in the year 2000 or prior.

#### **AI/ML Use Descriptions and/or Explanations**

- **Underwriting: AI/ML Uses**
  - Automated Approval: Approving an application without human intervention on that particular application.
  - Automated Denial: Denying an application without human intervention on that particular application.
  - Underwriting Tier Determination: Decisions regarding the criteria to use to establish specific named or numbered categories (called tiers) which utilize combinations of attributes that affect an insurer’s underwriting decision.
  - Company Placement: Decisions regarding which of several affiliated companies within an insurance group will accept an individual risk.
  - Input into Non-Automated Approval Decision: Providing data, analysis, or recommendations regarding a decision to approve an application in a situation where a human decision-maker still has the ability and responsibility to affirmatively consider this information and make a decision independently of the AI/ML system. In this situation, the AI/ML system cannot automatically approve the application, and protocols exist that ensure that each recommendation from the AI/ML system is actively reviewed and not adopted by default.
  - Input into Non-Automated Denial Decision: Providing data, analysis, or recommendations regarding a decision to deny an application in a situation where a human decision-maker still has the ability and responsibility to affirmatively consider this information and make a decision independently of the AI/ML system. In this situation, the AI/ML system cannot automatically deny the application, and protocols exist that ensure that each recommendation from the AI/ML system is actively reviewed and not adopted by default.
  - Automate Processing Thru the Agency Channel: Enabling agencies to receive certain information about applicants automatically without specifically requesting that information and/or to provide quotes to the applicants and/or recommend a decision regarding the application to the agent without being based on preprogrammed decision rules.

**DRAFT March 4, 2022**

**Adopted by the Life Insurance and Annuities (A) Committee on April 7, 2022**

**Adopted by Accelerated Underwriting Working Group on March 24, 2022**

Accelerated Underwriting (A) Working Group  
Ad Hoc Drafting Subgroup

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## **Appendices**

**Appendix A: Additional Procedural Background**

**Appendix B: Machine Learning/ Artificial Intelligence Definition in 6/24/21 Draft Big Data and Artificial Intelligence (EX) Working Group Survey on private passenger automobile (PPA) insurers' use and governance of big data.**

## Resources

New York Circular No. 1  
Abbreviated Summary of Presentations  
National Association of Insurance Commissioners (NAIC) Principles on Artificial Intelligence (AI)  
Casualty Actuarial and Statistical (C) Task Force Regulatory Review of Predictive Models White Paper

## Introduction

In 2019, the National Association of Insurance Commissioners (NAIC) established the Accelerated Underwriting (A) Working Group to consider the use of external data and data analytics in accelerated life insurance underwriting, including consideration of the ongoing work of the Life Actuarial (A) Task Force on the issue and, if appropriate, draft guidance for the states. In addition, the 2021 charges of the Special Committee on Race and Insurance direct the working group to include an assessment of and recommendations, as necessary, regarding the impact of accelerated underwriting on minority populations. A more detailed procedural background can be found in the appendix. This paper is the output of over a year's work by regulators to understand the current state of the industry and its use of accelerated underwriting. It summarizes what the Working Group has learned over the past year, contextualizes that learning and the topic of accelerated underwriting within other NAIC work and standard regulatory product evaluation processes, and makes recommendations for regulators and insurers when evaluating accelerated underwriting.

Accelerated underwriting in life insurance may provide potential benefits to both consumers and insurers, if applied in a fair and non-discriminatory manner. In order to fairly deliver the benefits of more convenient and cost-effective processes, regulators and insurers should be guided by current law related to fair trade practices and unfair discrimination. Regulators and insurers should also continue to monitor accelerated underwriting practices as they develop and update, when necessary, relevant laws to adapt to these developing practices to avoid unfair trade practices and unfairly discriminatory practices. Much of the discussion in this paper is framed in these general terms. The Working Group believes the charge to specifically address the impact on minority populations is included in these terms. Future work products of the Working Group may address the charge from the Special Committee on Race and Insurance in more detail.

## What is Accelerated Underwriting?

Throughout this paper, we use the term accelerated underwriting in life insurance. For purposes of this paper, we based our work on the following definition:

Accelerated underwriting is the use of big data, artificial intelligence, and machine learning to underwrite life insurance in an expedited manner. The process generally uses predictive models and machine learning algorithms to analyze applicant data, which may include the use of non-traditional, non-medical data, provided either by the applicant directly or obtained through external sources. The process is typically used to replace all or part of traditional underwriting in life insurance and to allow some applications to have certain medical requirements waived, such as paramedical exams and fluid collection.

Predictive models examine data sets for patterns to predict and assign the risk category, e.g., a model developer enters data points (potentially hundreds of thousands), and the model finds patterns and identifies future

predictions of risk and assigns an insured to a risk category.<sup>1</sup> Machine learning algorithms are a process or set of rules executed to solve an equation<sup>2</sup>, e.g., a life insurance underwriter uses a set of rules to place an individual insured in a particular risk category. The ‘learning’ part of machine learning means that those programs change how they process data over time, much as humans change how they process data by learning. Machine learning often falls into two groups: supervised or unsupervised. The difference between the two is whether the program is directed to analyze patterns or is self-automated.

Predictive models or machine learning trains a system to make judgments when exposed to data that is unfamiliar to serve as a substitute for human-centric decision making. These are both subcategories of artificial intelligence, which should not be confused with a static rule-based algorithm.

Life insurance underwriting is the process of determining eligibility and classifying applicants into risk categories to determine the appropriate rate to charge for transferring the financial risk associated with insuring the applicant. Traditional life insurance underwriting involves, assessing the applicant’s physical health, along with other financial and behavioral elements, then determining whether an applicant is eligible for coverage and the risk class to which that individual belongs. Accelerated underwriting relies both on traditional and non-traditional, non-medical data used within predictive models or machine learning algorithms to perform some of the tasks of an underwriter. The exact parameters of the application of accelerated underwriting vary by insurer.

Presentations made to the Working Group indicated that life insurers use accelerated underwriting in primarily two ways: 1) Accelerated underwriting is used to triage applicants, where unsuccessful applicants are re-routed to traditional underwriting, and successful ones continue through the accelerated underwriting process; or 2) Accelerated underwriting is used to rate applicants based on risk categories.

Most predictive or machine learning algorithms used in life insurance underwriting are in their second or third generation. The COVID-19 pandemic sped up the adoption of accelerated underwriting in the industry as both consumers and insurers looked for options to purchase and write policies that relied more on technology and involved less in-person contact. This has highlighted the need for ongoing monitoring of the machine learning algorithms—both their development and their uses in the marketplace.

Presentations made to the Working Group indicated that adverse underwriting decisions are sometimes reviewed by human underwriters. Companies presenting to the Working Group stated that the accelerated underwriting process is less cumbersome, costs less than traditional underwriting, it expedites the process and requires less

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<sup>1</sup> For a more detailed discussion of predictive models in property and casualty insurance, see the Casualty Actuarial and Statistical (C) Task Force Regulatory Review of Predictive Models White Paper, Adopted by the Property and Casualty Insurance (C) Committee on Dec. 8, 2020.

<sup>2</sup> The Big Data and Artificial Intelligence (EX) Working Group developed a survey to conduct analysis on private passenger automobile (PPA) insurers’ use and governance of big data, as used in an artificial intelligence (AI) and machine learning (ML) system. The survey is being conducted under the examination authority of Connecticut, Illinois, Iowa, Louisiana, Nevada, North Dakota, Pennsylvania, Rhode Island, and Wisconsin. This analysis will help inform the Working Group in completing its long-term goals of developing guidance and recommendations to update the existing regulatory framework for the use of big data and AI, including how to monitor and oversee the industry’s compliance with the NAIC’s AI principles. The survey work may be expanded to other lines of insurance as needed, such as life insurance and homeowners insurance. For the purposes of the survey only, AI/ML is defined as, “an automated process in which a system begins recognizing patterns without being specifically programmed to achieve a pre-determined result.” This is different from a standard algorithm that consists of a process or set of rules executed to solve an equation or problem in a pre-determined fashion, and evolving algorithms are considered a subset of AI/ML.

consumer involvement in the purchase, improves the underwriting experience for consumers, shortens issue times, and increases policy acceptance rates.<sup>3</sup>

### General Discussion of Issues and Recommendations

Life insurers reliance on an increasingly automated underwriting process that uses non-traditional, non-medical data presents new regulatory challenges. Regulators must ensure that the process is **fair, transparent, and secure**. With regard to accelerated underwriting in life insurance, this concern pertains to input data, the predictive model or machine learning algorithm, and the results of the process. One particular challenge is the potential for **unfair discrimination**. Due to the fact accelerated underwriting relies on non-traditional, non-medical data and predictive models or machine learning algorithms, it may lead to unexpected or unfairly discriminatory outcomes even though the input data may not be overtly discriminatory. It is critical to test the conclusions up front, on the back end, as well as, randomly, to ensure the machine learning algorithm does not produce unfairly discriminatory ratings or ones that are not actuarially sound. Testing can also be important in determining if a machine learning algorithm is accurate across demographic categories. Such scrutiny is especially important when behavioral data is utilized. Behavioral data may include gym membership, one's profession, marital status, family size, grocery shopping habits, wearable technology, and credit attributes. Although medical data has a scientific linkage with mortality, behavioral data may lead to questionable conclusions without reasonable explanation.

### Recommendations

Consistent with the Artificial Intelligence Principles approved by the NAIC in 2020<sup>4</sup>, the use of accelerated underwriting in life insurance should be fair and transparent to regulators, consumers, and policymakers. Companies must operate in compliance with applicable laws, and the process and data companies use need to be secure. To accomplish these objectives, regulators should dialogue with consumers, life insurers, and third-party vendors to determine if consumer data is being used in problematic or unfair ways or generating unfair outcomes.

Insurers and other parties involved in accelerated underwriting in life insurance should:

- Take steps to ensure data inputs are transparent, accurate, reliable, and the data itself does not have any unfair bias.
- Ensure that the use of external data sources, algorithms or predictive models are based on sound actuarial principles with a valid explanation or rationale for any claimed correlation or causal connection.
- Ensure that the predictive models or machine learning algorithm within accelerated underwriting has an intended outcome and that outcome is being achieved.
- Ensure that the predictive models or machine learning algorithm achieve an outcome that is not unfairly discriminatory.

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<sup>3</sup> Presentations to Accelerated Underwriting (A) Working Group between Dec. 8, 2018, and Sept. 24, 2020.

<sup>4</sup> See National Association of Insurance Commissioners (NAIC) Principles on Artificial Intelligence (AI) – Fair and Ethical a. AI actors should respect the rule of law throughout the AI life cycle. This includes, but is not limited to, insurance laws and regulations, such as those relating to trade practices, unfair discrimination, access to insurance, underwriting, privacy, consumer protection and eligibility practices, rate making standards, advertising decisions, claims practices, and solvency. b. Consistent with the risk-based foundation of insurance, AI actors should proactively engage in responsible stewardship of trustworthy AI in pursuit of beneficial outcomes for consumers and to avoid proxy discrimination against protected classes. AI systems should not be designed to harm or deceive people and should be implemented in a manner that avoids harmful or unintended consequences and corrects and remediates for such consequences when they occur.

- Be able to provide the reason(s) for an adverse underwriting decision, whether the decision is based on data subject to FCRA or not, to the consumer and all information upon which the insurer based its adverse underwriting decision.
- Take steps to protect consumer privacy and ensure consumer data is secure.
- Have a mechanism in place to correct mistakes if found.
- Produce information upon request as part of regular filing submissions reviews or market conduct examinations.

### Input data

Predictive models or machine learning algorithms within the accelerated underwriting process rely heavily on data and multiple variables. Examples of the variables used by some accelerated underwriting models include customer disclosures, prescription history, digital health records, credit attributes, medical information bureau data, public records, motor vehicle reports, smartphone apps, consumer activity wearables, claim acceleration tools, individual consumer risk development systems, purchasing history, behavior learned through cell phone usage, and social media. Because accelerated underwriting relies on predictive models or machine learning algorithms that use non-traditional, non-medical data, it may lead to unexpected or unfairly discriminatory outcomes, even though the input data may be facially neutral.

### Traditional Data

Traditional data used in life insurance underwriting includes data collected through a traditional underwriting process. This data may include the following:

- Application data, e.g., medical records, prescription questions, vocation questions, financial profile
- Tele-interview
- Medical records
- Data from the MIB (formerly known as Medical Information Bureau) <sup>5</sup>
- Data from Motor Vehicle Records
- Prescription drug history
- Public records, e.g., criminal records, bankruptcy records, civil litigation, etc.
- Paramedical or medical exam, including EKG's in some instances
- Fluids, e.g., blood, urine, swab/saliva test to determine tobacco usage
- Financial and tax information

### Considerations for use of Traditional Data

- Traditional data has a long and established history in the life insurance industry. Carriers, producers, and consumers are generally familiar with the process.
- Traditional data has a history of usage by insurance carriers. Trained underwriters and producers have years of experience and often understand the process well.
- The relationship of the traditional data elements to the risk is well established and consumers generally understand how most of the elements impact their risk classification or premium charged.

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<sup>5</sup> This data is subject to the Fair Credit Reporting Act (FCRA).

- State statutes and case laws were developed based on the use of traditional data containing consumer protections created under the assumption that this was the type of data collected or reviewed during an underwriting process.
- Presentations made to the Working Group represented that time and costs associated with obtaining and reviewing traditional data are significant.

### Non-traditional Data

Non-traditional data used in life insurance underwriting may include the following:

- Public records, e.g., assessor data, genealogy records, court filings, voter information
- Property/casualty data from adjacent carrier(s)
- Marketing and social data, e.g., shopping habits, mortgage amount/lender, occupation and education, and social media, etc.
- Professional licenses
- Biometric data, e.g., voice analysis, facial analysis, and other analytics based on personal physical features and characteristics
- Wearable devices

Considerations for use of Non-traditional Data

- Per Actuarial Standard of Practice (ASOP) No. 12, an actuary needs to demonstrate that a relationship between a risk characteristic and an expected outcome exists. This standard applies for any data used, traditional or non-traditional. Consumers may not generally understand how non-traditional data elements impact their risk classification or premium charged.
- As additional rating factors are introduced via insurance scores or with specific data elements, disparate impact across and between demographic groups may be introduced or amplified.
- Non-traditional data may not have the same consumer protections as FCRA and traditional data. For example:
  - There may not be a clear path for consumers to know how data affected their application and how inaccurate data may be corrected.
  - The type and purpose of data accessed are not required to be disclosed to the consumer.
  - There may be privacy concerns about the extent of the use of non-traditional data.

### FCRA Data

Some data<sup>7</sup> used in traditional and accelerated underwriting is subject to the federal Fair Credit Reporting Act (FCRA), which protects the privacy of consumer report information. If an insurer uses data subject to FCRA in its underwriting, applicants:

- (1) Have a right to be told if this information is used to deny insurance or take other adverse action<sup>8</sup>,
- (2) Have the ability to request the data a consumer reporting agency is providing to an insurer, and
- (3) Have the right to ask a consumer reporting agency to correct any errors in the data.

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<sup>7</sup> FCRA applies to consumer reports. Please see 15 U.S. Code § 1681a(d).

<sup>8</sup> FCRA defines adverse action, in part, as “a denial or cancellation of an increase in any charge for, or a reduction or other adverse or unfavorable change in the terms of coverage or amount of, any insurance, existing or applied for, in connection with the underwriting of insurance[.]” 15 U.S. Code § 1681a(k).

Considerations for use of data subject to FCRA:

- FCRA data is readily available.
- FCRA data is updated regularly.
- FCRA data is already used in life and property/casualty lines of business.
- There is existing regulation and oversight by the Federal Trade Commission (FTC) and Consumer Financial Protection Bureau (CFPB).
- Not all FCRA data is useful/ relevant to life insurance underwriting.
- If there is a dispute about the accuracy of FCRA data, a consumer has to obtain additional information and formally dispute these findings.
- FCRA data is extensive and accessing such data may result in access to non-usable credit attributes. In other words, significantly more data may be collected than is needed to determine risk.
- As additional rating factors are introduced via insurance scores or with specific data elements, unfair discrimination, including disparate impact, may be introduced or amplified.

### Recommendations

Existing regulations apply to accelerated underwriting programs in the same way as traditional underwriting programs. State Departments of Insurance (DOIs) have broad regulatory authority to make inquiries into the processes and procedures of life insurers in order to investigate potential unfair trade practices. Complaints about underwriting practices are opportunities for DOIs to review a life insurer's use of accelerated underwriting and data collection methods. Additional DOI actions may include market conduct and on-site examinations as appropriate under existing authority.

Specifically, examiners may:

- Review the life insurer's underwriting practices and underwriting guidelines during an examination or upon initial submission of the policy rates and forms and confirm the proper use of the data elements.
- Request that explanation provided to the consumer for any negative action taken by the life insurer adequately informs the consumer as to why a particular action was taken without the consumer having to make additional inquiries.
- Request information about source data regardless of whether the data or score is provided by a third party.

Form and rate reviewers may:

- Request that the life insurer provides information about how a predictive model or machine learning algorithm will be used.
- Consider requiring the filing of models used to analyze data.
- Consider questioning the extent to which data elements correlate to applicant risk.
- Request information about source data regardless of whether the data or score is provided by a third party.

Life insurers and third-party vendors have a responsibility to understand the data they are using. To accomplish this, life insurers should conduct post-issue audits and data analysis and make these audits and analysis available to regulators upon request. For example, analyses such as evaluating claims and lapse rates may be helpful. Life insurers and third-party vendors should ensure data inputs are accurate and reliable.

Life insurers and third-party vendors should ensure that the external data sources, algorithms, or predictive models are developed with sufficient internal controls and oversight and based on sound actuarial principles with a valid explanation or rationale for any claimed correlation and causal connection.

### Data Privacy

Data privacy—a consumer’s ability to retain control over what data can be shared about them and with whom—is not a concern unique to accelerated underwriting in life insurance. Protecting consumer privacy is an issue across all lines of insurance and is the subject of the NAIC Privacy Protections (D) Working Group, formed in 2019 under the parent committee of Market Regulation and Consumer Affairs (D) Committee.

The Working Group’s charge is to review the state insurance privacy protections regarding the collection, use, and disclosure of information gathered in connection with insurance transactions, and make recommended changes, as needed, to certain NAIC models and other existing federal or state statutes.<sup>9</sup>

The primary focus of the Working Group is on the six consumer data privacy rights or types of consumer data privacy protections identified in the NAIC’s Member adopted *Strategy for Consumer Data Privacy Protections* policy statement. The secondary focus is on issues such as notice requirements and standards, disclosure of information collected, disclosure of shared information, requirements to disclose sources of information, requirements to disclose business purposes, and a requirement to disclose third party involvement. The current assignments for the Working Group are intended to create a framework for the policy statement: defining the parameters of these consumer rights by offering suggested definitions, examples of consumer risks, and what may not be protected in federal laws or not covered under NAIC Model laws.

The Privacy Protections Working Group’s policy statement will address the following consumer privacy rights:<sup>10</sup>

- 1) Right to opt-out of data sharing
- 2) Right to opt-in of data sharing
- 3) Right to correct information
- 4) Right to delete information
- 5) Right to data portability

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<sup>9</sup> The Working Group has focused its reviews on the Insurance Information and Privacy Protection Model Act #670, and the Privacy of Consumer Financial and Health Information Regulation Model Act #672 – both drafted in response to the enactment of GLBA, and #668 – the Insurance Data Security Model Act, enacted in 2019/20. With a great deal of research assistance from NAIC Legal Staff, the Working Group prepared a gap analysis – upon which it continues to work. The Working Group is also reviewing the consumer data privacy protections other than those already in these models, such as the numerous provisions contained in federal acts such as the Fair Credit Reporting Act {FCRA}, the Gramm-Leach Bliley Act {GLBA}, the Health Insurance Portability and Affordability Act {HIPAA}, Electronic Health Records {EHR}, etc. The Working Group is also analyzing the various provisions of recently enacted legislation, such as California’s Consumer Privacy Act {CCPA} and its Consumer Data Privacy Regulation {CCPR}, Virginia’s and Colorado’s recently enacted Consumer Privacy Protection laws, certain provisions of the European General Data Protection Regulation {GDPR}, the NAIC’s Record Retention Model Regulation and the NAIC’s Unfair Claims Practice Model Act {UCPA}. There are a lot of jurisdictional issues that remain to be sorted through.

<sup>10</sup> For purposes of the Working Group’s paper, the use of the term “right” should be read as a basic protection, or, denoting access to making a request and not as a guarantee of having the requested right acted upon in the manner as the consumer requests.

6) Right to restrict the use of data<sup>11</sup>

The Accelerated Underwriting (A) Working Group will continue to watch the work of this group. If at any point issues unique to accelerated underwriting arise, we will endeavor to address them in a future work product.

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<sup>11</sup> for purposes of the Working Group's paper there is a distinction between an individual's data and information that results from the use of this data, *e.g.*, the insurance score that results from the use of an algorithm.

## Appendix A: Additional Procedural Background

At the 2019 NAIC Summer National Meeting, the Life Insurance and Annuities (A) Committee discussed a referral it had received from the Big Data (EX) Working Group. The Big Data Working Group had discussed the use of predictive models in accelerated underwriting in life insurance, instead of medical examinations and the collection of fluids. The Big Data Working Group agreed that the issue would be most appropriately addressed by the life insurance subject matter experts and voted to refer the issue of the use of external data and data analytics in accelerated underwriting in life insurance to the Life Insurance and Annuities (A) Committee (Committee).<sup>12</sup>

The Committee discussed the referral and acknowledged that there are a multitude of issues surrounding insurers' use of data models and data analytics; issues that extend into many areas of insurance and overlap with the work of several groups at the NAIC. In addition to the Big Data (EX) Working Group, there is the Innovation and Technology (EX) Task Force, the Artificial Intelligence (EX) Working Group, the Casualty Actuarial and Statistical (C) Task Force, and the Privacy Protections (D) Working Group. The Life Actuarial Task Force was also looking at the use of accelerated underwriting in life insurance from an actuarial perspective, including looking at any potential impact on insurer solvency.

The Committee agreed that an effort to delve into accelerated underwriting in life insurance would need to be narrowly focused while taking into account the work of these other NAIC groups touching on the same topic.

Robert Muriel (IL) chaired the Working Group and Grace Arnold (MN) was the vice-chair. The following were Working Group members: Jason Lapham (CO); Russ Gibson (IA); Rich Piazza (LA); Cynthia Amann (MO); Rhonda Ahrens and Laura Arp (NE); Ross Hartley and Chris Aufenthie (ND); Lori Barron (OH); Elizabeth Kelleher Dwyer (RI); Lichiou Lee (WA); Mark Afable (WI). In January 2021, Commissioner Afable became chair of the Working Group and the rest of the membership remained the same.

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<sup>12</sup> See NAIC Proceedings – Spring 2019, Innovation and Technology (EX) Task Force, Attachment Two.

<sup>13</sup> Gus Wortham Chair in Risk Management and Insurance at the University of Texas at Austin and Editor, North American Actuarial Journal.

In November 2020, the ad hoc drafting group shared with the Accelerated Underwriting (A) Working Group a proposed draft outline for an educational report exploring accelerated underwriting in life insurance to provide guidance to regulators, industry, and consumer advocates, and other stakeholders. In February 2021, the ad hoc groups merged.

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- Systems that arrive at results for which the outcomes and the stepwise approach toward the outcomes were not configured in advance by a human programmer.
- Systems that dynamically respond to conditions in the external environment without the specific nature of such responses being known in advance to the designers of the systems.
- Systems that utilize neural networks and/or deep-learning algorithms, such as supervised, semi-supervised, and unsupervised learning algorithms.
- Systems that engage in automatic speech recognition, facial recognition, image recognition, text recognition, natural language processing, generation of customer-specific recommendations, automated customer communications (e.g., chatbots with non-preprogrammed prompts), autonomous or semi-autonomous vehicle operation or data gathering, or any other approach that does not require either preprogramming or a manual human intervention in every instance of an action or decision.
- Systems that automatically generate adaptive responses based on interactions with a consumer or third party.
- Systems that determine which data elements to rely upon, in a non-preprogrammed fashion, among a variety of possible alternatives.

**Artificial Intelligence / Machine Learning Systems are not:**

- Static “scorecards” that deterministically map consumer or other risk characteristics to treatments or decisions. (However, an AI/ML system may use the output of such static “scorecards” as input data for the AI/ML system to consider.)
- Systems with solely preprogrammed decision rules (e.g., “If A, then B” applied invariably in all situations).
- Tables of point or factor assignments in rating plans.
- Static rate making and/or predictive modeling methodologies, including linear regression, generalized linear modeling (GLM), or generalized additive modeling (GAM). Purely informational static databases, such as databases used to obtain reference amounts for claim settlements, or static databases pertaining to consumer characteristics or experience, regardless of the

amount of information in the database. However, if AI/ML is used to create a static predictive model, that AI/ML system is considered within the scope of this survey.

- Deterministic “phone trees” that navigate consumers through pre-recorded voice prompts.
- Any approach that an insurer could have realistically utilized in the year 2000 or prior.

#### **AI/ML Use Descriptions and/or Explanations**

- **Underwriting: AI/ML Uses**
  - Automated Approval: Approving an application without human intervention on that particular application.
  - Automated Denial: Denying an application without human intervention on that particular application.
  - Underwriting Tier Determination: Decisions regarding the criteria to use to establish specific named or numbered categories (called tiers) which utilize combinations of attributes that affect an insurer’s underwriting decision.
  - Company Placement: Decisions regarding which of several affiliated companies within an insurance group will accept an individual risk.
  - Input into Non-Automated Approval Decision: Providing data, analysis, or recommendations regarding a decision to approve an application in a situation where a human decision-maker still has the ability and responsibility to affirmatively consider this information and make a decision independently of the AI/ML system. In this situation, the AI/ML system cannot automatically approve the application, and protocols exist that ensure that each recommendation from the AI/ML system is actively reviewed and not adopted by default.
  - Input into Non-Automated Denial Decision: Providing data, analysis, or recommendations regarding a decision to deny an application in a situation where a human decision-maker still has the ability and responsibility to affirmatively consider this information and make a decision independently of the AI/ML system. In this situation, the AI/ML system cannot automatically deny the application, and protocols exist that ensure that each recommendation from the AI/ML system is actively reviewed and not adopted by default.
  - Automate Processing Thru the Agency Channel: Enabling agencies to receive certain information about applicants automatically without specifically requesting that information and/or to provide quotes to the applicants and/or recommend a decision regarding the application to the agent without being based on preprogrammed decision rules.