

Draft June 3, 2024

**Accelerated Underwriting (A) Working Group
Ad Hoc Drafting Subgroup
Regulatory Guidance and Considerations**

The Accelerated Underwriting (A) Working Group offers the following regulatory guidance for state Departments of Insurance (DOIs) to use when reviewing life insurer's use of accelerated underwriting programs. The regulatory guidance is designed to provide a framework for regulators to reference and is divided into three areas of focus: A) regulatory considerations; B) strategies for review; and C) requests for information.

Regulators should ensure that accelerated underwriting programs are fair, transparent, safe, and secure and in compliance with existing law. Making sure that the use of accelerated underwriting is fair to consumers is important because its use impacts the availability, access, and affordability of life insurance to consumers. Ensuring that insurers use accelerated underwriting in a transparent manner is important because consumers should understand what personal data is being accessed by insurers and how that data is being used. Insurers accessing sensitive consumer data have a duty to secure that data to protect consumers from the harm of unauthorized disclosure. And finally, it is critical that insurers' use of accelerated underwriting is in compliance with all applicable insurance laws and regulations.

A "Background" section has been included starting on page 5 to explain the history of the development of this regulatory guidance. A chronological list of the work product from other NAIC groups addressing similar or overlapping issues related to accelerated underwriting also has been included. While this entire body of work at the NAIC has influenced this guidance document, in the interest of clarity in this rapidly evolving area, this guidance document includes specific references to the definitions from other work product on which the regulatory guidance relies.

Regulatory Guidance

A) Regulatory Considerations

The AUWG developed the following regulatory factors for DOIs to consider when reviewing a life insurer's use of Accelerated Underwriting¹ programs:

1. Data inputs are transparent, accurate, reliable, and the data itself is evaluated for potential unfair discrimination.
2. External data sources, Algorithms² or Predictive Models³ are based on sound actuarial principles, including a rational explanation why a rating variable is correlated to expected loss or expense, and why that correlation is consistent with the expected direction of the relationship.⁴
3. Predictive Models or Machine Learning⁵ Algorithm(s) within Accelerated Underwriting accurately assess and price risk.
4. Predictive Models or Machine Learning Algorithm(s) achieve an outcome that is not unfairly discriminatory.
5. Reason(s) for an Adverse Underwriting Decision⁶ are provided to the consumer along with all information upon which the insurer based its Adverse Underwriting Decision.
6. The insurer establishes and follows procedures to protect the consumer's privacy and the consumer's data.
7. The insurer has a mechanism in place to correct mistakes if found in consumer data.

¹ For purposes of this Regulatory Guidance, "Accelerated Underwriting" has the meaning set forth in the Life and Annuity Market Conduct Annual Statement (MCAS). See page 6 below "From 2022."

² For purposes of this Regulatory Guidance, "Algorithm" has the meaning set forth in the AI Model Bulletin (See Appendix 4).

³ For purposes of this Regulatory Guidance, "Predictive Model" has the meaning set forth in the AI Model Bulletin (See Appendix 4).

⁴ For clarity and consistency, this bullet borrows language from the Casualty Actuarial and Statistical (C) Task Force *Regulatory Review of Predictive Models White Paper* to describe this concept, replacing the language from the Accelerated Underwriting Educational Paper recommendation, which said: "External data sources, algorithms or predictive models are based on sound actuarial principles, including a valid explanation or rationale for any claimed correlation or causal connection."

⁵ For purposes of this Regulatory Guidance, "Machine Learning" has the meaning set forth in the AI Model Bulletin (See Appendix 4).

⁶ For purposes of this Regulatory Guidance, "Adverse Underwriting Decision" has the meaning articulated in the most recent draft of Model #674, which came from [Model #670](#) and is consistent with the Fair Credit Reporting Act.

8. The insurer will produce information upon request as part of regular filing submission reviews or market conduct examinations or actions.
9. The insurer has procedures in place to address the following requirements pertaining to the consumer: Notice Requirements, Opting-Out of Data Sharing, Correcting or Deleting Information, Data Portability, and Restricting the use of Data.

B) Strategies for Review

Using the regulatory considerations in A. above as a baseline for review, DOIs may consider the following:

1. Review a life insurer's underwriting programs/guidelines to confirm the proper use of data elements.
2. Request a life insurer provide Accelerated Underwriting data sources, Predictive Models, and Algorithms or summaries for analysis.
3. Request a life insurer provide additional information about how a particular Predictive Model or Machine Learning Algorithm is used in an Accelerated Underwriting program.
4. Request a life insurer provide information about source data used as part of its Accelerated Underwriting programs regardless of whether the data or score is provided by a third party or via a model.
5. Request a life insurer provide information about its auditing of data sets, Predictive Models, and Machine Learning Algorithms to ensure they are accurate, reliable, and do not result in unfairly discriminatory outcomes.

C) Requests for Information

The following are examples of questions and requests for information DOIs may want to submit to life insurers when reviewing Accelerated Underwriting programs:

1. What specific external data or information about life insurance applicants is being utilized by the Accelerated Underwriting program?
2. How does the company obtain any external data or information used as part of its life insurance Accelerated Underwriting program?
3. Explain in detail how the company discloses to applicants for life insurance what external information is used in its Accelerated Underwriting program and how this external information actually is used in the Accelerated Underwriting program.

4. Ask for a copy of all company disclosures provided to applicants regarding the company's Accelerated Underwriting program.
5. What process or recourse does the company provide to an applicant for life insurance should they receive an Adverse Underwriting decision based on external data or information?
6. What process or recourse does the company provide to applicants for life insurance to correct mistakes in the external data or information?
7. How is external data or information about life applicants utilized, stored, and destroyed after the completion of the underwriting process?
8. How does the company validate, test, and/or audit data sets, Predictive Models, and Machine Learning Algorithms for accuracy and reliability, and for potential Adverse Consumer Outcomes⁷?
9. Does the company validate, test, and/or audit data sets, Predictive Models, and Machine Learning Algorithms internally or does it utilize a third-party to perform these functions?
10. How does the company ensure that the model(s) it uses are based on sound actuarial principles?
11. How does the company address potential unfair discrimination by ensuring that external consumer data's correlation to risk is not outweighed by any correlation to a protected class(es).

The AUWG offers this guidance to the state DOIs for consideration, while recognizing that there is more work to come. The AUWG anticipates that the work of the other NAIC groups on this topic will lead to additional guidance regarding Accelerated Underwriting in life insurance.

⁷ For purposes of this Regulatory Guidance, "Adverse Consumer Outcomes" has the meaning set forth in the Model AI Bulletin (See Appendix 4)..

Background

The Accelerated Underwriting Working Group (AUWG) was created by the Life Insurance and Annuities (A) Committee at the NAIC 2019 Summer National Meeting. One of the original charges given to the Working Group was to “... consider the use of external data and data analytics in accelerated life underwriting . . . and, if appropriate, drafting guidance for the states.” The Working Group has been considering the effects of accelerated underwriting in life insurance since 2019, and during that time the definitions of artificial intelligence and accelerated underwriting and their use in life insurance has evolved.

A significant portion of the early work of the AUWG benefitted from a multitude of presentations from the life insurance industry, actuarial consulting firms, a machine learning assurance company, and consumer advocate groups. These presentations are summarized in an [educational paper](#) (Appendix 1) adopted by the Life Insurance and Annuities (A) Committee at the NAIC 2022 Spring National Meeting.

The educational paper includes recommendations for insurers and regulators designed to ensure new technologies are utilized by life insurers in ways that comply with existing insurance law. While existing insurance laws vary from state to state, the recommendations acknowledge that most states: 1) require life insurance underwriting to be based on expected losses and expenses; 2) require insurers that collect consumer data to maintain that data in secure systems; and 3) prohibit unfair discrimination in insurance underwriting.

The AUWG presents regulatory guidance for State Departments of Insurance (DOIs) when reviewing Accelerated Underwriting programs used by life insurers. The regulatory guidance expounds on the recommendations the AUWG made in its educational paper and provides sample questions and areas for review for DOIs.

Also, the AUWG is making a referral (Appendix 2) to the Market Conduct Examination Guidelines (D) Working Group of the Market Regulation and Consumer Affairs (D) Committee with suggested additions to the NAIC’s *Market Regulation Handbook* (MRH). The AUWG has concluded that it would be beneficial to include additional guidance in the NAIC’s MRH that addresses questions involving Accelerated Underwriting in life insurance.

There are other NAIC groups working on similar or overlapping issues related to Accelerated Underwriting. The AUWG has considered and incorporated relevant content from the following:

From 2020:

- ***The National Association of Insurance Commissioners (NAIC) Principles on Artificial Intelligence (AI)***

On August 14, 2020, the NAIC membership adopted the [NAIC Principles on AI](#) (AI Principles) (Appendix 3). These AI Principles apply to insurance companies and all persons or entities facilitating the business of insurance that play an active role in the AI system life cycle, including third parties such as rating, data providers and advisory organizations (AI actors). The purpose of

the principles is to inform and establish general expectations for AI actors and systems, emphasizing the importance of developing AI systems that are fair and ethical, accountable, compliant with insurance laws and regulations, transparent, and safe, secure, and robust. Both the educational paper and this regulatory guidance and referral rely on the expectations articulated in the AI Principles.⁸

From 2021:

- **The Casualty Actuarial and Statistical Task Force *Regulatory Review of Predictive Models White Paper*:**

The NAIC adopted the Casualty Actuarial and Statistical Task Force of Property and Casualty I Committee's [Regulatory Review of Predictive Models White Paper](#) (*Regulatory Review White Paper*) on April 14, 2021. The *Regulatory Review White Paper* was issued to help bring more consistency to the art of reviewing predictive models within property/casualty rate filings and make the review process more efficient.

From 2022:

- **The Market Conduct Annual Statement (MCAS) definition of Accelerated Underwriting**

The Market Conduct Annual Statement (MCAS) (D) Working Group under Market Regulation and Consumer Affairs (D) Committee is the national forum for states to define and revise the Market Conduct Annual Statement (MCAS) data elements and definitions. In 2022, the MCAS Working Group adopted additions to the Life and Annuity MCAS to collect basic information about products subject to Accelerated Underwriting, as well as the types of data the company uses in its Accelerated Underwriting. The MCAS includes the following:

For this MCAS, data should be reported as Accelerated Underwriting when artificial intelligence and/or machine learning which utilizes, in whole or in part, Other Non-medical Third-party Data and/or FCRA Compliant Non-medical Third-party Data in the underwriting of life insurance is applied; including when that data is used in combination with Application Data or Medical Data.

The AUWG believes that the MCAS definition is consistent with the more detailed definition of Accelerated Underwriting that informed the educational paper.⁹ Given that the AUWG regulatory

⁸ The AUWG relied on the NAIC's AI Principles for the recommendations contained in its educational paper and believes that these AI Principles, coupled with the NAIC model references listed in the MRH Section F. Underwriting and Rating of Chapter 20—General Examination Standards, and Section F. Underwriting and Rating of Chapter 23—Conducting the Life and Annuity Examination, form the basis for additional examination review criteria that focus on Accelerated Underwriting in life insurance.

⁹ AUWG's educational paper adopted the following definition: "Accelerated underwriting (AU) 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 applicants to have certain medical requirements waived, such as paramedical exams and fluid collection."

guidance is contemplated for use by insurance departments during market conduct reviews and for inclusion in the MRH, the AUWG uses the MCAS definition for purposes of its regulatory guidance document to avoid any unintended confusion.

From 2023¹⁰:

- ***NAIC Model Bulletin: Use of Artificial Intelligence Systems by Insurers***

On December 4, 2023, the NAIC adopted the [NAIC Model Bulletin: Use of Artificial Intelligence Systems by Insurers](#) (AI Model Bulletin) (Appendix 4). The bulletin, when issued by a Department of Insurance: 1) reminds insurers that decisions or actions made or supported by AI must comply with all applicable insurance laws and regulations; 2) sets forth expectations as to how insurers will govern the development/acquisition and use of AI technologies and systems; and 3) also advises insurers of the type of information and documentation that the Department may request during an investigation or examination of any insurer regarding its use of AI technologies and systems.

The regulatory guidance follows the AI Model Bulletin. Specifically, the considerations, expectations, and questions about Accelerated Underwriting in life insurance contained in the regulatory guidance follow the expectations articulated in the first sentence of the AI Model Bulletin: “that decisions or actions impacting consumers that are made or supported by advanced analytical and computational technologies, including Artificial Intelligence (AI) Systems (as defined [in the bulletin]), must comply with all applicable insurance laws and regulations.” The defined terms in the AI Model Bulletin also apply to the AUWG regulatory guidance.

Big Data and AI (H) Working Group 2023 Life Artificial Intelligence/Machine Learning Survey

The 2023 Life Artificial Intelligence/Machine Learning Survey (Life AI/ML Survey) was conducted to inform the work of the Big Data and Artificial Intelligence (H) Working Group in support of its charge to:

Research the use of big data and artificial intelligence (AI) in the business of insurance, and evaluate existing regulatory frameworks for overseeing and monitoring their use. Present findings and recommended next steps, if any, to the Innovation and Technology (EX) Task Force, which may include model governance for the use of big data and AI for the insurance industry.

¹⁰ In 2023, Draft Model and Data Questions were developed and exposed for comment by the Big Data and AI (H) Working Group to help regulators assess whether, to what extent, and in what capacity AI and ML algorithms were used in insurer operations. The Questions are intended to help regulators perform regulatory oversight during an investigation or as related to rate model reviews. The document includes a spreadsheet to gather responses in a structured format. An initial draft was exposed for comment in 2023, however, the project was put on hold to focus efforts on developing the AI Model Bulletin.

The results of the survey, summarized in a [Nov. 30, 2023 memorandum](#) (Appendix 5) and in the summary results chart (Appendix 6), confirm the importance of the development of regulatory guidance specific to the use of Accelerated Underwriting in life insurance.

In 2024 and ongoing...

- **Third-Party Data and Models (H) Task Force**

In 2024, the Third-Party Data and Models (H) Task Force was formed. The Task Force is charged to:

- A. Develop and propose a framework for the regulatory oversight of third-party data and predictive models.
- B. Monitor and report on state, federal, and international activities related to governmental oversight and regulation of third-party data and model vendors and their products and services. Provide recommendations to the Innovation, Cybersecurity, and Technology (H) Committee regarding responses to such activities.

The goal of this Task Force is to develop and propose an optimal regulatory framework for the regulatory oversight of third-party data and predictive models. The proposed regulatory framework may require new or modification of adopted model laws or regulations in 2025. The Third-Party Data and Models (H) Task Force will coordinate with other Innovation, Cybersecurity, and Technology (H) Committee activities and forums and place emphasis on transparency during the process.

- **Artificial Intelligence Systems Evaluation and Training Collaboration Forum**

The Innovation, Cybersecurity, and Technology (H) Committee established the concept of Collaboration Forums (CFs) as platforms for multiple NAIC groups to work together to identify and address foundational issues and develop a common framework that can inform the various workstreams across the NAIC Committee structure. CFs typically result in a series of events which may include webinars, or in-person components intended to advance an important policy matter.

An emerging CF is the Artificial Intelligence Systems Evaluation and Training Collaboration Forum, which includes several working groups and task force leads coming together for the purpose of developing exam standards for insurers using AI. The CF is also planning to oversee the development of AI training for regulators. The AUWG leadership is involved in this CF and in this role will help ensure that there is consistency around this topic across all lines of insurance.

- **The Privacy Protections (H) Working Group under the Innovation, Cybersecurity and Technology (H) Committee**

The Privacy Protections (H) Working Group is working on replacing the NAIC's Insurance Information and Privacy Protection Model Act (#670) and the Privacy of Consumer Financial and

Health Information Regulation (#672) with one new model, *Consumer Privacy Protections Model Law* (#674). Model #674 is intended to address issues confronting state insurance regulators applying current model law and regulation requirements to consumer privacy notifications relative to insurance companies, insurance producers, and their third-party vendors access to consumer data via the internet, telematics, and other data tracking technology used in complex algorithms, including machine learning (ML) and artificial intelligence (AI). Although this group is addressing a unique set of issues, it will require coordination, especially with regard to definitions.

The AUWG supports the NAIC further developing regulatory guidance regarding the use of artificial intelligence in the insurance industry to help DOIs appropriately monitor the use of Accelerated Underwriting programs used by life insurers. As noted above, there is work currently underway which will inform future efforts on this topic.