
Comments of the Center for Economic Justice

To the NAIC Accelerated Underwriting (A) Working Group

Regarding Draft "Regulatory Guidance and Considerations"

April 14, 2023

The Center for Economic Justice ("CEJ") offers the following comments on the draft "Regulatory Guidance and Considerations" for Accelerated Underwriting in Life Insurance.

CEJ appreciates the efforts of the working group to identify and address consumer protection issues with insurers' use of big data, algorithms and artificial intelligence – collectively referred to as Accelerated Underwriting ("AU"). We recognize the difficulty in carrying out your charge because of the constantly shifting responsibilities that touch on AU that have been assigned to a variety of different working groups and committees at the NAIC.

To an outsider, it appears to be a big game with AU issues going from the Life Actuarial Task Force in 2016 to, in no particular order, the Life Insurance Committee, the Big Data Working Group, the H Committee, the Market Conduct Annual Statement Blanks Working Group and perhaps others. We suspect that this movement of AU-related responsibilities around the NAIC has made your work more difficult as you try to stay in your lane while respecting the work of other group. The discussion, in the draft guidance document, of the related work of other NAIC entities reflects this fractured approach – nearly two full pages of the five-page document describe potential AU-related activities of other NAIC groups.

While we continue to appreciate the AU WG efforts, the draft regulatory guidance document unfortunately provides little regulatory guidance. In the five-page document, the first page is an introduction. Pages 2 and 3 discuss the work of other NAIC groups. The regulatory guidance provided is limited to the last two pages of the document and much of this is not actually guidance. Page 4 consists largely of "considerations" without reference to statutory authority and without guidance for how to address these considerations. At the bottom of page 4 onto page 5, the draft provides general descriptions of things to do, but, again, fails to link these regulatory requests to statutory authority or to particular issues of concern. The questions on page 5 are similarly without context regarding when and how to ask the questions. In addition, many of the terms used in expectations and questions are undefined.

The two pages of regulatory guidance in the draft are essentially the same general issues of concern raised in 2016 at the Life Actuarial Task Force and raised continuously since at each of the NAIC groups through which AU has migrated. The draft regulatory guidance provides no references for further information, despite a list of 17 documents on the AU WG web page.

Below, CEJ offers for the AU WG's consideration substantive regulatory guidance – guidance that would provide a clear road map based on statutory authorities to examine insurers' AU practices and show how to examine issues of regulatory concern. Included in the guidance are specific referrals to the Market Regulation and Consumer Affairs (D) Committee, marked with a footnote. We ask the AU WG to review the draft referral to the Market Conduct Examination Standards Guidelines Working Group to reflect the suggestions in the proposed revised draft regulatory guidance. Please see footnotes 5, 6, 7, 9 and 11 in the proposed regulatory guidance document for proposed referrals to the D Committee.

Finally, we request the AU WG hold an interactive meeting with stakeholders, as is the norm for working groups developing regulatory guidance. Examples include the detailed discussion of stakeholder comments at the Restructuring Mechanisms and Privacy Protections working groups, among many others past and current. Those sessions not only allow regulators to ask questions of stakeholders, but provide stakeholders with an understanding of why regulators decide to accept or reject particular recommendations.

Thank you for your consideration.

## Proposed Guidance for Regulatory Oversight of Life Insurers' Accelerated Underwriting Practices

### Foundation

This section provides foundational information and concepts to provide the basis for the guidance to regulators that follows.

#### What is Accelerated Underwriting in Life Insurance?

The NAIC Accelerated Underwriting Working Group ("AU WG") developed an educational paper, subsequently adopted by the Life Insurance and Annuities (A) Committee in April 2022. The educational paper provides the following definition / description of Accelerated Underwriting ("AU")

> 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.[1]

#### AU as a Continuum of Big Data and Artificial Intelligence ("AI") Practices

Insurers' use of big data, algorithms and AI runs along a continuum from speeding up traditional underwriting through automated processes and access to third party data sets to replacing traditional underwriting completely with algorithms and non-traditional data. On one end of the continuum, the insurer may speed up the underwriting and pricing process by obtaining data from third party sources instead of from the consumer in an application.

For example, instead of asking a consumer about their prescription drug use, the insurer might access a third party prescription database. Instead of obtaining a consumer credit report to review for financial distress or bankruptcy, the insurer might obtain a credit score based on the consumer's credit information.

[1] https://content.naic.org/sites/default/files/inline-files/AUWG%20DRAFT%2034-22%20for%20SNM_0.pdf at page 2.

The foundation of traditional underwriting has been – and continues to be – mortality tables that review many decades of insurer life insurance experience. These tables have historically been developed by the Society of Actuaries, subject to approval and adoption by the NAIC's Life Actuarial Task Force (and subsequent adoption by parent committees).

Over time, some of the manual underwriting processes were automated or semi-automated, but still remain part of a traditional underwriting approach – analyzing the same information, but getting it from sources other than the applicant and/or analyzing the traditional information in more granular detail to allow greater use of predictive models to produce greater segmentation among consumers – i.e., more price levels.

With new sources of data and advanced analytical techniques, some insurers, insurers and vendors developed new approaches to underwriting – AU that replace some or all of traditional underwriting data with different types of information. But since there is no set of mortality tables associated with these new sources of data, it is not possible to analyze, say, 50 years of mortality experience with the new data. Consequently, some AU applications are based on predicting what the traditional underwriting outcome would be as opposed to directly predicting mortality.

The distinction between an AU algorithm developed on the basis of actual mortality experience versus one developed on the basis of predicting or replicating the traditional underwriting result is significant. If a regulator seeks assurance that an insurer's underwriting is producing actuarial fair outcomes, then the relevant outcome to analyze is mortality. The fact that an AU algorithm faithfully mirrors the outcomes of traditional underwriting is, at best, a proxy for actuarial fairness and deserves careful scrutiny to ensure the traditional underwriting results were not biased on either actuarial or protected class basis.

Regulatory Authority

Regulatory oversight of insurers' use of AU presents both a continuation of traditional regulatory responsibilities and ove

- Information and Data Requests: Regulators have broad authority to request information from regulated entities. This authority works well for information maintained by the insurer or the insurer's agents or third parties acting under the authority of the insurer (such as a third party administrator), but may be problematic for third party vendors supplying data or algorithms for the insurer's AU practices.

  Regulators may ask third party providers of data and algorithms for information and many are willing to respond to the regulatory requests. For example, vendors providing credit-based mortality scores have indicated a willingness to share information with regulators – just as these same vendors do with credit-based insurance scores for auto and home insurance.

  However, some third-party vendors of data and algorithms may not be willing to provide the information sought by regulators. If the absence of information from third party vendors prevents the regulator from ensuring the insurer's compliance with statutory requirements, then the regulator may need to resort to disapproving or disallowing a particular insurer practice or algorithm used until and until the relevant third party vendors provide the information needed by the regulator.

- Unfair Discrimination on the Basis of Protected Class Status: Most states have laws in place that prohibit insurers, including life insurers, from discriminating on the basis of protected class characteristics. The protected class characteristics typically include race, religion and national origin, but may include other characteristics.

- Unfair Discrimination on An Actuarial Basis: Most states require that insurers treat similarly situated consumers the same, meaning that any difference in treatment of consumers for underwriting, pricing or claim settlement must be based on sound actuarial analysis and reflect a difference in the expect costs of the transfer of risk. If there is no actuarial basis for treating consumers differently, those consumers have experienced unfair discrimination.

- Unfair and Deceptive Trade Practice: For life insurance, unfair discrimination prohibitions are often found in unfair trade practices statutes or regulations. In addition, the unfair trade practices regulatory authority may be used to address deceptive and misleading practices by insurers. This is particularly relevant for issues of disclosure and consent for the insurers to collect, use and share personal consumer information.

Unfair Discrimination Definitions

With the advent of new data sources, data mining, and AI generating new models and algorithms used by insurers, there is increased potential for some data and models to reflect, perpetuate or amplify historical discrimination, particularly discrimination on the basis of race.

Regulators need precise definitions for different types of unfair discrimination to ensure a consistent understanding across stakeholders and to facilitate consistent regulatory analysis and treatment. Using the protected class characteristic of race:

***Disparate Intent*** is intentional use of race to discriminate in any aspect of the insurance life cycle. Regulators hope and believe that insurers no longer use race explicitly for underwriting, pricing, claims settlement or antifraud activities.

***Proxy Discrimination*** means disproportionate racial outcomes tied to the use of proxies for race, not to outcomes. The data source or algorithm is actually predicting race and not the insurance outcome.

***Disparate Impact*** means disproportionate racial outcomes tied to historic discrimination and embedded in insurance outcomes. The data is not correlated to race, but also predicts the insurance outcome because the racial discrimination is baked into the insurance outcomes.

Regulatory guidance for how to use these definitions is provided below.

Dark Patterns

Dark Patterns is a term used to describe digital manipulation.

> *"Dark patterns are user interface techniques that benefit an online service by leading consumers into making decisions they might not otherwise make. Some dark patterns deceive consumers, while others exploit cognitive biases or shortcuts to manipulate or coerce them into choices that are not in their best interests."*
>
> *"As documented in several research studies, consumers may encounter dark patterns in many online contexts, such as when making choices to consent to the disclosure of personal information or to cookies, when interacting with services and applications like games or content feeds that seek to capture and extend consumer attention and time spent, and in e-commerce, including at multiple points along a purchasing journey".*[2]

[2] https://freedom-to-tinker.com/2022/08/10/recommendations-for-updating-the-ftcs-disclosure-guidelines-to-combat-dark-patterns

*"At their core, dark patterns are a specific type of choice architecture in website and app design that interfere with user autonomy and choice. Dark patterns modify the presentation of choices available to users or manipulate the flow of information so that users make selections that they would not otherwise have chosen—to their own detriment and to the benefit of the website or app provider. Hallmarks of dark patterns include imposing asymmetric burdens to achieve competing choices, restricting the choices available at the same time (or at all), and hiding information or presenting information deceptively."*[3]

A business seeking to obtain a consumer report must do the following:

- Disclose the business's intent to obtain a consumer report
- Obtain the consumer's consent to obtain the consumer report
- Use the consumer report only for permitted uses
- Protect the consumer's personal consumer information

Getting Started

Lay of the Land Information Requests

Regulators should start with data and information requests to all life insurers to get information about life insurers' use of big data, algorithms, models and AI – all of which comprise AU.

***Information Request 1: Data Sources and Uses:*** This request should go to all life insurers with the following information requests:[5]

- Date of Report
- Data Type –What is the Data?
- Source of Data – Consumer via Application, Consumer via Wearable Device or other internet-connected device, Insurer Internal, Third Party, Other
- FCRA Compliant – Yes or No
- Use Category – Marketing, Underwriting (Eligibility/Terms), Pricing, Claims, Anti-Fraud, Risk Prevention, Loss Mitigation, Consumer Relations/Retention
- Models Utilizing These Data – Which of the insurer's' models utilize this data type

With this information, the regulator can quickly assess the state of AU in your jurisdiction. A best practice would be, following the initial reporting by insurers, to require insurers to provide updates every six months identifying any changes from the previous report.

Based upon this initial review, the regulator may want to go deeper by asking insurers about their AU algorithms identified in the Data Sources and Uses reports.

***Information Request 1A – Algorithms and Models:*** This information request provides the regulator with information to take the deeper dive into AU models:[6]

- Date of Report
- Name of Model or Algorithm
- Internally Developed or Third Party Algorithm
- If Third Party, Name of Vendor
- Date First Deployed
- Date Current Version Deployed

[5] The detailed development of this information request has been referred to the Market Regulation and Consumer Affairs (D) Committee.
[6] The detailed development of this information request has been referred to the Market Regulation and Consumer Affairs (D) Committee.

- Current Version Number
- Purpose(s) of Algorithm (Marketing, Underwriting, Pricing, Claims Settlement, Antifraud, Risk Mitigation Partnership, Other)
- Data Inputs, Sources of Data Inputs (Consumer, Insurer, Third Party, Other) and whether Data are FCRA-compliant (subject to FCRA requirements).
- Unfair Discrimination Test Results
- Actions Taken to Address Unfair Discrimination Test Results
- Consumer Complaints Arising from Use of the Model (since last report)
- Actions Taken with Respect to the Model to Address Consumer Complaints
- Results of Tests to Ensure Model is Performing as Intended
- Actions Taken in Response to Testing of Actual Model Performance

Disclosure and Consent for Collection and Use of Personal Consumer Information

Regulators expect that insurers' AU practices will be transparent and fair to consumers. Transparency requires meaningful disclosure of the personal information the insurer intends to collect or has already collected and the opportunity for the consumer to consent to specific uses by the insurer. This transparency requires a choice and disclosure to the consumer as well as a meaningful opportunity to decline some or all of the data collection and uses proposed by the insurer.

With AU – and, more generally, with more digital applications and consumer interactions – the issue of dark patterns or digital manipulation takes center stage. When a consumer goes to a life insurer's web site and seeks to obtain a quote, does the digital interface clearly disclose what personal consumer information will be obtained with the consumers' consent and without the consumers consent? Does the digital interface make it straightforward for the consumer to identify and decline data uses not essential to the insurance transaction?

***Information Request 2: Privacy Policies and Screenshots of Disclosure and Consent Architecture for Collection and Use of Personal Consumer Information***[7]

- Privacy Policies (Text)
- Screenshots of Disclosure of Personal Consumer Information Collected
- Screenshots of Consumer Consent Architecture

[7] The detailed development of this information request and guidance for identifying dark patterns has been referred to the Market Regulation and Consumer Affairs (D) Committee

> "TransUnion recently evaluated the predictive power of court record violation data (including criminal and traffic violations)
>
> "Also, as court records are created when the initial citation is issued, they provide insight into violations beyond those that ultimately end up on the MVR—such as violation dismissals, violation downgrades, and pre-adjudicated or open tickets."

It did not take the recent murders of Black Americans by police to recognize that this "criminal history score" will reflect historic discrimination in policing against Black Americans and perpetuate that discrimination in insurance. Consider policing records in Ferguson, Missouri.

> US DOJ Investigation of the Ferguson Police Department
> Ferguson's approach to law enforcement both reflects and reinforces racial bias, including stereotyping. The harms of Ferguson's police and court practices are borne disproportionately by African Americans, and there is evidence that this is due in part to intentional discrimination on the basis of race.

Protected Class Unfair Discrimination Analysis is Straightforward and Particularly Suited to Insurance.

The insurance industry has the precise skill set needed to identify and eliminate proxy discrimination and minimize disparate impact.

Let us revisit proxy discrimination and disparate impact forms of protected class unfair discrimination. Proxy Discrimination occurs when a predictive factor or data source is actually predicting race and not the intended outcome. The result is unnecessary racial bias because the predictive factor is not, in fact, predicting the outcome. Since proxy discrimination violates both the actuarial and protected class versions of unfair discrimination, the particular factor or data source should be discarded.

Disparate Impact occurs when the insurance outcomes are racially-biased because the racial bias in embedded in the insurance outcomes. For example, certain health conditions disproportionately impact African Americans. Historic residential property redlining is associated with a variety of disproportionate health impacts on communities of color.

It is important to distinguish between proxy discrimination and disparate impact. With proxy discrimination, insurers have or should have interest in stopping this unnecessary discrimination.

Disparate impact, however, requires a policy decision based on equity

Unfair Discrimination – Regulatory Data Collection and Independent Testing

In addition to reviewing insurers' self-testing of the AU algorithms for unfair discrimination, regulators should also collect granular consumer market outcome data for independent regulator testing. There are several reasons for independent regulator testing in addition to insurer self-testing. First, models don't always perform as intended. While an insurer model may not intend to produce racially biased results, the outcomes may, in fact, be racially biased in a manner that can be prevented or minimized. Second, regulators can utilize a common testing method across all insurer models and outcomes to produce metrics comparable across insurers. Third, trust but verify. Insurer testing may be flawed. Fourth, the aggregate industry results may show racial bias even if individual insurer results do not. Fifth, testing based on data containing final quotes – including both policies issued and not issued – provides insight into potential bias in marketing algorithms.

***Information Request 3 – Granular Consumer Market Outcome Data*** – These data should include a record for each final life insurance quote with all the risk characteristics utilized by the life insurer. Each record will include, among other things, whether the quote resulted in policy issuance and demographic information about the applicant collected by the insurer.

The AU WG has identified three possible options for the Market Regulation and Consumer Affairs (D) Committee to consider in developing detailed specifications and approaches for this information request[9]:

- Revise the current life insurance Specialized Data Request developed for market conduct examinations;
- Revise the Market Conduct Annual Statement;
- Supplement Life Insurance reporting for principle-based reserving. Life insurers will be reporting granular sales and claims data to the NAIC pursuant to the PBR valuation manual sections VM 50 and VM 51.
- Develop a separate statistical plan for life insurance and appoint a statistical agent to collect the data from insurers on behalf of all the regulations. This approach would eliminate the need for the Life Insurance MCAS.

<u>Regulatory Testing for Unfair Discrimination Using Granular Consumer Market Outcome Data</u>

As noted above, there are well-accepted methods for testing for protected class bias. One common approach is to add a data element to each consumer market outcome data to infer the

inferring a race to individual consumer market conduct records. A commonly used approach is the Bayesian Improved First Name Surname Geocoding (BIFSG) method which uses

Biometric Information

Biometrics refers to the measurement and statistical analysis of an individual's physical and behavioral characteristics. The technology associated with biometrics has many uses but frequently is used to verify personal identity. Examples of physiological characteristics include: DNA, fingerprints, face, hand, retina or ear features, and odor. Examples of behavioral characteristics include gesture, voice, typing rhythm, and gait.[13]

Facial recognition is the most common form of biometrics and, as discussed above, has been identified and racially biased.[14] Other algorithms either used by or marketed to life insurers include biometric analysis of video interviews or assessing the truthfulness of an applicant or the biological age of the applicant. New algorithms score consumers based on how they fill in / complete online forms.

Regulators should quickly identify any biometric data sources and algorithms used by life insurers and require the insurers to demonstrate that any use of such data or algorithms are fair and not unfairly discriminatory.

Criminal Histories and Criminal History Scores / Motor Vehicle Records

Regulatory concern with criminal histories and criminal history scores was discussed above. Some life insurer AU models utilize driving records – moving violations, for example – in AU models. Because of documented bias in policing, regulators should require insurers to demonstrate that their AU models that utilize these data sources do not produce unfairly discriminatory outcomes

Other AU data sources and algorithms that raise particular concern about unfair discrimination and for which regulators should require insurers to demonstrate the absence of unfair discrimination include:

- Consumer Lifetime Value Scores
- Fraud or Propensity for Fraud Scores
- Social Media
- Telematics / Wearable Devices

[13] https://www.jacksonlewis.com/sites/default/files/docs/IllinoisBIPAFAQs.pdf
[14] The NAIC hosted an event on facial recognition and racial bias in 2021. Regulators may want to view a recording of that session for background on the issue.

## Availability of AU Products

Another issue for regulators to consider with AU is whether all consumers have the same access to AU life insurance products. Analysis of information request 3: Granular Consumer Market Outcome Data enables regulators to determine whether AU products are being sought by or offered to consumers from all communities.