COMMENTS

NAIC MODEL BULLETIN:
USE OF ALGORITHMS, PREDICTIVE MODELS, AND ARTIFICIAL INTELLIGENCE SYSTEMS BY INSURERS

1. American Council of Life Insurers (ACLI)
2. America's Health Insurance Plans (AHIP)
3. American Academy of Actuaries
4. American InsurTech Council (AITC)
5. American Medical Association (AMA)
6. American Property Casualty Insurance Association (APCIA)
7. Blue Cross Blue Shield Association (BCBSA)
8. Center for Economic Justice (CEJ)
9. Colorado Division of Insurance
10. Consumer Health Representatives
11. Consumer Representatives
12. Indiana Department of Insurance
13. Insured Retirement Institute (IRI)
14. InsurTech Coalition
15. Missouri Department of Commerce and Insurance
16. Monitaur
17. National Association of Mutual Insurance Companies (NAMIC)
18. National Alliance of Life Companies (NALC)

19. National Council of Insurance Legislators (NCOIL)
20. New York State Department of Financial Services
21. Oscar Health, Inc.
22. Risk & Regulatory Consulting
23. U.S. Chamber of Commerce
24. Virginia Bureau of Insurance

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September 5, 2023

Commissioner Kathleen Birrane, Chair
Commissioner Mike Conway, Co-Vice Chair
Commissioner Doug Ommen, Co-Vice Chair
Innovation, Cybersecurity and Technology (H) Committee
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106

Re: Comments on NAIC Model Bulletin: Use of Algorithms, Predictive Models and Artificial Intelligence Systems by Insurers

Dear Chair Birrane and Co-Vice Chairs Conway and Ommen:

The American Council of Life Insurers ("ACLI") appreciates the opportunity to provide comments on the proposed NAIC Model Bulletin on the Use of Algorithms, Predictive Models and Artificial Intelligence Systems by Insurers ("Bulletin") on behalf of our members.

We would like to express our gratitude to Commissioner Birrane and her colleagues for spearheading this effort to create this model Bulletin. As technology continues to advance, and regulatory oversight of such technology expands, it is important that insurers have a uniform approach to ensure that customers are treated fairly and in the same fashion regardless of the state in which they live. This bulletin will help foster that uniform approach to the regulation of the use of AI and related technology.

ACLI appreciates the goal of this bulletin is to outline regulators' expectations when examining an insurer's use of AI Systems. We believe the draft Bulletin primarily meets that goal but we do offer the following comments/suggestions to consider when developing the final document.

Definitions

We understand the impetus behind including definitions for key terms that are used throughout the bulletin, but we would ask that they be consistent both throughout other NAIC created documents and with definitions set by the federal government or in guidelines such as the NIST AI RMF.

1. “AI Systems” – we would suggest using the NIST definition for this term which reads “an engineered or machine-based system that can, for a given set of objectives, generate outputs such as predictions, recommendations or decisions influencing real or virtual environments. AI Systems are designed to operate with varying levels of autonomy.”

2. “Algorithms” – we suggest using a modified version of the definition included in the NAIC AI/ML Definition for Personal Passenger AI/ML Survey Report (12/2022) which reads “A process or a set of rules executed to solve a non-deterministic or probablistic equation or problem in a predetermined fashion. This definition does not include systems with solely preprogrammed decision rules.”

3. “Artificial Intelligence” – as currently drafted, we believe this term is redundant given the definition of “AI Systems” which we believe incorporates the definition of “artificial intelligence” within it. If the NAIC still wishes to include a definition for this term, we suggest the following definition from NIST – “Artificial Intelligence (AI) refers to a large class of software-based systems that receive signals from the environment and take actions that affect the environment by generating outputs such as content, predictions, recommendations, classifications, or decisions influencing the environments they interact with, among other outputs.”

4. “Bias” – this term is used throughout the document where it would seem more appropriate to use the term unfair discrimination. We suggest removing this definition and striking instances where the term “unfair bias” is used and simply refer to unfair discrimination which is already defined in Section 4.G. of the Unfair Trade Practices Model Act (MO 880).

5. “Big Data” – although this definition is consistent with the NIST definition of Big Data, this term is not used within the body of the bulletin. It appears in the introductory paragraph and the proposed definition of “AI Systems” which we have suggested be modified. This definition should be removed.

6. “Machine Learning” – As with “Big Data”, the term “machine learning” or “ML” is not used within the body of the bulletin with the exception of one instance in the introductory paragraphs of Section 3. Regulatory Guidance and Expectations. We believe the definition we have proposed for “AI Systems” brings into scope “machine learning” and no further definition is required. If the NAIC wishes to keep a definition for “machine learning” in the document, we suggest the following NIST definition: “Machine Learning refers to the field of study that gives computers the ability to learn without being explicitly programmed.”

7. “Third Party” – we suggest the following alternative definition: “means an organization other than an insurance licensee or its affiliates or subsidiaries that provides services, data or other resources related to AI Systems.”

We note that there is no definition for “predictive models,” yet it appears throughout the Bulletin wherever “algorithm” appears. We suggest adding the following definition:

8. “Predictive Model” means a statistical technique using machine learning and data analysis to examine data sets for patterns to forecast possible or likely outcomes.

Section 3. Regulatory Guidance and Expectations

Attached as Appendix A is a redlined version of the draft bulletin with suggested edits. We did want to highlight a few areas of particular concern.

In the AIS Program Guidelines, General Guidelines 1. 3, the bulletin states that the AIS Program should be adopted by the board of directors or an appropriate committee of the board. The board of directors oversees the direction and strategic objectives of the company. As such, the board should be aware of the existence of a company’s AIS Program, but it should not be charged with approving such program. Requiring board approval of an AIS system would create logistical and practical challenges and would encumber the nimbleness of an area that is subject to rapid and continual changes. Instilling responsibility for the oversight and approval of the AIS Program with the company’s senior leadership allows for the company to remain agile and make timely adjustments as technology and regulatory landscapes evolve. We suggest the following edits to this section:

“The board of directors or an appropriate committee of the board should be aware of the IS Program and ensure the company has an AIS policy in place. The AIS Program should vest responsibility for the development, implementation, monitoring and oversight of the AIS Program and for setting the Insurer’s strategy for AI Systems with senior management reporting to the board or an appropriate committee of the board.”

Third-Party AI Systems

The use of third-party vendors is and will continue to be very important in the expanded use of technology within the insurance industry. This is true regardless of the size of the carrier. Many third-party vendors are not specific to the insurance industry nor are they insurance licensees and, thus, may not agree to the inclusion of specific contract terms subjecting them to “oversight” by state insurance regulators. Inclusion of such contract language and other requirements on the Bulletin has the potential of limiting the available third-party vendors willing to work with life insurers and may stifle innovation and ultimately harm consumers. In Sections 3 and Section 4, there are very prescriptive details regarding third-party vendors that go well beyond what would be considered “awareness of the Department’s expectations” and are indeed crossing into suggesting specific practices and documentation requirements.

In Section 3.4.2, we would strike a) through d) and reword the section to read: “Take steps to ensure that contracts with third-party vendors include commitments for the third-party vendor to cooperate with regulatory inquiries and investigations related to the insurer’s use of the third-party vendor’s products or services.”

In Section 3.4.3, we suggest the following substitute language " A process to ensure that data received from third parties is safe, accurate and fair and complies with regulatory requirements."

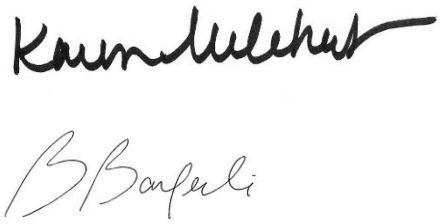
In Section 4.2.2, in describing the types of documents that may be requested during an examination, the description goes beyond simply stating the contracts a company has with third-party vendors and includes in the description contractual provisions to be included in such contracts. The sentence should read "Contracts with third-party AI System, model or data vendors."

In Section 4.2.3, it states that documentation pertaining to audits and confirmation processes performed with respect to third-party compliance. Again, this goes beyond providing guidance and seems to require that carriers include audit and compliance requirements in their contracts with third-party vendors. This section should either be stricken or rewritten to read: "Documentation maintained by the company to demonstrate due diligence in the selection of third-party vendors and the data, products and services they provide."

Conclusion

ACLI appreciates the work done to bring forth this Model AI Bulletin and the continued dialogue with all stakeholders to create uniformity in guidance to carriers for the use of AI across the country. We look forward to working with the NAIC to bring this Model to conclusion later this year.

Sincerely,



EXPOSURE DRAFT
07.17.2023

NAIC MODEL BULLETIN:

USE OF ALGORITHMS, PREDICTIVE MODELS,
AND ARTIFICIAL INTELLIGENCE SYSTEMS BY INSURERS

TO: All Insurers Licensed to Do Business In (*Insert Name of Jurisdiction*) ("Insurers")

FROM: [Department/Commissioner]

DATE: [Insert]

RE: The Use of Artificial Intelligence Systems in Insurance

This bulletin is issued by the [] (Department) to remind all Insurers that hold certificates of authority to do business in the state that decisions impacting consumers that are made or supported by advanced analytical and computational technologies, including artificial intelligence (AI) systems (as defined below), must comply with all applicable insurance laws and regulations. This includes those laws that govern unfair trade practices. This bulletin sets forth the Department's expectations as to how Insurers will govern the ~~development/acquisition and~~ use of such technologies and systems by or on behalf of the Insurer to make or support such decisions. This bulletin also advises Insurers of information and documentation that the Department may request during an investigation or examination of any Insurer that addresses the use of such technologies or systems.

SECTION I: INTRODUCTION, BACKGROUND, AND LEGISLATIVE AUTHORITY

Background

Artificial Intelligence (AI) techniques, including the application of sophisticated algorithms and machine learning (ML) to big data (BD), are transforming the insurance industry. AI techniques are deployed across all stages of the insurance life cycle, including product development, marketing, sales and distribution, underwriting and pricing, policy servicing, claim management, and fraud detection. AI can facilitate the development of innovative products, improve consumer interface and service, simplify and automate processes, and promote efficiency and accuracy. At the same time, using AI can bring unique risks, including the potential for inaccuracy, ~~unfair bias resulting in~~ potential unfair discrimination, and data vulnerability.

The Department encourages the development and use of innovation and AI Systems that contribute to safe and stable insurance markets. The Department also expects that Insurers that use AI Systems to support decisions that impact consumers will do so in a manner that complies with and is designed to assure that the decisions made using those systems meet the requirements of all applicable federal and state laws.

The Department recognizes the *Principles of Artificial Intelligence* that the NAIC adopted in 2020 as an appropriate source of guidance for Insurers as they develop and use AI systems. Those principles emphasize the importance of the fairness and ethical use of AI; accountability; compliance with state laws and regulations; transparency; and a safe, secure, fair, and robust system. These fundamental principles

should guide Insurers in their development and use of AI Systems and underlie the expectations set forth in this bulletin.

Legislative Authority

The regulatory expectations and oversight considerations set forth in Section 3 and Section 4 of this bulletin rely on the following laws and regulations:

- ***Unfair Trade Practices Model Act* (#880)**: The *Unfair Trade Practices Act* [*insert citation to state statute or regulation corresponding to Model #880]* (UTPA)*,* regulates trade practices in insurance by: 1) defining practices that constitute unfair methods of competition or unfair or deceptive acts and practices; and 2) prohibiting the trade practices so defined or determined.

- ***Unfair Claims Settlement Practices Model Act* (#900)**: The *Unfair Claims Settlement Practices Act*, [*insert citation to state statute or regulation corresponding to Model #900*] (UCSPA)*,* sets forth standards for the investigation and disposition of claims arising under policies or certificates of insurance issued to residents of [insert state].

Actions taken by Insurers in the state must not violate the UTPA or the UCSPA, regardless of the methods the Insurer used to determine or support its actions. As discussed below, Insurers are expected to adopt practices, including governance frameworks and risk management protocols, that are designed to assure that the use of AI Systems does not result in: 1) unfair trade practices, as defined in []; or 2) unfair claims settlement practices, as defined in [].

- ***Corporate Governance Annual Disclosure Model Act* (#305)**: The *Corporate Governance Annual Disclosure Act* [*insert citation to state statute or regulation corresponding to Model #305*] (CGAD), requires Insurers to report on governance practices and to provide a summary of the Insurer's corporate governance structure, policies, and practices. The content, form, and filing requirements for CGAD information are set forth in the *Corporate Governance Annual Disclosure Model Regulation* (#306) [*insert citation to state statute or regulation corresponding to Model #306])* (CGAD-R).

The requirements of CGAD and CGAD-R apply to elements of the Insurer's corporate governance framework that address the Insurer's use of AI Systems to support decisions that impact consumers.

- ***Property and Casualty Model Rating Law* (#1780)**: The *Property and Casualty Model Rating Law*, [*insert citation to state statute or regulation corresponding to the Model #1780]*, requires that property/casualty (P/C) insurance rates not be excessive, inadequate, or unfairly discriminatory.

The requirements of [] apply regardless of the methodology that the Insurer used to develop rates, rating rules, and rating plans subject to those provisions. That means that an Insurer is responsible for assuring that rates, rating rules, and rating plans that are developed using AI techniques and predictive models that rely on BD and ML do not result in excessive, inadequate, or unfairly discriminatory insurance rates with respect to all forms of casualty insurance—including fidelity, surety, and guaranty bond—and to all forms of property insurance—including fire, marine, and inland marine insurance, and any combination of any of the foregoing.

- ***Market Conduct Surveillance Model Law* (#693)**: The *Market Conduct Surveillance Model Law* [*insert citation to state statute or regulation corresponding to Model #693*] establishes the framework pursuant to which the Department conducts market conduct actions. These are comprised of the full range of activities that the Department may initiate to assess and address the market practices of Insurers, beginning with market analysis and extending to targeted examinations. Market conduct actions are separate from, but may result from, individual complaints made by consumers asserting illegal practices by Insurers.

An Insurer's conduct in the state, including its use of AI Systems to make or support decisions that impact consumers, is subject to investigation, including market conduct actions. Section 4 of this bulletin provides guidance on the kinds of information and documents that the Department may request in the context of an AI-focused investigation, including a market conduct action.

SECTION 2: DEFINITIONS

For the purposes of this bulletin[1]:

"**AI Systems**" is an engineered or machine-based system that can, for a given set of objectives, generate outputs such as predictions, recommendations or decisions influencing real or virtual environments. AI Systems are designed to operate with varying levels of autonomy. This is an umbrella term describing artificial intelligence and big data related resources utilized by Insurers which includes algorithms or predictive models~~.~~

"**Algorithm**" means a process or a set of rules executed to solve a non-deterministic or probablistic equation or problem in a predetermined fashion. This definition does not include systems with solely preprogrammed decision rules. ~~means a computational or machine learning process that augments or replaces human decision-making in insurance operations that impact consumers~~.

"**Artificial Intelligence**" refers to a large class of software-based systems that receive signals from the environment and take actions that affect the environment by generating outputs such as content, predictions, recommendations, classifications or decisions influencing the environments they interact with, among other outputs.~~is a term used to describe machine-based systems designed to simulate human intelligence to perform tasks, such as analysis and decision-making, given a set of human-defined objectives. This definition treats machine learning as a subset of artificial intelligence~~.

~~**"Bias"** is the differential treatment that results in favored or unfavored treatment of a person, group or attribute.~~

~~"**Big Data**" are data sets that are characterized by, at a minimum, their volume (i.e., size), velocity (i.e., speed of transmission), and variety (i.e., internal, external, including third-party data) that requires scalable computer architecture to analyze and model.~~

"Machine Learning" refers to the field of study that gives computers the ability to learn without being explicitly programmed. ~~is a subset of Artificial Intelligence that simulates human learning by identifying patterns in data either supervised, unsupervised or through reinforcement learning styles to make~~

[1] Drafting note: Individual states may have adopted definitions for terms that are included in the model bulletin that may be different from the definitions set forth herein.

~~decisions. "Predictive Analytics" and "Predictive Modeling" are related terms that refer to methods to identify patterns in data to make predictions.~~

"Predictive Models" means a statistical technique using machine learning and data analysis to examine data sets for patterns to forecast possible or likely outcomes.

"**Third-Party**" for purposes of this bulletin means an organization other than an insurance licensee or its affiliates or subsidiaries ~~the Insurer~~ that provides services, data or other resources related to AI Systems.

SECTION 3: REGULATORY GUIDANCE AND EXPECTATIONS

Decisions impacting consumers that are made by Insurers using AI Systems must comply with all applicable existing legal and regulatory standards, including unfair trade practice laws. Those laws require, at a minimum, that decisions made by Insurers not be arbitrary, capricious, or unfairly discriminatory. Compliance with those standards is required regardless of the tools and methods Insurers use to make decisions impacting consumers~~them~~.

AI Systems rely on large amounts of diverse, ever-changing, and sometimes nontraditional forms of data, sophisticated algorithms, and ML and deep learning techniques to develop complex and often opaque predictive models to make, inform, or support decisions. Current limitations on the availability of reliable demographic data on consumers make it challenging for Insurers and regulators to directly test these systems to determine whether the decisions made meet all applicable legal standards. Therefore, while the Department continues to encourage and emphasize the use of verification and testing methods ~~for unfair bias that leads~~ designed to look for potential unfair discrimination where possible, the Department recognizes that we must also rely upon robust governance, risk management controls, and internal audit functions to mitigate the risk that decisions driven by AI Systems will violate unfair trade practice laws and other applicable existing legal standards.

For these reasons, all Insurers authorized to do business in this state are encouraged to develop, implement, and maintain a written program for the use of AI Systems that ~~is~~are reasonably designed to assure that decisions impacting consumers made or supported by AI Systems ~~are accurate and~~ do not violate unfair trade practice laws or other applicable legal standards (AIS Program). An AIS Program that an Insurer adopts and implements should be reflective of, and commensurate with, the Insurer's assessment of the risk posed by its use of an AI System, considering the nature of the decisions being made, informed, or supported using the AI System; the nature and the degree of potential harm to consumers from errors or potential unfair discrimination~~bias~~ resulting from the use of the AI System; the extent to which humans are involved in the decision making process~~"in the loop"~~; and the extent and scope of the Insurer's use or reliance on data, models, and AI Systems from third parties.

As discussed in Section 4, an Insurer's use of AI Systems is subject to the Department's examination to determine whether decisions made or actions taken in reliance on AI Systems are compliant with all applicable existing legal standards governing the conduct of the Insurer. Regardless of whether an Insurer adopts a formal AI Program or the scope of that Program, an Insurer's use of AI and AI Systems is subject to investigation, including market conduct actions. However, the existence of an AIS Program, including documentation related to the Insurer's adherence to the standards, processes, and procedures set forth in the AIS Program, will facilitate such investigations and actions.

AIS Program Guidelines

1.0 General Guidelines

1.1 The AIS Program should be reasonably designed to mitigate the risk that the Insurer's use of AI Systems to make or support decisions that impact consumers will result in decisions that are arbitrary or capricious, unfairly discriminatory, or that otherwise violate unfair trade practice laws.

1.2 The AIS Program should address governance, risk management controls, and internal audit functions.

1.3 The ~~AIS Program should be adopted by the~~ board of directors or an appropriate committee of the board should be made aware of the AIS Program and ensure the company has an AIS policy in place. The AIS Program should vest responsibility for the development, implementation, monitoring, and oversight of the AIS Program and for setting the Insurer's strategy for AI Systems with senior management reporting to the board or an appropriate committee of the board.

1.4 The AIS Program should be tailored to and proportionate with the Insurer's use and reliance on AI and AI Systems. The AIS Program may be independent of or part of the Insurer's existing enterprise risk management (ERM) program. The AIS Program may adopt, incorporate, or rely upon, in whole or in part, a framework or standards developed by an official third-party standard organization, such as the National Institute of Standards and Technology.

1.5 The AIS Program should address the use of AI Systems across the insurance product life cycle, including product development and design, marketing, lead generation and use, applications, underwriting, rating, case management, claim administration and payment, and fraud detection.

1.6 The AIS Program should address all phases of an AI System's life cycle.

1.7 The AIS Program should address all of the AI Systems used by or on behalf of the Insurer to make decisions that impact consumers, whether developed by the Insurer or a third party and whether used by the Insurer or by an authorized agent or representative of the Insurer.

2.0 Governance

The AIS Program should include a governance framework for the oversight of AI Systems used by the Insurer. Governance should prioritize transparency, fairness, and accountability in the design and implementation of the AI Systems. An Insurer may consider adopting new internal governance structures or rely on the Insurer's existing governance structures, but the governance structure should address:

2.1 The standards that the Insurer adopted for its development of AI Systems generally and at each stage of the AI System life cycle.

2.2 The policies, processes, and procedures, including risk management and internal controls, to be followed at each stage of an AI System life cycle.

2.3 The requirements adopted by the Insurer to document compliance with the AIS Program policies, processes, procedures, and standards. Documentation requirements should be developed with Section 4 in mind.

2.4 Commensurate with the Insurer's development and use of AI Systems, defined roles, and responsibilities for key personnel charged with carrying out the AIS Program generally and at each stage of an AI System life cycle, including consideration of:

a) A centralized or federated committee comprised of representatives from all disciplines and units within the Insurer, such as business units, product specialists, actuarial, data science and analytics, compliance, and legal.

b) A description of the roles and responsibilities of each discipline and/or unit of the Insurer as they relate to the AI System, the AIS Program, and, where applicable, on the Insurer's internal AIS Program committee.

c) The qualifications of the persons serving in the roles identified.

d) Coordination and communication between persons with roles and responsibilities with the committee and among themselves.

e) Scope of authority, chains of command, and decisional hierarchies.

f) The independence of decision-makers and lines of defense at successive stages of the AI System life cycle.

g) Escalation procedures and requirements.

h) Development and implementation of ongoing training and supervision of personnel.

2.5 Monitoring, auditing, and reporting protocols and functions.

2.6 Specifically with respect to predictive models: the Insurer's processes and procedures for designing, developing, verifying, deploying, using, and monitoring predictive models, including a description of methods used to detect and address errors or unfair discrimination in the insurance practices resulting from the use of the predictive model.

3.0 Risk Management and Internal Controls

The AIS Program should document the Insurer's risk identification, mitigation, and management framework and internal controls for AI Systems generally and at each stage of the AI System life cycle. Risk management and internal controls should address:

3.1 The oversight and approval process for the development, adoption, or acquisition of AI Systems, as well as the identification of constraints and controls on automation and design to align and balance function with risk.

3.2 Data practices and accountability procedures, including data lineage, quality, integrity, ~~bias~~ analysis for the potential for unfair discrimination and remediation if necessary~~minimization~~, suitability, and updating.

3.3 Management and oversight of algorithms and predictive models, including:

a) Inventories and descriptions of algorithms and predictive models.

b) Detailed documentation of the development and use of algorithms and predictive models demonstrating compliance with the AIS Program requirements.

c) Measurements such as interpretability, repeatability, robustness, regular tuning, reproducibility, traceability, and the auditability of those measurements.

~~d) Benchmarking against alternative models and systems.~~

~~e)~~d) Evaluation for drift.

3.4 Validation and~~,~~ testing of AI Systems~~, and auditing of data, algorithms, and predictive models.~~

3.5 The protection of non-public information, including unauthorized access to algorithms or models themselves.

3.6 Data and record retention.

3.7 Specifically with respect to models: a narrative description of the model's intended goals and objectives and how the model is developed and validated to ensure that the AI Systems that rely on such models correctly and efficiently predict or implement those goals and objectives.

4.0 Third-Party AI Systems

Each AIS Program should address the Insurer's standards for the acquisition, use of, or reliance on AI Systems developed or deployed by a third-party, which may include~~including~~, as appropriate, the establishment of standards, policies, procedures, and protocols relating to:

4.1 Due diligence and the methods employed by the Insurer to assess the third-party, its AI Systems, and its AI governance and risk management protocols in order to assure that third-party AI Systems used to make or support decisions that impact consumers are designed to meet the legal standards imposed on the Insurer itself.

4.2 Take steps to ensure that contracts with third-party vendors include commitments for the third-party vendor to cooperate with regulatory inquiries and investigations related to the insurer's use of the third-party vendor's products or services. ~~The inclusion of terms in contracts with third-parties that:~~

~~a) Require third-party data and model vendors and AI System developers to have and maintain an AIS Program commensurate with the standards expected of the Insurer.~~

~~b) Entitle the Insurer to audit the third-party vendor for compliance.~~

~~c) Entitle the Insurer to receive audit reports by qualified auditing entities confirming the third-party's compliance with standards.~~

~~d) Require the third-party to cooperate with regulatory inquiries and investigations related to the Insurer's use of the third-party's product or services and require the third-party to cooperate with the Insurer's regulators as part of the investigation or examination of the Insurer.~~

4.3 A process to ensure the data received from third-party vendors is safe, accurate and fair and complies with regulatory requirements. ~~The performance of audits and other confirmatory activities to confirm the third-party's compliance with contractual and, where applicable, regulatory requirements.~~

SECTION 4: REGULATORY OVERSIGHT AND EXAMINATION CONSIDERATIONS

The Department's regulatory oversight of Insurers includes oversight of an Insurer's conduct in the state, including its use of AI Systems to make or support decisions that impact consumers. Regardless of the existence or scope of a written AIS Program, in the context of an investigation or market conduct action, an Insurer can expect to be asked about its governance framework, risk management, and internal controls (including the considerations identified in Section 3), as well as questions regarding any specific model, AI System, or its application, including requests for the following kinds of information and/or documentation:

1. Information and Documentation Relating to AI System Governance, Risk Management, and Use Protocols

1.1. Information and documentation related to or evidencing the Insurer's AIS Program, including:

a) The written AIS Program or any decision by the Insurer not to develop and adopt a written AIS Program.

b) Information and documentation relating to or evidencing the adoption of the AIS Program.

c) The scope of the Insurer's AIS Program, including any AI Systems and technologies not included in or addressed by the AIS Program.

d) How the AIS Program is tailored to and proportionate with the Insurer's use and reliance on AI Systems.

e) The policies, procedures, guidance, training materials, and other information relating to the adoption, implementation, maintenance, monitoring, and oversight of the Insurer's AIS Program, including:

i. Processes and procedures for the development, adoption, or acquisition of AI Systems, such as:

(1) Identification of constraints and controls on automation and design.

(2) Data governance and controls, any practices related to data lineage, quality, integrity, ~~bias~~ unfair discrimination analysis and remediation where necessary ~~minimization~~, suitability, and updating.

ii. Processes and procedures related to the management and oversight of algorithms and predictive models, including measurements, standards, or

thresholds adopted or used by the Insurer in the development, validation, and oversight of models and AI Systems.

iii. Protection of non-public information, including unauthorized access to algorithms or models themselves.

1.2. Information and documentation relating to the Insurer's pre-acquisition/pre-use diligence, monitoring, oversight, and auditing of AI Systems developed or that a third party deployed, including any authorized agent or representative of the Insurer when acting as such.

1.3. Information and documentation relating to or evidencing the Insurer's implementation and compliance with its AIS Program, including documents relating to the Insurer's monitoring and audit activities respecting compliance, such as:

a) Documentation relating to or evidencing the formation and ongoing operation of the Insurer's coordinating bodies for the development, use, and oversight of AI Systems, including documentation identifying key personnel and their roles, responsibilities, and qualifications.

b) Management and oversight of algorithms, predictive models, and AI Systems, including:

i. The Insurer's inventories and descriptions of algorithms, predictive models, and AI Systems used by or on behalf of the Insurer to make or support decisions that impact consumers.

ii. As to any specific algorithm, predictive model, or AI System that is the subject of investigation or examination:

(1) Documentation of compliance with all applicable AI Program policies, protocols, and procedures in the development, use, and oversight of algorithms, predictive models, and AI Systems deployed by or on behalf of the Insurer.

(2) Information about data used in the development and oversight of the specific model or AI System, including the data source, provenance, data lineage, quality, integrity, ~~bias~~ unfair discrimination analysis and remediation where necessary~~minimization~~, suitability, and updating.

(3) Information related to the techniques, measurements, thresholds, benchmarking, and similar controls adopted by the Insurer.

(4) Validation, testing, and auditing, including evaluation of drift.

2. Third-Party AI Systems

Investigations and examinations of an Insurer may include requests for the following kinds of information and documentation related to data, models, and AI Systems developed by third parties that are relied on or used by or on behalf of the Insurer, directly or by an agent or representative.

2.1 Due diligence conducted on third parties and their data, models, or AI Systems.

2.2 Contracts with third-party AI System, model, or data vendors~~, including terms relating to representations, warranties, data security and privacy, data sourcing, data use, intellectual processes rights, confidentiality and disclosures, and cooperation with regulators.~~

2.3 Documentation maintained by the company to demonstrate due diligence in the selection of third-party vendors and the data, products and services they provide.~~Audits and confirmation processes performed with respect to third-party compliance with contractual and, where applicable, regulatory obligations~~.

The Department recognizes that Insurers may demonstrate their compliance with the laws that regulate their conduct in the state in their use of AI Systems through alternative means, including through practices that differ from those described in this bulletin. The goal of the bulletin is not to prescribe specific practices or to prescribe specific documentation requirements. Rather, the goal is to ensure that Insurers in the state are aware of the Department's expectations as to how AI Systems will be governed and managed and of the kinds of information and documents about an Insurer's AI Systems that the department expects an Insurer to produce when requested.

As in all cases, investigations and market conduct actions may be performed using procedures that vary in nature, extent, and timing in accordance with regulatory judgment. Work performed may include inquiry, examination of company documentation, or any of the continuum of market actions described in the NAIC's *Market Regulation Handbook*. These activities may involve the use of contracted specialists with relevant subject matter expertise.

September 5, 2023

Kathleen Birrane, Chair
Innovation, Cybersecurity, and Technology (H) Committee
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

By Email to Miguel Romero at MARomero@NAIC.org

Re: AHIP Comments – Exposure Draft Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers

Dear Commissioner Birrane:

On behalf of the members of AHIP, we appreciate the opportunity to provide comments on the July 17, 2023, Exposure Draft of the Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers (the Bulletin). AHIP is the national association whose members provide health care coverage, services, and solutions to hundreds of millions of Americans every day. We are committed to market-based solutions and public-private partnerships that make health care better and coverage more affordable and accessible for everyone by leveraging, among other things, technological solutions such as AI.

AI has the potential to offer Americans great improvements in health care affordability, access, and outcomes. However, as the use of AI in health care grows, AHIP agrees there needs to be a robust regulatory framework and industry standards to protect consumers and guard against bias, especially for high-risk applications. To that end, AHIP has been engaged with several federal agencies, including the Office of Science and Technology Policy, and standards development organizations to create principles, standards, operational guidance, and regulations. We look forward to also working collaboratively with you on this project and developing policy in this relatively new and rapidly evolving territory.

Background. AHIP's members are well engaged, and they are using or considering the use of AI to transform health care and administrative processes to benefit the people they serve. AHIP members are currently using AI in identifying gaps in evidence-based care to share with providers, improving consumer experience, creating efficiencies in claims processes, and detecting fraud. At the same time, our members are committed to ensuring the application of AI

is safe, transparent, explainable, and ethical. AHIP and its members also seek to ensure adverse biases are neither perpetuated nor introduced in the development and application of AI that could negatively impact certain subpopulations. For more information on AHIP's and our members' broader efforts in developing national priorities for artificial intelligence, you are invited to review these materials: https://www.ahip.org/resources/ahip-comments-on-national-priorities-for-artificial-intelligence-ostp-tech-2023-0007-0001

As a foundational matter, we are submitting two documents as our comments: First, a redline version of the Bulletin to provide specific language in areas where we can; and second, this comment letter which sets out broad concerns and some specific references to provide context for some of the changes we offer in the redline. We hope this approach will assist you in understanding our concerns and addressing them.

Scope. We appreciate the general thrust of the Bulletin which makes clear that insurers must follow existing legal requirements in making decisions which impact consumers, regardless of whether those decisions are made solely by people or assisted in any way by artificial intelligence or other methods. There are multiple areas of the Bulletin where the phrase, "in insurance operations that impact consumers" appears, such as in the definition of "Algorithm" in **Section 2**, **Definitions**, page 3, and in the **AIS Program Guidelines**, subsection 1.7 at p. 6. However, it does not appear in the definition of "Artificial Intelligence" nor "Machine Learning." If the entire Bulletin concerns the making of decisions and operations by insurers that impact consumers, as stated in the second line of the first full paragraph of the Bulletin, we suggest other appearances of the phrase can be deleted.

More broadly, we have inserted language in the Bulletin on p. 4, in the 3rd paragraph, Section 3, to limit the focus of the Bulletin to not only matters which impact consumers, but which also present a substantial risk of unfair discrimination. Insurers and regulators alike should efficiently tailor their efforts in the AI realm so that surveillance, governance, and mitigation should all be determined by a risk-focused analysis. We would also like to explore with you how best to emphasize the importance of the risk-focused scalability of actions taken by insurers and regulators.

Definitions. The Bulletin definitions, as much as possible, should be consistent with those used by nationally accepted organizations such as the National Institute of Standards and Technology (NIST). For example, NIST defines "artificial intelligence" as:

> "(1) A branch of computer science devoted to developing data processing systems that perform functions normally associated with human intelligence, such as reasoning, learning, and self-improvement.
> (2) The capability of a device to perform functions that are normally associated with human intelligence such as reasoning, learning, and self-improvement."

Similarly, NIST refers to "Machine Learning" as:

> "Machine learning (ML), a field within artificial intelligence, focuses on the ability of computers to learn from provided data without being explicitly programmed for a particular task."

[Definitions are from ANSI INCITS 172-220 (R2007) Information Technology -- American National Standard Dictionary of Information Technology (ANSDIT), and cited in NIST's U.S. Leadership in AI: A Plan for Federal Engagement in Developing Technical Standards and Related Tools (August 9, 2019).]

Although these definitions may not be seen to directly conflict with those currently in the Bulletin, the use of terms already widely accepted by national experts may reduce confusion for novices and experts alike.

Third-Party AI System Governance. In Section 3, "Regulatory Guidance and Expectations", there is language in Subsection 4.1 stating an insurer should use effective methods to assure itself that third-party AI Systems are designed to meet the legal standards imposed on the insurer itself. However, it not feasible to require an Insurer to require a non-Insurer third-party model provider to subscribe to 100% of the requirements on the Insurer for internally generated models. Documentation standards alone make this non-viable. Subsection 4.2(d) is perhaps the most problematic due to the highly competitive and proprietary information held by third-parties for which no provision is made in the Bulletin. That might be interpreted to mean that regulators should make requests to the third-party for information which could misalign with existing data protection regulations and if improperly disclosed, could cause irreparable damage to the third-party for which there would be no relief from the regulator. This would be untenable.

We would suggest more work should be performed to determine the minimum viable criteria for compliance for an Insurer to contractually require from a vendor. There should also be some language in the Bulletin pertaining to the imposition of the Bulletin's "expectations" on existing contracted services, compared to new engagements. A phased governance approach here is critical to implementation.

Thank you for the opportunity to provide these comments, and we look forward to further discussing these matters with you.

Sincerely,

Bob Ridgeway
Bridgeway@ahip.org
501-333-2621

Attachment: AHIP Redline of Draft Bulletin

EXPOSURE DRAFT
07.17.2023

AHIP Redline

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NAIC MODEL BULLETIN:

USE OF ALGORITHMS, PREDICTIVE MODELS,
AND ARTIFICIAL INTELLIGENCE SYSTEMS BY INSURERS

TO: All Insurers Licensed to Do Business In (*Insert Name of Jurisdiction*) ("Insurers")

FROM: [Department/Commissioner]

DATE: [Insert]

RE: The Use of Artificial Intelligence Systems in Insurance

This bulletin is issued by the [] (Department) to remind all Insurers that hold certificates of authority to do business in the state that decisions impacting consumers that are made or supported by advanced analytical and computational technologies, including artificial intelligence (AI) systems (as defined below), must comply with all applicable insurance laws and regulations. This includes those laws that govern unfair trade practices. This bulletin sets forth the Department's expectations as to how Insurers will govern the development/acquisition and use of such technologies and systems by or on behalf of the Insurer to make or support such decisions. This bulletin also advises Insurers of information and documentation that the Department may request during an investigation or examination of any Insurer that addresses the use of such technologies or systems.

SECTION I: INTRODUCTION, BACKGROUND, AND LEGISLATIVE AUTHORITY

Background

Artificial Intelligence (AI) techniques, including the application of sophisticated algorithms and machine learning (ML) to big data (BD), are transforming the insurance industry. AI techniques may be ~~are~~ deployed across some ~~all~~ stages of the insurance life cycle, including product development, marketing, sales and distribution, underwriting and pricing, policy servicing, claim management, and fraud detection. AI can facilitate the development of innovative products, improve consumer interface and service, simplify and automate processes, and promote efficiency and accuracy. At the same time, using AI can bring unique risks, including the potential for inaccuracy, unfair bias resulting in unfair discrimination, and data vulnerability. Insurers should take actions to minimize those risks.

The Department encourages the development and use of innovation and AI Systems that contribute to safe and stable insurance markets. The Department also expects that Insurers that use AI Systems to support decisions that impact consumers will do so in a manner that complies with and is designed to assure that the decisions made using those systems meet the requirements of all applicable federal and state laws.

The Department recognizes the *Principles of Artificial Intelligence* that the NAIC adopted in 2020 as an appropriate source of guidance for Insurers as they develop and use AI systems. Those principles emphasize the importance of the fairness and ethical use of AI; accountability; compliance with state laws and regulations; transparency; and a safe, secure, fair, and robust system. These fundamental principles should guide Insurers in their development and use of AI Systems and underlie the expectations set forth in this bulletin.

Commented [RB1]: These principles should be augmented to better align with NIST's AI RMF 1.0, to avoid having multiple confusing framework standards. Accordingly, the emphasis should be modified to align with the characteristics of Trustworthy AI Systems: Valid and Reliable, Safe, Secure and Resilient, Accountable and Transparent, Explainable and Interpretable, Privacy-Enhanced, and Fair.

Legislative Authority

The regulatory expectations and oversight considerations set forth in Section 3 and Section 4 of this bulletin rely on the following laws and regulations:

- ***Unfair Trade Practices Model Act* (#880)**: The *Unfair Trade Practices Act* [*insert citation to state statute or regulation corresponding to Model #880]* (UTPA), regulates trade practices in insurance by: 1) defining practices that constitute unfair methods of competition or unfair or deceptive acts and practices; and 2) prohibiting the trade practices so defined or determined.

- ***Unfair Claims Settlement Practices Model Act* (#900)**: The *Unfair Claims Settlement Practices Act*, [*insert citation to state statute or regulation corresponding to Model #900*] (UCSPA), sets forth standards for the investigation and disposition of claims arising under policies or certificates of insurance issued to residents of [insert state].

Actions taken by Insurers in the state must not violate the UTPA or the UCSPA, regardless of the methods the Insurer used to determine or support its actions. As discussed below, Insurers are expected to adopt practices, including governance frameworks and risk management protocols, that are designed to assure that the use of AI Systems does not result in: 1) unfair trade practices, as defined in []; or 2) unfair claims settlement practices, as defined in [].

- ***Corporate Governance Annual Disclosure Model Act* (#305)**: The *Corporate Governance Annual Disclosure Act* [*insert citation to state statute or regulation corresponding to Model #305*] (CGAD), requires Insurers to report on governance practices and to provide a summary of the Insurer's corporate governance structure, policies, and practices. The content, form, and filing requirements for CGAD information are set forth in the *Corporate Governance Annual Disclosure Model Regulation* (#306) [*insert citation to state statute or regulation corresponding to Model #306])* (CGAD-R).

The requirements of CGAD and CGAD-R apply to elements of the Insurer's corporate governance framework that address the Insurer's use of AI Systems to support decisions that impact consumers.

- ***Property and Casualty Model Rating Law* (#1780)**: The *Property and Casualty Model Rating Law*, [*insert citation to state statute or regulation corresponding to the Model #1780]*, requires that property/casualty (P/C) insurance rates not be excessive, inadequate, or unfairly discriminatory.

The requirements of [] apply regardless of the methodology that the Insurer used to develop rates, rating rules, and rating plans subject to those provisions. That means that an Insurer is responsible for assuring that rates, rating rules, and rating plans that are developed using AI techniques and predictive models that rely on BD and ML do not result in excessive, inadequate, or unfairly discriminatory insurance rates with respect to all forms of casualty insurance—including fidelity, surety, and guaranty bond—and

to all forms of property insurance—including fire, marine, and inland marine insurance, and any combination of any of the foregoing.

- ***Market Conduct Surveillance Model Law* (#693)**: The *Market Conduct Surveillance Model Law* [*insert citation to state statute or regulation corresponding to Model #693*] establishes the framework pursuant to which the Department conducts market conduct actions. These are comprised of the full range of activities that the Department may initiate to assess and address the market practices of Insurers, beginning with market analysis and extending to targeted examinations. Market conduct actions are separate from, but may result from, individual complaints made by consumers asserting illegal practices by Insurers.

An Insurer's conduct in the state, including its use of AI Systems to make or support decisions that impact consumers, is subject to investigation, including market conduct actions. Section 4 of this bulletin provides guidance on the kinds of information and documents that the Department may request in the context of an AI-focused investigation, including a market conduct action.

SECTION 2: DEFINITIONS

For the purposes of this bulletin[1]:

"**AI Systems**" is an umbrella term describing artificial intelligence and big data related resources utilized by Insurers.

"**Algorithm**" means a computational or machine learning process that augments or replaces human decision-making in insurance operations that impact consumers.

"**Artificial Intelligence**" is a term used to describe machine-based systems designed to simulate human intelligence to perform tasks, such as analysis and decision-making, given a set of human-defined objectives. This definition treats machine learning as a subset of artificial intelligence.

"Bias" is the differential treatment that results in favored or unfavored treatment of a person, group or attribute.

"**Big Data**" are data sets that are characterized by, at a minimum, their volume (i.e., size), velocity (i.e., speed of transmission), and variety (i.e., internal, external, including third-party data) that requires scalable computer architecture to analyze and model.

"Machine Learning" is a subset of Artificial Intelligence that simulates human learning by identifying patterns in data either supervised, unsupervised or through reinforcement learning styles to make decisions. "Predictive Analytics" and "Predictive Modeling" are related terms that refer to methods to identify patterns in data to make predictions.

"**Third-Party**" for purposes of this bulletin means an organization other than the Insurer that provides services, data or other resources related to AI.

Commented [RB2]: Where available, we suggest using definitions accepted by NIST to preserve consistency for many companies already engaged in developing AI governance, risk management, and use protocols.

Commented [RB3]: States which have not yet enacted AI laws should be encouraged to adopt consistent definitions.

[1] Drafting note: Individual states may have adopted definitions for terms that are included in the model bulletin that may be different from the definitions set forth herein.

SECTION 3: REGULATORY GUIDANCE AND EXPECTATIONS

Decisions impacting consumers that are made by Insurers using AI Systems must comply with all applicable legal and regulatory standards, including unfair trade practice laws. Those laws require, at a minimum, that decisions made by Insurers not be arbitrary, capricious, or unfairly discriminatory. Compliance with those standards is required regardless of the tools and methods Insurers use to make them.

AI Systems rely on large amounts of diverse, ever-changing, and sometimes nontraditional forms of data, sophisticated algorithms, and ML and deep learning techniques to develop complex and often opaque predictive models to make, inform, or support decisions. Current limitations on the availability of reliable demographic data on consumers make it challenging for Insurers and regulators to directly test these systems to determine whether the decisions made meet all applicable legal standards. Therefore, while the Department continues to encourage and emphasize the use of verification and testing methods for unfair bias that leads to unfair discrimination where possible, the Department recognizes that we must also rely upon robust governance, risk management controls, and internal audit functions to mitigate the risk that decisions driven by AI Systems will violate unfair trade practice laws and other applicable legal standards.

For these reasons, all Insurers authorized to do business in this state are encouraged to develop, implement, and maintain a written program for the use of AI Systems that is designed to assure that decisions impacting consumers and presenting a substantial risk of unfair discrimination made or supported by AI Systems are accurate and do not violate unfair trade practice laws or other applicable legal standards (AIS Program). An AIS Program that an Insurer adopts and implements should be reflective of, and commensurate with, the Insurer's assessment of the risk posed by its use of an AI System, considering the nature of the decisions being made, informed, or supported using the AI System; the nature and the degree of potential harm to consumers from errors or risks, such as unfair bias, resulting from the use of the AI System; the extent to which humans are "in-the-loop"; ~~and~~ the extent and scope of the Insurer's use or reliance on data, models, and AI Systems from third parties, and incorporate strategies for risk mitigation across the model's lifecycle. ~~.~~

As discussed in Section 4, an Insurer's use of AI Systems is subject to the Department's examination to determine whether decisions made or actions taken in reliance on AI Systems are compliant with all applicable legal standards. Regardless of whether an Insurer adopts a formal AI Program or the scope of that Program, an Insurer's use of AI and AI Systems is subject to investigation, including market conduct actions. However, the existence of an AIS Program, including documentation related to the Insurer's adherence to the standards, processes, and procedures set forth in the AIS Program, will facilitate such investigations and actions.

AIS Program Guidelines

1.0 General Guidelines

1.1 The AIS Program should be designed to mitigate the risk that the Insurer's use of AI Systems to make or support decisions that impact consumers will result in decisions that are arbitrary or capricious, unfairly discriminatory, or that otherwise violate unfair trade practice laws.

1.2 The AIS Program should address governance, risk management controls, and internal audit functions.

1.3 The AIS Program should be adopted by the board of directors or an appropriate committee of the company~~board~~. The AIS Program may be established as a separate program, part of an existing compliance plan, or within the company's standard governance. The AIS Program should vest responsibility for the development, implementation, monitoring, and oversight of the AIS Program and for setting the Insurer's strategy for AI Systems with senior management reporting to the board or an appropriate committee of the company~~board~~.

1.4 The AIS Program should be tailored to and proportionate with the Insurer's use and reliance on AI and AI Systems. The AIS Program may be independent of or part of the Insurer's existing enterprise risk management (ERM) program. The AIS Program may adopt, incorporate, or rely upon, in whole or in part, a framework or standards developed by an official third-party standard organization, such as the National Institute of Standards and Technology.

1.5 The AIS Program should address the use of AI Systems across the insurance product life cycle, including product development and design, marketing, lead generation and use, applications, underwriting, rating, case management, claim administration and payment, and fraud detection.

1.6 The AIS Program should address all phases of an AI System's life cycle.

1.7 The AIS Program should address all of the AI Systems used by or on behalf of the Insurer to make decisions that have a high impact on consumers and present a substantial risk of unfair discrimination, whether developed by the Insurer or a third party and whether used by the Insurer or by an authorized agent or representative of the Insurer.

Commented [RB4]: Since accepted definitions of Artificial Intelligence are broad, shouldn't this be limited somehow? It has been said that a simple Excel spreadsheet could be viewed as AI, and if it is used in any step of insurance operations, the point could be made that it impact consumers.

Commented [RB5]: This clause may help narrow the focus of the regulators' concern with AI usage.

2.0 Governance

The AIS Program should include a governance framework for the oversight of AI Systems used by the Insurer. Governance should prioritize transparency, fairness, and accountability in the design and implementation of the AI Systems. An Insurer may consider adopting new internal governance structures or rely on the Insurer's existing governance structures, but the governance structure should address:

2.1 The standards that the Insurer adopted for its development of AI Systems generally and at each stage of the AI System life cycle.

2.2 The policies, processes, and procedures, including risk management and internal controls, to be followed at each stage of an AI System life cycle.

2.3 The requirements adopted by the Insurer to document compliance with the AIS Program policies, processes, procedures, and standards. Documentation requirements should be developed with Section 4 in mind.

2.4 Commensurate with the Insurer's development and use of AI Systems, defined roles, and responsibilities for key personnel charged with carrying out the AIS Program generally and at each stage of an AI System life cycle, including consideration of:

a) A centralized or federated committee comprised of representatives from all disciplines and units within the Insurer, such as business units, product specialists, actuarial, data science and analytics, compliance, and legal.

b) A description of the roles and responsibilities of each discipline and/or unit of the Insurer as they relate to the AI System, the AIS Program, and, where applicable, on the Insurer's internal AIS Program committee.

c) The qualifications of the persons serving in the roles identified.

d) Coordination and communication between persons with roles and responsibilities with the committee and among themselves.

e) Scope of authority, chains of command, and decisional hierarchies.

f) The independence of decision-makers and lines of defense at successive stages of the AI System life cycle.

g) Escalation procedures and requirements.

h) Development and implementation of ongoing training and supervision of personnel.

2.5 Monitoring, auditing, and reporting protocols and functions.

2.6 Specifically with respect to high-impact predictive models: the Insurer's processes and procedures for ~~designing, developing, verifying, deploying, using, and monitoring~~ identifying and mitigating risks of predictive models, including a description of methods used to detect and address errors or unfair discrimination in the insurance practices resulting from the use of the predictive model.

3.0 Risk Management and Internal Controls

The AIS Program should document the Insurer's risk identification, mitigation, and management framework and internal controls for AI Systems generally and at each stage of the AI System life cycle. Risk management and internal controls should address:

3.1 The oversight and approval process for the development, adoption, or acquisition of AI Systems, as well as the identification of constraints and controls on automation and design to align and balance function with risk.

3.2 Data practices and accountability procedures, including data lineage, quality, integrity, bias analysis and minimization, suitability, and updating.

3.3 Management and oversight of algorithms and predictive models, including:

a) Inventories and descriptions of algorithms and predictive models.

b) Detailed documentation of the development and use of algorithms and predictive models demonstrating compliance with the AIS Program requirements.

Commented [RB6]: We would generally support this concept, but caution any such committee will vary widely with the size and AI-usage of the company. Do regulators contend this is adequately addressed in the introductory language of 2.4, "Commensurate with…"?

Commented [RB7]: Clarity requested here. Are these qualifications needed if their roles and responsibilities are identified per b), above?

Commented [RB8]: Again, clarity would be helpful here.

Commented [RB9]: Suggesting terminology that is evergreen as NIST updates its iterative framework

c) Measurements such as interpretability, repeatability, robustness, regular tuning, reproducibility, traceability, and the auditability of those measurements, where appropriate.

d) Benchmarking against alternative models and systems.

e) Evaluation for drift.

3.4 Validation, testing, and auditing of data, algorithms, and predictive models, including their reliability.

3.5 The protection of non-public information, including unauthorized access to algorithms or models themselves.

3.6 Data and record retention.

3.7 Specifically with respect to models: a narrative description of the model's intended goals and objectives and how the model is developed and validated to ensure that the AI Systems that rely on such models correctly and efficiently predict or implement those goals and objectives.

4.0 Third-Party AI Systems

Each AIS Program should address the Insurer's standards for the acquisition, use of, or reliance on AI Systems developed or deployed by a third-party, including, as appropriate, the establishment of standards, policies, procedures, and protocols relating to:

4.1 Due diligence and the methods employed by the Insurer to assess the third-party, its AI Systems, and its AI governance and risk management protocols in order to assure that third-party AI Systems used to make or support decisions that impact consumers are designed to meet the legal standards imposed on the Insurer itself.

4.2 The inclusion of terms in contracts with third parties that:

a) Require third-party data and model vendors and AI System developers to have and maintain an AIS Program commensurate with the standards expected of the Insurer.

b) Entitle the Insurer to audit the third-party vendor for compliance.

c) Entitle the Insurer to receive audit reports by qualified auditing entities confirming the third-party's compliance with standards.

d) Require the third-party to cooperate with regulatory inquiries and investigations related to the Insurer's use of the third-party's product or services and require the third-party to cooperate with the Insurer's regulators as part of the investigation or examination of the Insurer.

Commented [RB10]: Adding language to allow, for example, for new apps in use but which are still learning. Any of these measurements might reflect only a moment in time for a developing product which continues learning and developing through its entire usage.

Commented [RB11]: Suggest there be a discussion of audit protocols for AI which can be considered to be "best practices", similar to the NIST protocols for governance and methodologies.

Commented [RB12]: Since parties to these agreements may have dramatically different bargaining leverage, it is unclear how feasible this provision will prove to be. Is it believed the phrase "as appropriate" in the second line of 4.0, above, will encourage examiners and investigators to allow flexibility in these and similar issues?

4.3 The performance of audits and other confirmatory activities to confirm the third-party's compliance with contractual and, where applicable, regulatory requirements.

SECTION 4: REGULATORY OVERSIGHT AND EXAMINATION CONSIDERATIONS

The Department's regulatory oversight of Insurers includes oversight of an Insurer's conduct in the state, including its use of AI Systems to make or support decisions that impact consumers. Regardless of the existence or scope of a written AIS Program, in the context of an investigation or market conduct action, an Insurer can expect to be asked about its governance framework, risk management, and internal controls (including the considerations identified in Section 3), as well as questions regarding any specific model, AI System, or its application, including requests for the following kinds of information and/or documentation:

1. Information and Documentation Relating to AI System Governance, Risk Management, and Use Protocols

1.1. Information and documentation related to or evidencing the Insurer's AIS Program, including:

a) The written AIS Program or any decision by the Insurer not to develop and adopt a written AIS Program.

b) Information and documentation relating to or evidencing the adoption of the AIS Program.

c) The scope of the Insurer's AIS Program, including any AI Systems and technologies not included in or addressed by the AIS Program.

d) How the AIS Program is tailored to and proportionate with the Insurer's use and reliance on AI Systems.

e) The policies, procedures, guidance, training materials, and other information relating to the adoption, implementation, maintenance, monitoring, and oversight of the Insurer's AIS Program, including:

i. Processes and procedures for the development, adoption, or acquisition of AI Systems, such as:

(1) Identification of constraints and controls on automation and design.

(2) Data governance and controls, any practices related to data lineage, quality, integrity, bias analysis and minimization, suitability, and updating.

ii. Processes and procedures related to the management and oversight of algorithms and predictive models, including measurements, standards, or thresholds adopted or used by the Insurer in the development, validation, and oversight of models and AI Systems.

iii. Protection of non-public information, including unauthorized access to algorithms or models themselves.

1.2. Information and documentation relating to the Insurer's pre-acquisition/pre-use diligence, monitoring, oversight, and auditing of AI Systems developed or that a third party deployed, including any authorized agent or representative of the Insurer when acting as such.

1.3. Information and documentation relating to or evidencing the Insurer's implementation and compliance with its AIS Program, including documents relating to the Insurer's monitoring and audit activities respecting compliance, such as:

a) Documentation relating to or evidencing the formation and ongoing operation of the Insurer's coordinating bodies for the development, use, and oversight of AI Systems, including documentation identifying key personnel and their roles, responsibilities, and qualifications.

b) Management and oversight of algorithms, predictive models, and AI Systems, including:

i. The Insurer's inventories and descriptions of algorithms, predictive models, and AI Systems used by or on behalf of the Insurer to make or support decisions that impact consumers.

ii. As to any specific algorithm, predictive model, or AI System that is the subject of investigation or examination:

(1) Documentation of compliance with all applicable AI Program policies, protocols, and procedures in the development, use, and oversight of algorithms, predictive models, and AI Systems deployed by or on behalf of the Insurer.

(2) Information about data used in the development and oversight of the specific model or AI System, including the data source, provenance, data lineage, quality, integrity, bias analysis and minimization, suitability, and updating.

(3) Information related to the techniques, measurements, thresholds, benchmarking, and similar controls adopted by the Insurer.

(4) Validation, testing, and auditing, including evaluation of drift.

2. Third-Party AI Systems

Investigations and examinations of an Insurer may include requests for the following kinds of information and documentation related to data, models, and AI Systems developed by third parties that are relied on or used by or on behalf of the Insurer, directly or by an agent or representative.

2.1 Due diligence conducted on third parties and their data, models, or AI Systems.

2.2 Contracts with third-party AI System, model, or data vendors, including terms relating to representations, warranties, data security and privacy, data sourcing, data use, intellectual processes rights, confidentiality and disclosures, and cooperation with regulators.

2.3 Audits and confirmation processes performed with respect to third-party compliance with contractual and, where applicable, regulatory obligations.

The Department recognizes that Insurers may demonstrate their compliance with the laws that regulate their conduct in the state in their use of AI Systems through alternative means, including through practices that differ from those described in this bulletin. The goal of the bulletin is not to prescribe specific practices or to prescribe specific documentation requirements. Rather, the goal is to ensure that Insurers in the state are aware of the Department's expectations as to how AI Systems will be governed and managed and of the kinds of information and documents about an Insurer's AI Systems that the department expects an Insurer to produce when requested.

Commented [RB13]: This important sentence should also appear in the introductory portion of the Bulletin.

Commented [RB14]: However, this language describing the department's expectations sounds at least somewhat contradictory of the preceding sentence.

As in all cases, investigations and market conduct actions may be performed using procedures that vary in nature, extent, and timing in accordance with regulatory judgment. Work performed may include inquiry, examination of company documentation, or any of the continuum of market actions described in the NAIC's *Market Regulation Handbook*. These activities may involve the use of contracted specialists with relevant subject matter expertise.

September 1, 2023

Kathleen A. Birrane, Chair
Innovation Cybersecurity and Technology (H) Committee
National Association of Insurance Commissioners

Re: "Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers" Model Bulletin exposure draft.

Dear Chair Birrane,

On behalf of the Risk Management and Financial Reporting Council of the American Academy of Actuaries[1] (Academy), and in collaboration with the Academy's Casualty, Life and Health Practice Councils, we are pleased to share these written comments on the July 2023 "Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers" Model Bulletin exposure draft (Model Bulletin). These comments complement the verbal comments we presented at the Innovation, Cybersecurity, and Technology (H) Committee meeting on August 13, 2023, at the Summer National Meeting in Seattle.

As we noted in Seattle, we applaud the framework's focus on decisions as the key point of interest, as well as the fact that companies have available for review the documentation and governance used for decisions based on artificial intelligence (AI) systems within an insurance organization. This framing will be a key guide in assessing the depth and breadth of any necessary documentation and governance.

Some additional thoughts and reactions include:

- **ORSA.** Reviewing page 4 of the Model Bulletin, we noted that the third paragraph introduces the concept of an "AI System (AIS) Program," which sounds analogous to the concept of an ORSA Program. As in ORSA, the depth and nature of the AIS Program should be "commensurate" to the "risks, decisions and potential harm to consumers" and

[1] The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

also vary based upon the degree to which the decision-making process relies on AI processes, or third-party data, which lacks sufficient critical human oversight.

Given that ORSA focuses on the documentation of the key risk management principles, measures, and governance that are used by a company, the timeline to develop and implement the structure was done relatively quickly over three to five years. The ORSA framework also allows for regulatory oversight to encourage, adapt to, and learn from the diverse and emerging tools and approaches developed by companies and the actuarial profession. In comparison, the development and implementation of Principle Based Reserves (PBR), due to the necessary detailed focus on specific valuation requirements, was and continues to be a 20+ year process.

- **ENFORCEMENT vs. OVERSIGHT**. We believe additional clarification is needed regarding if and how this framework and its implementation requirements are meant to mimic those used for ORSA requirements. The Model Bulletin states the goal is not to prescribe specific practices or documentation requirements (page 10). Rather, it is to state expectations as to how AI Systems will be governed, as well as the nature of the documentation that is expected to be available upon request.

  As the Committee considers this, we note that the approach used in the Model Bulletin refers to laws already in place, such as the Unfair Trade Practices Act, the Unfair Claim Settlement Practices Model Act, and the Property and Casualty Model Rating Law. This approach has both value and shortcomings. The proposed approach avoids the need to create a new model law, which would then require adoption, with possible modification, by every state within each state's legislative session. But, under this proposed initial framework, there may be wide variation in interpreting how these laws might apply to business practices not present when the original laws were formulated.

  A unique aspect of ORSA relates to the documentation requirements. ORSA requires the documentation be shared without specifically mandating the content, allowing for a tailored report from each entity. This approach is a valuable way to accelerate best practices that will continue to evolve. Not only does it allow the state, as well as the NAIC, to benefit from a perspective of observing and learning from the diverse set of approaches, it also encourages the use of and sharing of emerging best practices. This is true within the evolving practice of risk management as well as within the use and application of decisions based on AI systems. Tools that can be used to accelerate the furtherance of better practice include:

  1. Confidential surveys with public sharing of aggregate information.
  2. "Jawboning" via increased onsite market conduct exams.

We would also underscore that the actuarial profession is actively researching new techniques, analyses, and practices to assess bias and prohibited discrimination, as well as how to apply sound governance of models in general. The literature, practice notes, and current and future inclusion of those developments into actuarial standards of practice (ASOP) will also benefit from regulatory actuaries contributing their unique perspective to the Actuarial Standards Board (ASB) on inadequate practices and governance that they may observe in their oversight roles. As was the experience with enterprise risk management, standards of practice become integral resources, even when an actuary is not the primary individual who develops, oversees, or audits an AI system.

The use of this approach can also be used to oversee the use of third-party data. Vendors will be constrained, knowing that it risks public exposure should its data or processing not have adequate controls, disclosures, or testing. Such a report would likely have an immediate effect on their viability within the marketplace and to their reputation with their client base.

Given this perspective, we believe that there are effective ways to both govern and support the evolution of better practices in such a way that minimizes the concern around the variation of expectations across the states until uniform practices and techniques can be developed.

- **Other Recommendations.**
  In reviewing page 5, within the first paragraph of the Governance section, we recommend reframing the goal of a governance framework to read as "oversight of AI Systems used by the Insurer *as well as decisions about the development of AI Systems.*" This more clearly allows the application of concepts like "commensurate" and "material" when assessing the degree of structure or oversight that is needed.

  Similarly, on page 6, the first paragraph of the Risk Management and Internal Controls section should read as, "[t]he AIS Program should document the Insurer's risk identification, mitigation, and management framework and internal controls for AI Systems generally and at each stage of the AI System life cycle, *proportionate to materiality*." This addition helps address the traditional use of Generalized Linear Models (GLMs) and Generalized Additive Models (GAMs). These models are often used to finalize assumptions for pricing or valuation, and they may or may not have a material impact on the product. However, they allow for a more disciplined use of actual experience, as well as an analysis of actual to expected results.

  Finally, we would mention actuarial standards currently exist that already apply to the work of actuaries within in this space, including:

i. ASOP 12 Risk Classification (Currently being updated with exposure expected in Fall of 2023)
ii. ASOP 23 Data Quality
iii. ASOP 41 Actuarial Communications
iv. ASOP 56 Modeling

The Academy appreciates the efforts and engagement of the NAIC within the AI space and looks forward to our continued collaborative efforts to develop a framework that offers a pragmatic and forward-looking approach to this evolving area. If you have any questions or would like further information, please contact Will Behnke, the Academy's Risk Management and Financial Reporting policy analyst (behnke@actuary.org).

Sincerely,

David Sandberg, MAAA, FSA, CERA, FCA
Member
Risk Management and Financial Reporting Council
American Academy of Actuaries

CC: Miguel Romero, Director, P&C Regulatory Services, NAIC

September 5, 2023

Commissioner Kathleen Birrane
Chair, Innovation, Cybersecurity, and Technology (H) Committee
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64105

Re: NAIC Model Bulletin: Use of Algorithms, Predictive Models, and Artificial Intelligence Systems By Insurers

Commissioner Birrane:

The American InsurTech Council (AITC) is an independent advocacy organization dedicated to advancing the public interest through the development of ethical, technology-driven innovation in insurance. We appreciate the opportunity to comment on the NAIC Model Bulletin: Use of Algorithms, Predictive Models, and Artificial Intelligence Systems By Insurers (Model Bulletin).

We acknowledge the leadership and hard work that you and other members of the Innovation, Cybersecurity, and Technology (H) Committee committed to completing the first exposure of the Model Bulletin in record time. This was no small task given the diverse perspectives and wide range of highly complex issues. As noted in our public comments at the NAIC Summer Annual Meeting, the Model Bulletin is a positive first step in developing a comprehensive regulatory framework for insurers using AI, predictive analytics, and other innovative technology.

The Model Bulletin also stands as a powerful statement that the system of state regulation is more than up to the task of developing appropriate regulatory guidance regarding insurer use of AI and related technology that benefits insurance consumers, encourages competition and innovation, and strengthens the U.S. insurance market. The Model Bulletin establishes that insurers will not be at a disadvantage to banks, other financial services organizations, or global competitors that are also moving quickly to develop business use cases for AI. The Bulletin also provides a necessary framework for ensuring appropriate consumer protections.

The risk-based approach embedded in the Model Bulletin reflects the right regulatory approach. The Model Bulletin builds on previously stated NAIC core principles regarding AI, establishes regulator expectations, identifies applicable legal standards, and, significantly, the process that regulators will take to monitor company activity. For the most part, the Model Bulletin accomplishes those objectives while ensuring that insurers and other licensees can develop and implement a governance and risk management framework that reflects the unique risk(s) associated with their use of AI. This flexibility is essential not only in the near term but also in the future as the technology continues to evolve and business use cases for insurer use of AI expand.

Regarding the applicable legal standards to be applied, the Committee's decision to utilize existing legal standards and principles for insurance regulation that have guided the states and company activity for many decades is highly significant and deserves to be acknowledged:

- It demonstrates their strength, durability, and ability to adapt. Insurers embracing new technology is hardly new. For instance, the transition from paper files to computerized files took place many decades ago. State regulators have never encountered trouble adapting to those changes. On the contrary, state regulators have also embraced new technology to improve their own performance and efficiency.
- The current standards are time-tested. While applying those standards to insurers using AI will take time to develop, the ability of regulators and insurers alike to tie those practices back to well-recognized standards that have proven to work over decades will be essential.
- It stands as an important reminder that while AI may be new, its use does not alter core principles embedded in insurance.

We also support the decision to use states' existing legislative and regulatory market regulation authority to govern insurers' use of AI. Given the uneven interpretation and application of many of those standards across states that already occurs in the traditional market regulation context, however, we do have concerns about uniform treatment and the application of those standards to rapidly evolving technology like AI. Specifically, we have a concern that a particular AI process or business use case may be deemed appropriate in one state, and an unfair trade practice in another. Lack of uniformity will discourage the use of innovative tools. We would encourage this Committee and the NAIC to identify achieving meaningful uniformity in this area as a high priority.

As the Committee works to improve the Model Bulletin before it is finalized, we offer the following comments and observations.

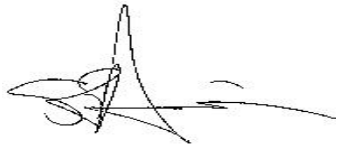
1. **Develop More Precise AI Definitions & Descriptions.** We have several concerns with including descriptions in the Model Bulletin, most significantly the lack of clear commonly accepted definitions of key terms. A technical literature survey, for example, reveals no accepted definition of "AI algorithm." While such a lack of precision may be acceptable in an academic context, including definitions in the Model Bulletin will confer upon them legal significance that may be unwarranted, quickly rendered obsolete, and become the basis for unnecessary disputes and confusion. Likewise, we are also concerned that actuarial

methodologies that have been in use for many decades - but would not be considered "AI" as that term is commonly understood – could inadvertently be included in the Model Bulletin. A preferred approach is to avoid future debates over terms while focusing on substantive issues involving AI and how it is being applied in a specific business use case.

2. **Include a Confidential Self-Audit of AI Processes.** We strongly encourage the addition of a confidential self-audit of AI processes and decisions that will provide a framework for robust self-examination (including third-party providers) and, where necessary, remedial action.
3. **Address Concerns Regarding Third Party AI Vendor Oversight.** This is an area where continued discussion and consideration is needed. Efforts to regulate third-party AI systems through insurers and other licensees raise several important issues, including contractual responsibility, access to highly proprietary intellectual property, and more. An approach that depends less on prescriptive requirements in favor of one that provides insurers with the flexibility to manage their own risks associated with third party AI systems would produce more effective results while maintaining consistency with the Model Bulletin's overall risk-based approach.
4. **Maintain Reasonable Documentation Requirements.** Prescriptive documentation should not be more burdensome than what is expected for actuarial modeling. This balance ensures compliance without hindering innovation.
5. **Expand Focus Beyond Traditional Machine Learning.** The Model Bulletin should also consider emerging AI technologies, such as generative AI, which may not have the same issues as traditional machine learning (e.g., drift). This approach will ensure that regulatory guidance remains relevant and effective.
6. **Consider Utilizing a Pilot Project Approach.** Many issues identified by AITC and others can be resolved through time and a better understanding of how AI is utilized in practice, including companies' risk management practices. We would recommend consideration be given to a project similar to the one used with cybersecurity in which three companies of varying sizes volunteered to participate in a pilot examination focusing on governance framework, management of third-party vendors, and data issues. As with the cybersecurity project, results would be anonymized, and no adverse regulatory action would be taken. This process may help the NAIC and other companies find best practices and yield new regulatory approaches to meet NAIC goals better.
7. **Embrace Forward-Thinking and Comprehensive Regulation.** The Model Bulletin should anticipate the widespread adoption of AI across various software apps, including HR, finance, and IT Help Desk functions. By considering the rapid integration of AI into everyday tools (e.g., Microsoft products, Google search algorithms), regulators can develop guidelines that address the broader AI landscape. Clear boundaries must be established to prevent over-regulation and to focus on areas of genuine concern.
8. **Encourage Cross-Sector Collaboration.** Regulators should consider taking a team approach to regulation and collaborate with large tech companies like Microsoft, AI experts, industry leaders, and stakeholders to develop a comprehensive understanding of AI technologies as they develop regulatory guidance. This collaboration will help create informed, effective regulations that address potential risks without stifling innovation.

Thank you again for the opportunity to address our comments.

Respectfully Submitted,



Scott R. Harrison
Co-Founder, American InsurTech Council

AMA
AMERICAN MEDICAL ASSOCIATION

James L. Madara, MD
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September 5, 2023

The Honorable Kathleen A. Birrane
Chair
Innovation, Cybersecurity, and Technology (H) Committee
National Association of Insurance Commissioners
444 North Capitol Street NW, Suite 700
Washington, DC 20001

RE: AMA comments on Exposure Draft of the Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers

Dear Chair Birrane:

On behalf of the physician and student members of the American Medical Association (AMA), I would like to thank you for the opportunity to submit comments on the "Exposure Draft of the Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers" (the draft bulletin). We appreciate the work of the National Association of Insurance Commissioners' (NAIC) H Committee and are very encouraged by the protections outlined in the draft bulletin on the use of augmented intelligence (AI) in insurance. As you proceed with finalizing this draft bulletin and, more broadly, creating a regulatory model for the use of AI in insurance, we respectfully urge the H Committee to undertake a specific focus on AI in *health* insurance given the potential impact of health insurers' use of AI on patients' health outcomes and access to care.

The AMA recognizes the potential of AI to improve the health care system through greater efficiencies, enhancement of human intelligence, and a refocusing on the patient-physician relationship. But at the same time, physicians are concerned that poor AI systems, incomplete or biased data inputs, and inappropriate reliance on algorithms and predictive models in clinical decision-making and utilization management could mean that patients are unable to access the care they need when they need it. This concern appears justified as we witness insurer algorithm-enabled decision-making systems making inappropriate coverage decisions that directly impact patients' access to care.[1]

The AMA's House of Delegates (HOD), our policy-setting body (representing state medical associations and national medical specialty societies along with AMA sections, national societies such as the American Osteopathic Association and the National Medical Association, professional interest medical associations, and the federal services, including the Public Health Service), has adopted policies that attempt to balance the positive potential of AI with a call for ethical, regulatory, and governance structures for AI's use in health insurance.[2] Our HOD recognizes that as AI is further incorporated into health care, it is imperative that the level of internal and external oversight of AI systems used by health insurers aligns with the risk to patients.

[1] See https://www.propublica.org/article/cigna-pxdx-medical-health-insurance-rejection-claims.
[2] See AMA policy: Augmented Intelligence in Health Care H-480.939

For example, most recently, the AMA's HOD adopted policy that promotes greater regulatory oversight of the use of AI for review of patient claims and prior authorization requests, including whether insurers are using a thorough and fair process that: (1) is based on accurate and up-to-date clinical criteria derived from national medical specialty society guidelines and peer-reviewed clinical literature; (2) includes reviews by doctors and other health care professionals who are not incentivized to deny care and with expertise for the service under review; and (3) requires such reviews include human examination of patient records prior to a care denial.[3] This policy highlights the importance of ensuring physician engagement at any point in the process that could lead to care denial, given that the use of AI for utilization management purposes poses high risks to patient access to care. The AMA encourages the H Committee to consider incorporating high levels of scrutiny when AI is used for such purposes into the internal controls and regulatory oversight sections of the draft bulletin.

Looking ahead, it is notable that the AMA is drafting broader principles related to the use of AI in health care and health insurance, which we anticipate being complete in the next several months. Though we recognize the speed with which AI is being incorporated into health care and the urgency to establish a framework for state regulation, we hope to have the opportunity to further engage with the H Committee and the broader NAIC on this issue once our principles are finalized.

In the interim, please feel free to contact Emily Carroll, Senior Attorney, emily.carroll@ama-assn.org, with any questions. Again, we thank you for the opportunity to submit comments on the draft bulletin and for your work to ensure the safe use of AI in insurance. We look forward to future opportunities to work with you on these critical issues.

Sincerely,

James L. Madara, MD

[3] AMA policy: Use of Augmented Intelligence for Prior Authorization D-480.956

American Property Casualty Insurance Association
INSURING AMERICA apci.org

September 5, 2023

Commissioner Kathleen Birrane
Chair
Innovation, Cybersecurity, and Technology (H) Committee
National Association of Insurance Commissioners

Re: Proposed Model AI Bulletin

Dear Commissioner Birrane:

The American Property Casualty Insurance Association (APCIA) welcomes the opportunity to comment on the Innovation, Cybersecurity, and Technology (H) Committee's proposed model bulletin on the use of algorithms, predictive models, and artificial intelligence systems by insurers. APCIA is the primary national trade association for home, auto, and business insurers. APCIA promotes and protects the viability of private competition for the benefit of consumers and insurers, with a legacy dating back 150 years. APCIA members represent all sizes, structures, and regions—protecting families, communities, and businesses in the U.S. and across the globe.

APCIA supports the NAIC's goal of developing a model bulletin outlining how existing regulatory requirements apply to insurers' use of artificial intelligence (AI). However, the proposal as currently drafted could require undue effort for insurers to aggregate information they have not been previously asked to produce, assemble new oversight mechanisms for every model including models that have long been used and are already adequately regulated, and produce documentation that would unproductively consume resources of both regulators and insurers. And although the draft bulletin concludes with a statement that "the goal of the bulletin is not to prescribe specific practices or to prescribe specific documentation requirements," we are concerned that the guidelines and expectations listed in Section 3 (Regulatory Guidance and Expectations) and Section 4 (Regulatory Oversight and Examination Considerations) as written could be applied as prescriptive requirements.

Fundamentally, we ask that the bulletin use a more risk-focused and principle-based approach that emphasizes outcomes, consistent with legislated regulatory standards, over the exact methods used to achieve them. The scope of the draft bulletin should be narrowed to focus on AI models that have not previously been regulated and that have the greatest impact on consumers if not executed and administered properly and fairly (i.e., AI models that affect the availability, purchase, or processing of insurance transactions for individuals). Consistent with this risk-focused approach, the bulletin should not apply to commercial lines of business. Likewise, insurers' AI systems that are operational in nature and only tangentially related, if at all, to individuals' ability to secure insurance or receive benefits should also be excluded from the scope of the bulletin.

Using a more risk-focused and principle-based approach would help reduce unnecessary costs that could ultimately harm consumers through higher prices and the diversion of company resources that otherwise could be invested in improving the costumer experience or helping consumers mitigate losses. We believe the changes recommended in this letter will best serve consumers by ensuring regulatory oversight of new AI applications that most directly impact them, while still fostering innovation and maintaining the high ethical and professional standards of our industry.

Definitions

Artificial Intelligence
The proposal defines "artificial intelligence" as "a term used to describe machine-based systems designed to simulate human intelligence to perform tasks, such as analysis and decision-making, given a set of human-defined objectives." We are concerned this definition is overly broad because it can be interpreted to include every automated process utilized by an insurance company regardless of whether any statistical or machine learning is involved in its development. The bulletin should define AI consistent with more widely accepted sources, such as the National Institute of Standards and Technology (NIST). Specific examples of systems that are included in, and excluded from, the definition of AI (similar to the examples provided in the definition of AI for the recent AI surveys of private passenger and homeowners insurers coordinated by the Big Data and Artificial Intelligence (H) Working Group) would also help clarify the definition.

Machine Learning
"Machine learning" is defined as "a subset of Artificial Intelligence that simulates human learning by identifying patterns in data either supervised, unsupervised or through reinforcement learning styles to make decisions. 'Predictive Analytics' and 'Predictive Modeling' are related terms that refer to methods to identify patterns in data to make predictions." Although this definition refers to machine learning as a subset of AI, the references to predictive analytics and predictive modeling imply that the definition of "machine learning" includes any use of predictive analytics and predictive modeling regardless of whether AI is involved. The references to predictive analytics and predictive modeling should be removed from the definition of "machine learning" to clarify that this definition only applies to models using AI.

AI Systems
The bulletin defines "AI Systems" as "an umbrella term describing artificial intelligence and big data related resources utilized by Insurers." This definition is overbroad because it includes any use of big data as an "AI System" regardless of whether artificial intelligence is actually used. Therefore, the reference to big data should be excluded to clarify the definition of "AI Systems" includes only systems that use AI.

Big Data
The proposal defines "big data" as "data sets that are characterized by, at a minimum, their volume (i.e., size), velocity (i.e., speed of transmission), and variety (i.e., internal, external, including third-party data) that requires scalable computer architecture to analyze and model." We are concerned this definition is ambiguous because it does not provide specific parameters regarding when a data set's volume, velocity, and variety would be sufficient to meet the

definition. The proposed definition is also overbroad because it would encompass data sets that may not have any connection to insurers' use of AI. To address these concerns, big data should be more clearly defined and limited to data sets with a nexus to insurers' use of AI.

Algorithm
"Algorithm" is defined as "a computational or machine learning process that augments or replaces human decision-making in insurance operations that impact consumers." This definition is overbroad in the context of the proposal because it would encompass any algorithm used by an insurer for any purpose, regardless of whether the algorithm incorporates AI and regardless of whether the algorithm is used in an insurance process that impacts consumers. To more appropriately limit the scope of this bulletin, the definition of "algorithm" should be limited to AI algorithms.

Third Party
"Third party" is defined as "an organization other than the Insurer that provides services, data or other resources related to AI." We believe this definition should exclude entities licensed by departments of insurance, such as insurance agents and third-party claim adjusters.

The definition of "third party" should further clarify that it applies only to organizations that provide AI to an insurer as a service. This definition should explicitly exclude vendors who themselves utilize AI to provide services. For example, Facebook, when used as a marketing platform, is not an AI-service organization, but it does utilize AI to optimize the ads it serves. The definition of "third party" should exclude vendors who themselves utilize AI to provide services, such as Facebook's marketing platform, because it is impractical for insurers to monitor how each and every vendor is using AI within their own companies. In addition to being impractical, third parties will have concerns over revealing their proprietary AI and in such cases may be unwilling to allow insurers to have that access.

Bias
The proposal defines "bias" as "the differential treatment that results in favored or unfavored treatment of a person, group or attribute." It is critical for the proposed bulletin to clearly state that the concept of "bias" is being defined and used in the sense of statistical bias. The term should not be defined or used as though it is replacing the legislated standards of conduct, most importantly "unfair discrimination." We are concerned the broad definition of "bias" in this proposal could be misinterpreted to supplant anti-discrimination law and create a new legal standard for how insurers conduct their core business.

Other Definitional Issues
Although "AIS Program" is seemingly defined in the introduction to Section 3, this term does not include a formal definition. "AIS Program" should be added to the Definitions section for the avoidance of doubt on the term's meaning.

Additionally, the proposed bulletin makes frequent references to insurers' AI systems that support decisions that "impact consumers." However, the bulletin does not define what it means to impact consumers. The proposal should clarify that AI systems that "impact consumers" are

those AI models that affect the availability, purchase, or processing of insurance transactions for individuals.

Finally, we note that the definitions proposed in this bulletin differ from the definitions for the same terms provided in the Big Data and Artificial Intelligence (H) Working Group's proposed model and data regulatory questions. The Committee should coordinate with the Big Data Working Group to ensure the definitions in the finalized AI model bulletin align with those in the finalized model and data regulatory questions.

Regulatory Guidance and Expectations

APCIA appreciates that the introductory guidance in Section 3 explicitly states that insurers' AIS Programs should be reflective of, and commensurate with, insurers' assessment of the risk posed by its use of an AI system, considering the nature of the decisions being made, informed, or supported using the AI. This statement recognizes the importance of proportionality, which is essential to maintaining a competitive and innovative insurance market. We also appreciate that the introduction appropriately recognizes that current limitations on the availability of reliable demographic data on consumers make it challenging for insurers and regulators to directly test these systems to determine whether the decisions made meet all applicable legal standards.

However, APCIA is concerned that the regulatory guidance and expectations in this section, as currently drafted, are written as prescriptive, inflexible, and overbroad requirements. AIS Programs should primarily address the use of AI in novel and key insurance processes that have the most impact on consumers, such as underwriting and claims adjusting, rather than all possible uses of AI in an organization. This will allow companies to implement AIS Programs that are focused and manageable even as the applications of AI continue to expand. We offer the following recommendations to ensure the regulatory guidance and expectations contained in the bulletin are proportionate, flexible, and risk based.

AIS Program General Guidelines

Paragraph 1.1 provides that an insurer's AIS Program should be designed to mitigate the risk that the insurer's use of AI makes or supports decisions that impact consumers resulting in decisions that are "arbitrary or capricious". The terms "arbitrary" and "capricious" are also used in the introductory text for Section 3. However, the phrase "arbitrary and capricious" is generally only used in the context of administrative law in most states, and most states do not use this phrase in their rating, unfair trade practices, or similar insurance statutes. Accordingly, the terms "arbitrary" and "capricious" should be omitted from the proposed model bulletin.

APCIA is also concerned with the statement in paragraph 1.3 providing that an insurer's AIS Program should be adopted by the board of directors or an appropriate committee of the board. We do not believe it is necessary or appropriate to mandate board adoption of insurers' AIS Programs because senior management should be responsible for designing and implementing an AIS Program. Instead of requiring companies' boards to adopt AIS Programs, paragraph 1.3 should be amended to say the board or a risk management committee reporting to the board should be informed of management's compliance with the governance requirements set forth in the AIS Program. These amendments should afford insurers with flexibility to determine how

and when management's compliance with the AIS Program should be reported to the board or risk management committee.

Additionally, we recommend deleting the reference to marketing in paragraph 1.5. This paragraph currently provides that an AIS Program should address the use of AI systems across the insurance product life cycle, including product development and design, marketing, lead generation and use, applications, underwriting, rating, case management, claim administration and payment, and fraud detection. Unlike the other functions identified in this paragraph, marketing is unique in that the vast majority of AI implications reside with the publisher, rather than insurers. The models utilized for ad-serving for platforms such as Facebook and Google are not developed, controlled, or governed by insurance companies. Therefore, the references to marketing in this paragraph should be removed.

APCIA is also concerned with the statement in paragraph 1.7 that an AIS Program should address all of the AI systems used by or on behalf of an insurer. As indicated above, including AI models used "on behalf of" an insurer within AIS Programs would require insurers to conduct extensive review and oversight of AI models of certain vendors or other third parties that insurers neither control nor have access to. Paragraph 1.7 should clarify that AI tools owned or controlled by agents, brokers, and managing general agents are excluded from the scope of an insurer's AIS Program.

Governance

We agree that flexible and proportionate governance should be a high, if not the highest, priority of this bulletin. Good governance helps prevent problems from materializing, a far better approach than after-the-fact remediation.

The opening paragraph of the governance section indicates that insurers' governance frameworks should prioritize transparency and fairness. However, the bulletin does not define "transparency" or "fairness" in this context, nor does it elaborate on how insurers can achieve a governance framework that prioritizes transparency and fairness. Given the lack of standards regarding how insurers' governance can prioritize transparency and fairness, these terms should be removed from this paragraph. Alternatively, instead of focusing on the transparency of AI models themselves – particularly since vendors who develop models that insurers use are likely to be resistant to providing insurers proprietary information relating to the construction of such models – the bulletin should emphasize the transparency of how AI systems are used in decision-making processes and the impact on policyholders.

In addition, the governance framework outlined in paragraph 2.4 is too prescriptive and impractical. As currently drafted, the proposed governance framework emphasizes identifying named individuals as key personnel rather than identifying certain roles. However, identifying individuals is not practical because many people throughout an insurance organization are involved in the development and use of AI and their roles and responsibilities may change over time. This section should allow companies more flexibility to develop and implement their own proportionate and risk-focused governance framework.

APCIA is also concerned with paragraph 2.4(f), which provides that an AIS Program should address "the independence of decision-makers and lines of defense at successive stages of the AI System life cycle." It is unclear how companies would be expected to comply with paragraph 2.4(f), and it would be difficult in practice for companies to ensure there is independent review of day-to-day processes. While audits and independent reviews are important, companies will have different levels of review and frequencies for differently risked systems.

Further, paragraph 2.6 refers specifically to "predictive models." Since predictive models do not necessarily use AI, the proposal should clarify that this paragraph applies only to predictive models utilizing AI. In addition, APCIA is concerned that paragraph 2.6 would require "a description of methods used to detect and address errors or unfair discrimination." In contrast to this language in paragraph 2.6, the introduction to Section 3 recognizes that "current limitations on the availability of reliable demographic data on consumers make it challenging for Insurers and regulators to directly test these systems to determine whether the decisions made meet all applicable legal standards." Given the limitations appropriately identified in the introductory text, it is unclear how insurers would be expected to comply with the regulatory expectation in paragraph 2.6. As such, we would suggest that the language be amended to add the following: "...including a description of the *reasonable and practicable* efforts insurers undertook to detect and address errors or unfair discrimination in the insurance practices resulting from the use of the predictive model (with due recognition of limitations set forth above)."

Risk Management and Internal Controls

APCIA is concerned with the breadth of the documentation requirements contemplated in the risk management and internal controls section. As drafted, this section would require detailed documentation of the development and use of any algorithms and predictive models, and measurements such as interpretability, repeatability, robustness, regular tuning, reproducibility, and traceability. Insurers would also be expected to document "validation, testing, and auditing of data, algorithms, and predictive models." This suggests insurers would potentially be expected to engage in testing, which is problematic and has limitations, and seemingly contradicts the bulletin's appropriate recognition in the in the introductory text of Section 3 about the current limitations on testing.

These documentation requirements are unnecessarily broad and burdensome. Preparing the documentation described in this section for each and every model or algorithm used by an insurer – regardless of whether AI is involved – would be a substantial project for any insurer. It is also unclear why a department would want much of this information, what regulators would do with the information, and whether regulators have the resources and expertise to properly digest any information they may receive. To address these concerns, we believe the documentation requirements in this section should be limited to algorithms and predictive models that use AI in insurance processes that have the most impact on consumers (i.e., AI models that affect the availability, purchase, or processing of insurance transactions for individuals).

Finally, we suggest the inclusion of either a safe harbor for insurers who adhere to their risk tiering structure or a similar mechanism, provided that in each case, the insurer's determination of high-risk AI systems is reasonable. This would prevent differing approaches taken by states as to whether the insurer's determination of risk tier for a particular AI system was appropriate.

Third-Party AI Systems
Insurers typically make every effort to perform due diligence on vendors prior to the execution of a contract. However, APCIA has significant concerns with how insurers would be expected to monitor and collect expansive amounts of information regarding the use of AI by unrelated third parties that insurers do not control. We expect third-party vendors would be unwilling to disclose their proprietary AI models out of concern for safeguarding their trade secrets. Additionally, many insurers have AI systems and models that are already in place, whether developed internally or provided by a third-party vendor. It would be unrealistic to require insurers to modify contractual terms quickly and mid-engagement. Any required changes to insurers' contracts with third-party vendors should apply only on a prospective basis when contracts are renewed or new contracts are formed.

Even when negotiating new contracts, no insurer has the ability to impose the types of contractual obligations contemplated in the proposed bulletin on vendors. For example, paragraph 4.2(a) would require insurers to have their third-party vendors to contractually agree "to have and maintain an AIS Program commensurate with the standards expected of the Insurer." We do not believe this requirement is appropriate given that vendors are not insurers in many cases. It is unlikely that third-party vendors will be willing to adjust their governance standards to be commensurate with the standards expected of insurers, so this requirement may have a chilling effect on vendors providing services to insurance companies.

That said, we recognize that concerns about third-party AI models are important to regulators. The Committee and the NAIC should maintain an ongoing dialogue with industry to identify a balanced, risk-focused, and practical solution for providing information about third-party AI models that accounts for both practical realities and regulatory needs. On a going-forward basis, insurers may be able to contractually agree to certain expectations with third parties or possibly have third parties attest to certain standards.

For example, instead of requiring third-party vendors to have an AIS Program commensurate with the standards expected of insurance companies, insurers may be able to require vendors to contractually agree that a vendor will comply with a generally accepted AI risk management program, such as the NIST AI Risk Management Framework. In addition, it may be reasonable for the bulletin to set forth an expectation that contracts provide insurers the right to audit a vendor, but vendors may be resistant to such provisions and insurers may be unable to negotiate the inclusion of such provisions depending on the circumstances. As drafted, the proposal currently suggests the performance of such audits is required. Since vendors are likely to be resistant to such audits – and even if permitted, they may put limitations on the scope of these audits – insurers should have the flexibility to determine the scope of the audit and when an audit of a third-party vendor is necessary, and that determination should be risk based.

Regulatory Oversight and Examination Considerations

Similar to the documentation requirements described above, the regulatory oversight and examination considerations section would require insurers to maintain and produce voluminous amounts of documentation related to their use of AI. For example, insurers would be expected to provide information and documentation relating to the pre-acquisition/pre-use diligence,

monitoring, oversight, and auditing of AI systems as well as information related to the techniques, measurements, thresholds, benchmarking, and similar controls adopted by an insurer. These documentation requirements are overly prescriptive and far beyond what is typically sought by regulators.

Additionally, it is unclear when insurers would be required to provide the documentation contemplated by this section. The proposal should clarify these requirements apply only in the context of market conduct exams or similar processes because requiring insurers to produce this documentation more frequently would be unworkably burdensome.

The proposal should also clarify how insurers are expected to comply with paragraph 1.1(c), which would require insurers to produce information on the scope of their AIS Programs, including any AI systems and technologies not included in or addressed by the AIS Program. This paragraph should be clarified to address whether it is intended to refer to any technologies that are not considered AI, or whether it refers to those solutions that meet the definition of AI but are not covered by the company's AIS program.

Further, APCIA is concerned with the requirement in paragraph 1.3(a) to provide documentation identifying key personnel and their roles, responsibilities, and qualifications. As described above, identifying individuals is not practical because many people from throughout an insurance organization are involved in the development and use of AI, and their roles and responsibilities may change over time. This paragraph should allow companies more flexibility for documenting their compliance with AIS Programs.

We are also concerned with the expectations for providing documentation related to AI systems developed by third parties. For insurers to provide the degree of detail needed from third-party vendors would be unwieldy and could breach restrictions on the disclosure of proprietary information. For example, the contractual language between insurers and their vendors may be confidential and proprietary, but paragraph 2.2 would nonetheless compel insurers to produce these contracts. Therefore, the reference to third-party contracts in this paragraph should be removed. Alternatively, paragraph 2.2 should be limited to only requiring insurers to produce portions of the contract related to AI services.

Confidentiality and Privilege

Much of the information insurers would be expected to provide in response to the proposed bulletin could be highly proprietary. Regulators should ensure that insurers' proprietary information disclosed pursuant to this bulletin remains confidential under state law. Therefore, the bulletin should explicitly state that it will require insurers to turn over information that is proprietary and contains trade secrets subject to confidentiality protections under state law. These amendments should also state that regulators will ensure that companies will only be asked to turn over confidential information if the confidentiality of the answers and related documentation will remain subject to the highest level of confidentiality protections afforded under state law.

Further, information sought under the proposed bulletin may be subject to privilege, such as attorney-client privilege. The bulletin should provide that companies will not be required to

produce information subject to attorney-client privilege. For companies that voluntarily choose to provide regulators with documentation covered by attorney-client privilege, the bulletin should clarify that turning over privileged information pursuant to this bulletin will not be considered a waiver of any privilege.

Other Evidence of Compliance

The bulletin provides that "Insurers may demonstrate their compliance with the laws that regulate their conduct in the state in their use of AI Systems through alternative means, including through practices that differ from those described in this bulletin. The goal of the bulletin is not to prescribe specific practices or to prescribe specific documentation requirements. Rather, the goal is to ensure that Insurers in the state are aware of the Department's expectations as to how AI Systems will be governed and managed and of the kinds of information and documents about an Insurer's AI Systems that the department expects an Insurer to produce when requested."

While APCIA appreciates this acknowledgement, the bulletin should clarify how insurers will be able to properly deviate from the requirements described throughout the bulletin.

Conclusion

In conclusion, we ask for your consideration of these comments to help produce a bulletin that is appropriately limited in scope, reflects the realistic status and constraints with testing, helps address regulatory concerns about third-party vendors without closing off access to their expertise and innovation, adheres in all ways to legislated standards, and results in the most cost-effective bulletin for regulators, insurers, and the consumers we serve.

Thank you for considering the points addressed in this letter, and please do not hesitate to contact us if you have any questions. We look forward to working with you and other regulators to finalize a bulletin that efficiently and effectively achieves the goals set forth in the draft.

Sincerely,

Matthew Vece
Director, Financial & Tax Counsel

Dave Snyder
Vice President, International & Counsel

BlueCross BlueShield Association

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September 5, 2023

Commissioner Kathleen A. Birrane, Chair
Commissioner Michael Conway, Co-Vice Chair
Commissioner Doug Ommen, Co-Vice Chair
Innovation, Cybersecurity, and Technology (H) Committee
National Association of Insurance Commissioners
444 North Capitol Street NW, Suite 700
Washington, DC, 20001

Submitted electronically via Miguel Romero (maromero@naic.org)

Re: Exposure Draft of NAIC Model Bulletin: Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers

Dear Commissioners Birrane, Conway, and Ommen:

The Blue Cross Blue Shield Association (BCBSA) is pleased to have the opportunity to share our comments on the National Association of Insurance Commissioners (NAIC)'s exposure draft, "NAIC Model Bulletin: Use of Algorithms, Predictive Models and Artificial Intelligence Systems by Insurers" (the "Model Bulletin").

BCBSA is a national federation of 34 independent, community-based and locally operated BCBS companies that collectively cover, serve, and support 1 in 3 Americans in every ZIP code across all 50 states and Puerto Rico. Our Plans contract with 96% of hospitals and 95% of doctors across the country and serve those who are covered through Medicare, Medicaid, an employer, or purchase coverage on their own.

BCBSA believes that everyone should have access to high-quality health care. BCBSA's commitment to the health of our communities includes continuing to improve the way we gain insight from diverse health factors and how we use technologies. BCBS Plans are actively leveraging technology, where appropriate, to provide innovative solutions and services to members.

To facilitate the appropriate use of innovative technology in health care, it is important to continue to develop regulatory expectations and standards for artificial intelligence systems (AI Systems or AIS) governance, risk management controls, internal audit functions and third-party AI Systems, while mitigating risks such as adverse bias and inaccuracies. Any regulatory structure should be flexible and enable industry to appropriately measure and balance the varying levels of risks presented by different AIS and the data those Systems rely upon. It must simultaneously support the opportunities that AI Systems provide. We commend NAIC for engaging thoughtfully and collaboratively on this topic.

Informed by our experience, BCBSA respectfully offers the following comments for NAIC's consideration as it refines the Model Bulletin.

1. **Consistency across AI regulations is critical.** To the extent regulators take a regulation-based approach, as opposed to self-regulation or voluntary approach, in deploying AI accountability measures, we urge NAIC to encourage state insurance departments to engage with their federal regulatory agency partners to work towards a regulatory structure that provides consistency and reliability, while also supporting the adoption and use of responsible AIS in a way that fosters appropriate innovation. Further, to the extent state and federal agencies adopt regulation-based approaches, they should do so only after developing a deep understanding of the technology, existing risk identification and mitigation approaches, impacts (costs and benefits) to consumers, health care providers, and the insurance industry, as well as existing regulatory protections.

   One example of where consistency is critical is in the definitions within the Model Bulletin Section 2. The definitions proposed in Section 2 are markedly different from and much broader than the definitions proposed by the federal regulators in various AI-related proposals. The federal regulatory landscape seeks to adopt the National Institute of Standards and Technology's (NIST) AI Risk Management Framework (NIST AI RMF), which has been vetted through several rounds of stakeholder input and congressional directives. To demonstrate the importance of consistency across definitions, we draw your attention to the NIST definition of "AI Systems" and encourage you to compare this definition to the Model Bulletin's definition of the same term. The NIST definition of "AI Systems" is "an engineered or machine-based system that can, for a given set of objectives, generate outputs such as predictions, recommendations, or decisions influencing real or virtual environments." This is a precise definition that aligns with existing standards development entity, Organisation for Economic Co-operation and Development (OECD). This consensus-developed definition acknowledges that "AI Systems" (and the risks they may present) are dependent on data and use cases to arrive at a particular outcome. The Model Bulletin's definition of "AI System" is "an umbrella term describing artificial intelligence and big data related resources utilized by Insurers." Unlike the NIST definition, the Model Bulletin seeks to broadly encompass all algorithm or computer-based learning models, regardless of how or why the models may be used. Consistency between the NAIC, state regulators, and their federal counterparts

on the scope and application of any AI regulation, including the definitions incorporated therein, will be necessary for industry to understand regulatory expectations. This will also enable industry to identify and mitigate appropriate risks, while moving forward with needed innovations and use of AIS.

2. **Adoption of a risk-based approach is foundational to responsible AI**. We applaud NAIC for its efforts to align with the NIST AI RMF, as there is a demonstrable understanding that the foundation of responsible and trustworthy AI is in the appropriate identification, measurement and mitigation of risk through governance, protocols and internal controls tailored to a particular AIS and use case. However, it is important to note that there is no one-size-fits-all approach to measuring, managing and mitigating potential risks of AI. A workable framework is one that has the necessary level of flexibility built into it to appropriately measure risks and enable companies to tailor risk mitigation to each AI Systems and use cases.

   BCBSA supports the risk management approach generally, and in particular, the NAIC's recognition that AI accountability measures should be scoped through applying an impact/risk-based approach. Instead of prescriptive requirements as set forth in Section 3 of the Model Bulletin, BCBSA urges the NAIC to advocate that organizations adopt a flexible, standards-based risk framework to guide management and oversight of AIS. Such a risk-based framework would account for the fact that the higher the impact to individuals from the use of AIS, the higher the potential risk and need for greater accountability, governance and risk mitigation measures.

3. **A flexible AIS governance process.** BCBSA agrees that governance is a critical component of how to apply and implement a risk-based framework. BCBSA respectfully recommends that flexibility be incorporated into the Model Bulletin around what constitutes appropriate governance. Several of the sections in the Model Bulletin provide specific requirements related to governance without acknowledging that such governance requirements may be burdensome and unnecessary for certain AIS or AIS use cases (e.g., Section 2.4 of Model Bulletin.)

   As noted previously, there is no one-size-fits-all approach to AIS risk management, including the governance associated with implementing and operating an AIS risk management framework. The scope of oversight and governance controls applicable to AIS should incorporate, among other considerations, an assessment of the relevant AIS, the use case and the data at issue. The greater the risk presented by any of the components of an assessment, the greater the need for more governance controls over the AIS. For example, a low-risk AIS use case - i.e., one that is not member facing, does not use sensitive data, does not directly impact members, and is performed in a test environment - may not require a multi-disciplinary review committee. Whereas such a requirement would be more reasonable and appropriate for high-risk use cases.

4. **Data and transparency related to the use of AIS.** BCBSA agrees with the Model Bulletin's recognition that there is a role for transparency when discussing AIS. We acknowledge that the scope of transparency may increase as AI tools are employed in high impact, consumer facing situations. However, consistent with our comments regarding the importance of adopting a flexible risk-based framework, the need for and application of transparency depends on several factors, including the AI System, data at issue, intended audience, and intended output.

   Additionally, Section 4 of the Model Bulletin sets forth standards related to acquiring or using an AIS that has been developed by a third party. BCBSA agrees that entities should perform due diligence when evaluating third-party vendors to provide any sort of services, especially using an AI system. However, rather than utilizing one set of standards, the use of AIS developed by third parties should be evaluated using a risk-based approach that incorporates the same principles underlying the regulated entity's own risk-based framework.

We appreciate your consideration of our comments and believe that our recommendations will help with the development and use of trustworthy AI through sensible public policies. If you have additional questions or comments, please contact Lauren Choi, Managing Director, Health Data and Technology Policy at lauren.choi@bcbsa.com or Randi Chapman, Managing Director, State Affairs at randi.chapman@bcbsa.com.

Sincerely,

Clay S. McClure
Executive Director, State Affairs
Blue Cross Blue Shield Association

CENTER for ECONOMIC JUSTICE | FAIR ACCESS FAIR TREATMENT

Comments of the Center for Economic Justice

To the NAIC Innovation, Technology and Cybersecurity (H) Committee

Regarding Draft Model Bulletin
"Use of Algorithms, Predictive Models and Artificial Intelligence Systems by Insurers."

September 5, 2023

The Center for Economic Justice (CEJ) submits the following comments on the July 17, Exposure Draft of the "NAIC Model Bulletin: Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers.

We appreciate the work of the H Committee and particularly the tireless efforts of Commissioner Birrane. However, we believe the draft model bulletin does not provide the necessary guidance to implement the NAIC's Principle on Artificial Intelligence nor address the issues of structural racism in insurance magnified by insurers' use of big data and artificial intelligence (AI).

We believe the process-oriented guidance presented in the bulletin will do nothing to enhance regulators' oversight of insurers' use of AI Systems or the ability to identify and stop unfair discrimination resulting from these AI Systems. These comments explain why the draft bulletin's approach is flawed and provides no realistic path forward for market regulators.

We believe an outcome-based approach is needed that requires insurer testing of its AI systems for fair and unfair discrimination and that insurer governance and risk management should emanate from that core testing requirement. Attached to these comments are CEJ's presentation slides to the NAIC Consumer Liaison Committee setting out the components of the outcomes based approach and CEJ's proposed draft model bulletin that would implement that outcomes-based guidance for insurers.

Also attached to these comments is a letter from several organizations working on fairness and justice in technology – Algorithmic Justice League, Data & Society Research Institute, Electronic Privacy Information Center, Fight for the Future and Upturn – to the Biden Administration explaining the central role of anti-discrimination testing in AI Systems.

The December 2022 Announcement of the NAIC's Decision Regarding Implementation of the NAIC AI Principles

At the December 13, 2022 meeting of the H Committee, chair Birrane, chair of the H Committee, disclosed the following:

> "Commissioner Birrane said the goal of the Collaboration Forum is to ensure, to the extent possible and appropriate, that the work on this important topic is transparent, efficient, collaborative, and consistent in addition to developing a common vocabulary for state insurance regulators. She said state insurance regulators considered whether the NAIC should move forward with guidance or directives now and what form that would take in terms of a principled or prescriptive approach among other topics. She said there is a clear consensus that: 1) the NAIC should develop and adopt a regulatory framework for the use of AI by the insurance industry; 2) it should take the form of a model bulletin; 3) the framework should be principles-based and not prescriptive; and 4) members prefer a focus on governance requirements and the establishment of AI use protocols that rely on external and objective standards, such as the National Institute of Standards and Technology (NIST). She said members agree that efforts to validate the process should be part of the requirements, but with recognition of the practical difficulties and limitations associated with testing at this time. She said with respect to third parties, there is a strong preference among members to place responsibility on licensees to conduct appropriate diligence with respect to third-party data and model vendors as opposed to attempting to directly regulate unlicensed third-party vendors.
>
> Commissioner Birrane said it is with those concepts in mind that the Committee, through the Collaboration Forum and the many working groups that make up the Collaboration Forum, will draft a model interpretative bulletin. She said the development of the current table of contents for the bulletin, at a very high level, is just now getting underway. She said it would include: 1) an introduction background and anchoring legislative authority for the bulletin; 2) a definitional section incorporating the vocabulary project already underway; 3) regulatory expectations for the use of AI by the insurance industry, which will include corporate governance and enterprise risk management (ERM) expectations; and 4) a section on regulatory oversight and examination standards, which will address market conduct, financial examination, and rate filing reviews."

The decisions announced by Commissioner Birrane were made in the absence of exposure and comment by stakeholders. Stakeholders did not have an opportunity to comment on the proposed approach to implementing the NAIC's AI principles.

The referenced model bulletin was exposed for comment on July 17, 2023. As a preliminary comment, the NAIC would have benefitted by exposing the proposed approach for stakeholder comment before deciding to take the approach set out last December. At this point, we are concerned that the die is cast and no amount of meritorious critique will cause any substantive change in the draft bulletin or general approach and that the current exposure represents stakeholder engagement in name only.

The Need for Substantive Guidance to Implement the 2020 NAIC Principles on AI

The purpose of insurance market regulation is to ensure fair treatment of consumers. Statutes memorialize this purpose by setting out requirements for fair and unfair discrimination. Unfair discrimination is defined in rating, unfair trade practices and unfair claim settlement statutes, among others, and has two prongs:

First is unfair discrimination on the actuarial basis – treating similarly situated consumers differently. Stated differently, treating consumers differently when there is no difference in expected costs for providing the insurance.

Second is protected class unfair discrimination – discriminating on the basis of race, religion, national origin, and sometimes others characteristics. Protected class discrimination is unfair and prohibited even if it is actuarially fair.

Consumer groups and some regulators have long been concerned with protected class unfair discrimination generated by insurers' use of data that are racially biased and which indirectly cause unfair discrimination on the basis of race. The generic response from industry – particularly the property-casualty trades – is that these controversial risk classifications and scoring algorithms are predictive and actuarially fair. They also argue protected class discrimination can only mean explicit and intentional use of prohibited characteristics.

With insurers' explosive growth in the use of new sources and types and volumes of data about consumers, vehicles, properties and the built and natural environments – big data and AI – regulators acknowledged the vastly increased potential for racially-biased data and algorithms to produce protected class unfair discrimination in 2020 with the adoption of the Principles on AI which included the following under the fairness category:

> *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.*

These AI principles also stated, "the document should be used to assist regulators and NAIC Committees addressing specific AI applications."

Following the adoption of the principles by the AI working group, George Floyd was murdered by police in Minneapolis. Along with other similar events of police violence against Black Americans, our country was confronted with structural racism persists in America – that many of our institutions and public policies reflect and reinforce racial discrimination with devastating consequences for communities of color.

Insurance industry leaders and the NAIC declared this as a watershed moment for action against racism in insurance – to address inherent bias and systemic racism.

The NAIC created the Special Committee on Race and Insurance. Director Farmer said

> *"Within the NAIC, we're seeing unprecedented discussions between our members and stakeholders on race and its role in the design and pricing of insurance products . . .... "It is the duty of the insurance sector to address racial inequality while promoting diversity in the insurance sector. If not us, who? If not now, when?"*

The committee charges included: "Determine whether current practices exist in the insurance sector that potentially disadvantage minorities."

What has happened over the past three years? The Special Committee and the NAIC have made great strides on diversity, equity and inclusion education and initiatives under Evelyn Boswell's leadership. Thank you.

But what about addressing structural racism in insurance marketing, sales, pricing, claims settlement and anti-fraud? Other than equity in health insurance, all activities related to protected class bias – from over a dozen working groups and committees – have been deferred to the new H Committee to ensure coordination and consistency. The property casualty work stream and its work plan – which included examining practices that disadvantaged communities of color – have disappeared. The life work stream has decided that the victims are the problem and require greater financial literacy to somehow address the structural racism in life insurance. The work of the Accelerated Underwriting Working Group and its draft regulatory guidance has, again, been shelved even though that guidance had virtually no overlap with draft bulletin.

After three years, the culmination of that work by the H Committee is the recently-released draft model bulletin.

The Draft Bulletin

That draft fails to respond to the challenges and promises made three years ago. It is not principles-based, but laissez faire. It does not expand upon the AI principles or reflect any specific guidance to NAIC committees and working groups. It offers no guidance -- principles-based or other – to insurers or regulators for how to implement the AI principles. In place of guidance on how to achieve the principles and how to ensure compliance with existing laws, the draft tells insurers what they already know – AI applications must comply with the law and insurers should have oversight over their AI applications.

The draft bulletin fails to provide essential definitions – it doesn't even define proxy discrimination. It not only fails to address structural racism in insurance, it incorrectly tells insurers that testing for protected class bias may not be feasible.

Not "Principles Based" and No Actual Guidance

While it is unclear what the NAIC means by a "principles-based" approach, the draft bulletin is clearly not principle-based. The NAIC has adopted principles regarding insurers' use of AI. The draft bulletin fails provide guidance to insurers regarding how to implement those principles.

In place of guidance for implementing the principles for AI – what do insurers need to do to ensure that their AI Systems are fair and ethical, accountable, compliant, transparent, and secure, safe and robust – the draft bulletin sets out a voluntary list of prescribed governance procedures.

We understand the "principle-based" approach in the draft bulletin to reflect the ACLI's proposal for focusing on governance procedures instead of consumer outcomes The ACLI has previously suggested algorithmic model governance, including efforts to address structural racism in insurance, similar to the approach used for ORSA and preventing cyber breaches.

Model governance is essential, but not sufficient. The focus on governance for ORSA and cybersecurity is necessary because there are relatively few bad outcomes against which predictive modeling can be employed. There are relatively few insolvencies and cyber breaches. In contrast, insurers' AI Systems produce billions of actual consumer outcomes annually and these outcomes can be tested to determine how the AI Systems are performing.

A "principles-based approach" to address structural racism is not necessary or desirable, because uniform methods of testing and evaluation across insurers is possible because all insurers share the same types of consumer outcomes, regardless of business model or product:

- Did the insurer receive an application?
- Did the application result in a policy?
- If a policy was issued, what was the premium and coverage provided?
- Was a claim filed?
- Was the claim denied or paid?
- If the claim was paid, how much?

A more relevant analogy for how regulators should approach insurers' use of AI Systems is found with the NAIC's risk-based capital tools. Consider the following – instead of regulators setting specific guidance for how to measure the risks of insurers and the capital available to buffer that risk through risk-based capital, regulators instead relied completely on process governance to assess insurer financial strength. There would be no standards for financial strength and financial examiners would have to review each insurers' measurement of capital needs as a unique event because each insurer would have their own bespoke approach. Clearly, such an approach wouldn't make any sense – yet that is the approach offered for evaluating unfair discrimination in insurers' AI governance – even though the outcomes of AI Systems are more clearly defined than RBC outcomes.

The draft bulletin offers no actual guidance. It provides governance procedures in place of guidance and "regulatory expectations" relate to process, not to outcomes. There is no guidance regarding the actual outcomes a regulator expects and how the insurer should demonstrate those outcomes.

> *The Department recognizes that Insurers may demonstrate their compliance with the laws that regulate their conduct in the state in their use of AI Systems through alternative means, including through practices that differ from those described in this bulletin. The goal of the bulletin is not to prescribe specific practices or to prescribe specific documentation requirements. Rather, the goal is to ensure that Insurers in the state are aware of the Department's expectations . . .*

AI System Governance Should Emanate from Testing of AI System Outcomes.

As noted above, AI system governance is necessary, but the draft bulletin provides a set of governance processes untethered from the effectiveness of the governance. The draft bulletin tells insurers what procedures the insurer should employ, but fails to tell insurers what outcomes should be achieved by those procedures.

AI System governance should start with the outcomes desired by regulators through the AI Principles and testing to measure and assess the outcomes for fair and unfair discrimination should be the foundation of the governance. The insurer's AI System governance should develop from the foundation of testing requirements and good consumer outcomes. Then – and only then – will the governance actually produce the outcomes set out in the AI principles. You can't evaluate something unless you measure it and the draft bulletin offers no metrics or methods for measuring outcomes.

Telling insurers that the regulator expects them to test their AI systems for fair and unfair discrimination is not a stretch. Insurers test these outcomes as they develop the algorithms for marketing, pricing, claims settlement and anti-fraud. Testing for spurious correlations (proxy discrimination) and disparate impact on the basis of protected class characteristics should simply be part of model development and post-deployment review.

All of Insurers' Consumer Facing AI Applications are High Risk.

The draft guidance is deeply flawed by tasking insurers with the determination of the level of risk posed by the use of AI systems.

> "*An AIS Program that an Insurer adopts and implements should be reflective of, and commensurate with, the Insurer's assessment of the risk posed by its use of an AI System, considering the nature of the decisions being made, informed, or supported using the AI System; the nature and the degree of potential harm to consumers from errors or unfair bias resulting from the use of the AI System;*

It's clear that any consumer-facing AI application used by an insurer is high risk because such AI application has the potential to produce catastrophic and unfairly discriminatory outcomes – denying a consumer essential insurance coverage, charge unfair prices, unfairly settling a claim or otherwise denying a consumer the full benefits of the insurance coverage.

Consider the follow:

- A marketing algorithm that systematically denies essential insurance product options on the basis of race;
- A policy form algorithm that generates policy language with misleading, deceptive, unfair or prohibited provisions;
- A pricing algorithm that systematically charges more to people of color;
- A claims settlement algorithm that systematically offers lower claims settlements to people of color;

- An antifraud algorithm that reflects and perpetuates historic racial discrimination in policing and criminal justice;

- A chatbot that provides misleading or false information to consumers that causes consumers to not get the benefits of their purchase.

Regulators, not insurers, should determine what AI applications are high risk for consumer harm and that determination should be that all consumer-facing AI Systems are high risk and must be tested for unfair discrimination.

No Progression from 2020 AI Principles:

The draft bulletin recognizes the NAIC AI Principles, but fails to accomplish what was intended when those principles were adopted – namely, that NAIC committees and working groups would be guided by those principles in implementing subject matter-specific guidance.

> *The Department recognizes the Principles of Artificial Intelligence that the NAIC adopted in 2020 as an appropriate source of guidance for Insurers as they develop and use AI systems. Those principles emphasize the importance of the fairness and ethical use of AI; accountability; compliance with state laws and regulations; transparency; and a safe, secure, fair, and robust system. These fundamental principles should guide Insurers in their development and use of AI Systems and underlie the expectations set forth in this bulletin.*

Incorrect Guidance or Testing for Racial / Protected Class Unfair Discrimination.

Beyond the lack of guidance for testing for unfair discrimination on the basis of race, the draft guidance falsely suggests such testing is not feasible and that governance processes can substitute for actual testing – despite over 40 years of such testing under federal laws for credit, employment **and insurance!**

Three years after the murder of George Floyd and the recognition by insurers, NAIC leadership and the society at large that structural racism impacts all of institutions – including insurance – the NAIC's efforts to address structural racism have disappeared from the Special Committee on Race, were sent to the H Committee / Collaboration Forum and, based on the draft AI guidance, have now been abandoned. The draft guidance not only equivocates on testing for racial bias, but doesn't even state that practices that have the effect of discriminating on the basis of protected class status – even if unintentional – are unfair discrimination.

> *"Current limitations on the availability of reliable demographic data on consumers make it challenging for Insurers and regulators to directly test these systems to determine whether the decisions made meet all applicable legal standards. Therefore, while the Department continues to encourage and emphasize the use of verification and testing methods for unfair bias that leads to unfair discrimination where possible, the Department recognizes that we must also rely upon robust governance, risk management controls, and internal audit functions to mitigate the risk that decisions driven by AI Systems will violate unfair trade practice laws and other applicable legal standards."*

Telling Insurers to Comply with the Law, but No Guidance on How to Measure or Ensure Appropriate Outcomes

The draft bulletin tells insurers what they surely know – their AI Systems must product outcomes that comply with statutes and regulations. But the draft bulletin fails to provide the essential guidance to insurers on how to measure or ensure appropriate outcomes.

> *Actions taken by Insurers in the state must not violate the Unfair Trade Practices Act or the Unfair Claims Settlement Practice Act or the UCSPA, regardless of the methods the Insurer used to determine or support its actions. As discussed below, Insurers are expected to adopt practices, including governance frameworks and risk management protocols, that are designed to assure that the use of AI Systems does not result in: 1) unfair trade practices, as defined in []; or 2) unfair claims settlement practices . . ..*

Unhelpful Definitions / Missing Key Definitions

In December 2022, Commissioner Birrane stated that the draft bulletin would have "a definitional section incorporating the vocabulary project already underway." The draft bulletin contains a very few definitions and most of them are not utilized in the draft bulletin "guidance." There is no definition of proxy discrimination even though that term is featured in the AI Principles.

Of great concern in the inclusion of the term "bias" and its definition as differential treatment. The term is used in an awkward and confusing manner in the draft bulletin – "unfair bias that leads to unfair discrimination."

It is unclear why regulators seek to introduce a new and previously unused term – "unfair bias" – when longstanding insurance statutes and regulations have clearly defined fair and unfair discrimination. Why aren't the terms fair and unfair discrimination sufficient for purposes of AI Systems guidance?

The definition of "Third Party" definition fails to distinguish between third party advisory organizations, whose activities are subject to regulatory oversight, and third parties not licensed as advisory organizations.

There are no definitions for the needed guidance for assessing fair and unfair discrimination – "on the basis of," proxy discrimination, disparate impact, data source, data type.

See CEJ's proposed draft bulletin for relevant terms and needed definitions.

The Draft Guidance Has No Realistic Path Forward for Market Regulation

The draft Guidance envisions an auditing approach by market conduct examiners regarding insurers' AI Systems processes. At best, the draft guidance suggests a check-the-box approach for documentation and procedures. Realistically, regulators lack the resources – both quantity and specific-skills – to examine every insurer's bespoke approach to avoiding unfair discrimination or entering into dialog with every insurer about each insurer's method of testing for unfair discrimination – if the insurer's governance even features such testing.

Our recommended Outcomes-Based guidance provides a path forward for meaningful oversight. Testing and reporting requirements provide common metrics across insurers that facilitate an analytic – as opposed to auditing – approach that permits evaluation of insurers' performance quickly and consistently. Our recommended guidance provides a path forward for specific and achievable regulatory resources and skill sets.

The attached recent presentation by CEJ provides a summary of the outcomes-based approach needed for regulatory guidance of insurers' use of AI systems. CEJ's draft model bulletin, also attached, shows how to implement that outcomes-based approach.

Thank you for your consideration of our comments.

Proposed Guidance / Model Bulletin

Use of Algorithms, Predictive Models and Artificial Intelligence Systems by Regulated Entities

Recommendations of the Center for Economic Justice

September 5, 2023

I. Purpose of the Bulletin

The use of new, non-traditional data types and data sources, combined with the ability to process huge amounts of information and deploy the results of algorithms and artificial intelligence applications in real time is the most significant change in insurance in a generation. For purposes of this bulletin, big data and artificial intelligence (AI) are the terms used to describe the vast new data and new technologies, respectively. The term AI Systems encompasses both big data and AI.

Insurers' (and other regulated entities') use of AI Systems hold tremendous promise to reduce the cost of insurance, increase the availability and affordability of insurance, more quickly bring products to market, improve risk management, close the protection gap, create greater transparency of insurance products and processes, create risk prevention and loss mitigation opportunities and partnerships and reduce the impact of structural racism in insurance. But, these outcomes are not guaranteed. For nearly every potential benefit, there is a potential downside. The purpose of this bulletin is to alert regulated entities to your responsibilities regarding the use of AI Systems, how to ensure compliance with relevant laws and regulation, provide guidance for what the Department expects of you regarding such use and to alert you to changes in the Department's regulatory practices to align with current and emerging technology.

II. Basis for the Guidance

The basis for this guidance are the Principles of Artificial Intelligence adopted by the National Association of Insurance Commissioners (NAIC AI Principles) in 2020 and current legislative authority. This bulletin provides the guidance to implement the NAIC AI Principles,[1] which are consistent with and informed by current legislative authority. Regulated entities' use of AI Systems must comply with the letter and spirit of insurance laws and regulations.

[1] The NAIC AI Principles state, "This document should be used to assist regulators and NAIC committees addressing insurance-specific AI applications."

The regulatory guidance relies upon current laws and regulations [insert state-specific references], including:

- Unfair Trade Practices Model Act (#880)
- Unfair Claims Settlement Practices Model Act (#900)
- Corporate Governance Annual Disclosure Model Act (#305)
- Property and Casualty Model Rating Law (#1780): The Property and Casualty Model Rating Law, [insert citation to state statute or regulation corresponding to the Model #1780], requires that property/casualty (P/C) insurance rates not be excessive, inadequate, or unfairly discriminatory and provides the regulatory framework for licensing and oversight of advisory organizations.
- Market Conduct Surveillance Model Law (#693)

III. Nature of the Guidance

The guidance provided in this bulletin includes the requirement for a regulated entity to establish and document a governance program to manage its AI Systems applications. While the bulletin offers resources for regulated entities regarding approaches to AI governance, the method of AI Systems risk management and governance is left to the regulated entity as long as that governance system produces the outcomes set out in the NAIC AI Principles and further developed in this bulletin. The guidance is, for the most part, outcomes-based to guide the implementation of the AI Principles.

The outcomes-based guidance focuses on the consumer-facing AI Systems applications used by the regulated entity and the avoidance of unfair discrimination. Insurers also utilize AI Systems applications for other aspects of their operations, including investment decisions, enterprise risk management and establishing reserves, among others. Application of AI Systems governance and risk management is also essential for these non-consumer facing AI Systems tools.

Regulated entities' use of AI Systems is rapidly evolving. The intent of this guidance is highlight the guardrails of greatest importance to the Department and have regulated entities report their experience implementing and using the guardrails. The Department expects that the guidance will develop further over time. However, the consumer protection issues are sufficiently important for regulated entities to start addressing the potential harms of AI Systems applications as set out in this bulletin. The Department will update this guidance as needed.

This bulletin does not address cybersecurity because cybersecurity guidance has previously been provided to regulated entities. [insert relevant reference]

IV. All Consumer-Facing AI Systems applications are High Risk

> Advocates of algorithmic techniques like data mining argue that these techniques eliminate human biases from the decision-making process. But an algorithm is only as good as the data it works with. Data is frequently imperfect in ways that allow these algorithms to inherit the prejudices of prior decision makers. In other cases, data may simply reflect the widespread biases that persist in society at large. In still others, data mining can discover surprisingly useful regularities that are really just preexisting patterns of exclusion and inequality. Unthinking reliance on data mining can deny historically disadvantaged and vulnerable groups full participation in society. [2]

The Department views all consumer-facing AI applications are high risk – whether for marketing, underwriting, pricing, claims settlement, antifraud, consumer relations/consumer information or loss prevention and risk mitigation. A flawed algorithm can unfairly limit product offerings, deny coverage, charge unfair prices, unfairly settle claims, incorrectly label a claim as suspicious, provide false or misleading information or prevent effective risk mitigation and loss prevention. A flawed consumer-facing algorithm can deny a consumer essential insurance coverage or the benefits of purchased coverage resulting in catastrophic consequences for the consumer. All of the following potential harms represent this high risk to consumers:

- A marketing algorithm that systematically denies product options on the basis of race;
- A policy form algorithm that generates policy language and provisions but produces unclear, misleading, deceptive, unfair or prohibited provisions;
- A pricing algorithm that systematically charges people on the basis of race;
- A claims settlement algorithm that systematically offers lower claims settlements on the basis of race;
- An antifraud algorithm that reflects and perpetuates historic racial discrimination in policing and criminal justice;
- A chatbot that provides misleading or false information to consumers that causes consumers to not get the benefits of their purchase; or
- An algorithm designed to provide relevant loss prevention tools to policyholders that systematically that systematically offers less opportunity to communities of color.

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[2] Solon Barocas and Andrew D. Selbst, "Big Data's Disparate Impact," *Columbia Law Review* at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2477899

V. Algorithm vs. Artificial Intelligence vs. Machine Learning

Artificial Intelligence is a broad term that refers to the use of technologies to build machines and computers that have the ability to mimic cognitive functions associated with human intelligence.

An algorithm is a formula or computer code that rapidly executes decision rules set by programmers, or in the case of machine learning, revises decision rules based on ongoing ingestion and analysis of data. With machine learning AI applications, the algorithm can change without human intervention.

An algorithm can be as simple as the premium calculation formula in a rate filing. A machine learning AI application might be a learning algorithm that analyzes consumer characteristics and the nature of the consumer's inquiry to provide automated response (chatbot) or to route the consumer to a consumer service representative most likely to meet the insurer's outcome goals. Another example of machine learning AI applications might be claim settlement anti-fraud algorithms that change as new data are received during the claim settlement process for individual claims or in aggregate.

This bulletin utilize the term "algorithm" broadly to refer to AI Systems and AI applications.

VI. Definitions

Unfair Discrimination Actuarial Basis is one of two types of unfair discrimination in insurance. A practice is unfairly discriminatory if there is no reasonable actuarial basis for different treatment of consumers in underwriting, pricing, claims settlement, antifraud, customer relations, risk prevention and loss mitigation practices. Unfair Discrimination on the Actuarial Basis occurs when similarly situated consumers are treated differently – there is no distinction in the cost of the transfer of risk to justify different treatment of the consumers.

Unfair Discrimination Protected Class Basis is the second type of unfair discrimination in insurance and means that insurers are prohibited from treating consumers differently on the basis of a protected class characteristic. The protected classes in this state include race, religion, national origin [insert others]. There are two types of protected class unfair discrimination – proxy discrimination and disparate impact.

Proxy Discrimination means that a data type or algorithm or AI system is predicting a protected class characteristic and not the insurance outcome. Consequently, the facial relationship between the data type, algorithm or AI system and the insurance outcome is spurious, a proxy for the protected class characteristic and, consequently, discriminating on the basis of that protected class characteristic. Proxy discrimination is a violation of both the actuarial and protected class bases for unfair discrimination.

Disparate Impact means that a data type, algorithm or AI system is producing outcomes that disproportionately affect groups of consumers as defined by protected class characteristics, but comply with the actuarial basis for fair discrimination. Disparate impact is not a violation per se, as set out in this guidance, but efforts to minimize disparate impact within the cost- and risk-based foundation of insurance is part of this guidance.

Equity Trade Off means balancing public policy goals with the efficiency and accuracy of an algorithm of AI system. An example of an equity trade-off is the prohibition on discrimination on the basis of race (or other protected class characteristic). The legislature has made the decision that, regardless of actuarial fairness, there is a public policy goal of not discriminating on the basis of race.

On the Basis Of means direct or indirect discrimination related to a protected class characteristic. A data source, algorithm or AI system that has the same or similar effect as intentional discrimination against groups of consumers with protected class characteristic is discriminating on the basis of that protected class characteristic.

Advisory Organization means a third party entity that is licensed or should be licensed pursuant to [insert statutory reference] to collect information from insurers and provide guidance to insurers for phases of the insurance life cycle. The licensing and oversight of advisory organizations by the Department represents the state oversight of collective decision-making activities that exempts those activities from federal antitrust enforcement.

Third Party Not Advisory Organization – means, for purposes of this bulletin, an entity other than the insurer that provides data, algorithms, resources or other services related to AI Systems used by the regulated entity.

Statistical Agent means an entity designated by the Department to collect information from insurers on behalf of the Department, typically pursuant to a statistical plan approved by the Department.

Data Type means a singular characteristic of the consumer, vehicle, property, built or natural environment as well as data generated by the consumer. Data types are the building blocks for AI Systems applications. An algorithm or AI application will typically utilize multiple data types in both development and deployment.

Consumer means a person or organization that applies for, obtains or uses an insurance policy or contract and includes an applicant for insurance, a policyholder and a claimant.

Data Source means the origin of the data type, including provided directly by the consumer, generated by the consumer in course of applying for, maintain or using the insurance contract, generated by the insurer in course of a consumer applying for, maintaining or using the insurance contract, third party advisory organizations, third party not advisory organizations, and government records. Data origins provided directly by the consumer include data provided in the application or through interaction with the regulated entity, including data generated from telematics in the vehicle, home or wearable device. Third party not advisory organizations include data brokers, online data aggregators and social media platforms, web sites and mobile device carriers.

Phase of the Insurance Life Cycle means the consumer-facing practices related to product development, marketing, underwriting, pricing, claims settlement, antifraud, policy administration, customer relations, loss prevention and risk mitigation.

Adverse Action or Outcome means an action taken by the insurer towards a consumer in any phase of the insurance life cycle that is less than the best outcome available to any consumer in that transaction or interaction. When an insurer takes an adverse action against a consumer or the consumer suffers an adverse outcome as a result of AI Systems and AI Applications, that adverse action is a result of some consumer data less than the data deemed optimal by the systems and applications. The purpose of this definition of adverse action or outcome is to facilitate the insurer in communicating to the consumer that an adverse outcome has occurred and the reason for that adverse action.

VII. AI Systems Risk Management and Governance System

The Department expects regulated entities to have in place governance and oversight of your internal data, third party-supplied data, algorithms, predictive models and artificial intelligence, including any machine learning applications.

The Department does not specify any particular approach or structure for governance and risk management of AI Systems. There are numerous resources available for insurers regarding governance programs. The National Institute of Standards and Technology (NIST) AI Risk Management Framework (AI RMF)[3] is one excellent example.

The Department does expect and require that whatever the governance and risk management approach utilized by the regulated entity, that governance and risk management framework produces the outcomes set out in the next section of the bulletin. The Department also expects that the regulated entity will have written documentation and procedures to implement your AI Systems governance and risk management. The Department also expects your AI Systems governance and risk management will include ongoing assessment of performance and

[3] https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.100-1.pdf

procedures to identify and remediate poor outcomes. If the Department determines that any of your AI Systems applications are producing poor outcomes, the Department may examine the governance and risk management framework in great detail to identify the source of poor outcomes.

In addition, the Department's expectations regarding regulated entities governance and risk management of AI systems (AIS Governance) include:

- The AIS Governance should be designed to ensure the use of AI Systems will not violate any laws or regulations and the chief executive officer of the regulated entity is responsible for such compliance.
- The AIS Governance should address governance, risk management controls, and internal audit functions.
- The AIS Governance should address the use of AI Systems across all phases of the insurance product life cycle.
- The AIS Governance should address all of the AI Systems used by or on behalf of the Insurer to make decisions, whether developed by the Insurer or a third party and whether used by the Insurer or by an authorized agent or representative of the Insurer.

VIII. Required Outcomes of Your Use of AI Systems Applications

Whatever type or method of AIS Governance utilized, the following outcomes are required to ensure compliance with the various statutory requirements discussed above.

1. Disputability

You must be able to identify and explain why a particular outcome occurred and, for consumer-facing AI Systems applications, trace that outcome to a particular characteristic of the consumer or data associated with the consumer and aspect or component of the algorithm or application. You must be able to permit the Department or a consumer to identify the specific information that caused the consumer's adverse outcome, allow the Department or the consumer to correct false or incorrect information and have the outcome reviewed in light of the corrected data.

Disputability includes some degree of transparency, but is a broader requirement that simply explaining how a model or algorithm works or is intended to work. The Department recognizes that with some AI techniques, you may not be able to understand how the algorithm was created because the AI application may learn and change without human intervention. Such learning and changes may occur very frequently. The Department will not ask you record every change in such models, but requires that you be able to explain how a particular consumer outcome emerged so that the outcome is disputable.

2. Testing for Unfair Discrimination

All regulated entities are required to demonstrate the absence of unfair discrimination by testing for unfair discrimination on both the actuarial and protected class bases. This bulletin provides minimum standards for such testing, how to respond to testing results showing unfair discrimination and how to document and report the results of testing and testing responses.

Testing is required for protected class characteristics in all consumer-facing AI Systems applications. Testing is also required for certain data types for which discrimination on the basis of that data type is permitted for certain parts of the insurance life cycle, but not for others. For example, age, marital status and gender are data types used for marketing, underwriting and pricing for many types of personal insurance. Claim settlement outcomes for the same type of claims, however, should not vary based on these data types.

While there are a variety of methods and models used by regulated entities to develop algorithms and a variety of ways to test for unfair discrimination, the Department requires that insurers utilize one specific testing methodology to ensure a consistent set of metrics across regulated entities. That required testing methodology is referred to as the Control Factor Approach. If you believe that the Control Factor Approach does not accurately reflect fair and unfair discrimination of your AI Systems application, you may utilize a second methodology and report the testing outcomes of both the Control Factor Approach and your second methodology with an explanation why you believe your second methodology is a better method for assessing fair and unfair discrimination than the Control Factor Approach

The basics of the Control Factor Approach are as follows. Every AI Systems application utilize certain data types as predictors of a particular outcome sought by the insurer. In the development of an AI Systems application, the modeler will examine a variety of data types to see which data types and combinations of data types best predict the outcome sought by the insurer. Some data types are then eliminated because they are not predictive or not sufficiently predictive to include in the algorithm or model ultimately deployed by the insurer.

In developing a model or algorithm, the modeler will often employ one or more control variables – data types utilized as predictors in the model, but not intended to be used once the model is deployed. The purpose of the control variable is statistically remove certain influences that would otherwise skew or statistically bias the model. For example, an insurer developing a multi-state risk classification model for personal auto insurance might include a control variable for state to ensure the model is not biased because of state differences in age distribution or tort systems. By including state as a control variable, the modeler removes the statistical influence of significant state differences on the other predictive variables, leaving the remaining results for the other predictive variables as better estimates of the unique contribution of those predictive variables to the explanation / prediction of the outcome.

For purposes of testing for unfair discrimination, the Control Factor Approach attempts to remove the correlation between predictive variables – and the algorithm as a whole – and the protected class characteristic – thereby ensuring that the predictive variables and the algorithm are predicting the outcome and are not proxies for the protected class characteristic. The Control Factor Approach also improves the assessment for actuarial fairness by removing potentially spurious correlations.

Testing for unfair discrimination using the Control Factor approach should be part of the AI Systems application development as well as used to test the final model intended for deployment and the actual consumer outcomes that result from the deployment of the AI Systems model.

The Department expects regulated entities to document the results of the Control Factor Approach testing and provide the results of the testing to the Department as set out in the Reporting section of this bulletin. If the regulated entity utilizes a second testing methodology and seeks Department consideration of the results of that second testing methodology in place of or in addition to the results of the Control Factor Approach, the Department expects the regulated entity to document and report those results, too.

a. Testing Metrics

The basic method for Control Factor Approach testing is to perform a multi-variate analysis of the model in the following general form.

$$b_0 + b_1X_1 + b_2X_2 + b_3X_3 + e = y$$

The above is the general formula for a multiple linear regression. You may decide to statistically transform certain variables to better reflect the AI System being used.

$X_1, X_2 + X_3$ are the predictive or independent variables trying to predict the dependent or outcome variable y. For purposes of this bulletin, y is the insurance outcome associated with the AI System.

b_0 is a constant produced by the analysis

b_1 b_2 and b_3 are the coefficients for the predictive variables – the values that will be assigned to individual consumer data values. These coefficients indicate how much the predictive variable is contributing the outcome result.

Each predictive variable and the overall model will have measures of statistical significance, indicating how statistically reliable and powerful is the predictive variable.

e is the residual, reflecting the portion of the outcome not explained by the predictive variables.

The Control Factor Approach adds one or more control variables to correspond to protected or prohibited class characteristics – characteristics prohibited generally and characteristics not permitted for the particular AI Systems application.

$$b_0 + b_1X_1 + b_2X_2 + b_3X_3 + \mathbf{b_4C_1} + e = y$$

b. Metrics for Evaluation and Action

Proxy Discrimination: If, after adding control variables for protected class or prohibited characteristics, a particular predictive data type loses 75% or more of its predictive power – as measured either by the factors coefficient or measure of statistical strength – that data type is considered a proxy for a protected or prohibited class characteristic and may not be used in the deployment version of the model. If the protected class characteristic control factor explains 75% or more of the outcome, the entire AI System exhibits proxy discrimination and may not be used.

Disparate impact: After adding control variables for protected class characteristics, the insurer may find a protected class characteristic is a statistically significant and sizable predictor of the outcome – in addition to other predictive factors being statistically significant and sizable predictors of the outcome. This is not a violation, but the Department expects the regulated entity will explore other predictive variables that achieve a similar predictive outcome sought by the insurer, but with less disparate impact.

Equity Trade Off Metrics: The Department understands that some protected class characteristics are strong predictors of certain insurance outcomes, yet their use – directly or indirectly through proxies – is prohibited regarded of actuarial fairness. This is a public policy that recognizes acceptable trade-offs between actuarial fairness and protected class equity. Consistent with this public policy, the Department expects that if the disparate impact as measured by the contribution of the control variable in the Control Factor Approach can be reduced by 80% or more with no greater a loss of efficiency or predictive power of the AI Systems model of 10%, the insurer will accept that equity trade off and implement that change.

c. Data for Protected Class Testing

The Department recognizes that testing requires assignment of protected class characteristics to the individual transaction data utilized by regulated entities in the development of AI Systems models. Initial testing for protected class unfair discrimination will be limited to race and any other protected class characteristic for which the insurer currently has, is able to obtain or is able to infer that protected class characteristic for the consumer transactions being analyzed. Initial testing will also include testing of data types permitted for some AI Systems applications, but not others including, for example, testing for unfair discrimination on the basis of age, marital status or gender in claim settlement.

The Department recognizes that most insurers do not currently request from applicants, policyholders or claimants their self-identified race. For purposes of testing, the Department expects regulated entities to infer the race of individual consumers utilizing the Bayesian Improved First Name Geocoding (BIFSG) methodology.[4] The Department also encourages insurers to request self-identified protected class characteristics from consumers if such information is provided on a voluntary basis by the consumer. The NAIC has developed best practices for such requests for protected class characteristics. [Insert link for Health Workstream of Special Committee on Race and Insurance]

IX. New Reporting Requirements

1. Data Types, Sources, and Uses

The Department will require insurers and advisory organizations to submit two reports and then update those reports on a quarterly basis for changes. The first report is the Report on Data Types, Sources and Uses and will include the following

- Date of Report
- Data Type – brief description of all data types used by the insurer in consumer-facing AI Systems.
- Data Source – Source of the data type, including Consumer via Application, Consumer via Telematics, Consumer Via Interaction with Insurer, Insurer Internal, Third Party Advisory Organization, Third Party Not Advisory Organization, Public/Government Records
- Name of Third Party Provider, if applicable
- If Third Party Provider, Fair Credit Reporting Act Compliant? – Yes/No
- Phase of the Insurance Life Cycle – Marketing, Underwriting (Eligibility/Terms), Pricing, Claims Settlement, Antifraud, Risk Prevention, Loss Mitigation, Consumer Relations, Consumer Information, Other
- Models Utilizing These Data – Which of the insurer's' models utilize this data type

The second report is the Report of Algorithms and Models and will include the following:

- Date of Report
- Name of Model or Algorithm
- Internally Developed, Third Party Advisory Organization or Third Party Not Advisory Organization Algorithm
- If Third Party, Name of Vendor

[4] See https://www.rand.org/pubs/research_reports/RRA1853-1.html and https://www.paceanalyticsllc.com/post/cfpb-bifsg-proxy

- Date First Deployed
- Date Deployment Ended, if applicable
- Date Current Version Deployed
- Current Version Number
- Purpose(s) of Algorithm – Product Development, Marketing, Underwriting (Eligibility/Terms), Pricing, Claims Settlement, Antifraud, Risk Prevention, Loss Mitigation, Consumer Relations, Consumer Information, Other)
- If Third Party Provider, Fair Credit Reporting Act Compliant? – Yes/No
- For Third Party Not Advisory Organization Algorithms, List Data Types Used in the Algorithm.

2. Testing Results

The regulated entity will report on a quarterly basis any new results of testing for unfair discrimination, including testing results for any AI Systems applications developed during the reporting quarter. The initial report (pursuant to phase-in explained below) will report the results of testing of AI Systems applications developed prior to the reporting quarter. Testing results will include pre-deployment and post deployment testing.

For pre-deployment testing, the testing results shall include a description, including quantification, of changes in algorithmic performance and individual predictive variable performance after the protected class Control Variable is added. Pre-deployment testing results shall also include any changes to the algorithm made by the regulated entity in response to test results.

For post-deployment testing, the testing results shall include a description of how the actual consumer outcomes resulting from the model compare to the expected and intended results at the time of initial deployment. The testing results shall also include the actual protected class impacts of the deployed model's actual consumer outcomes.

3. New Statistical Agent and Statistical Plan for Reporting of Granular Outcome Data / Elimination of Market Conduct Annual Statement

The Department intends to solicit interest from a vendor to serve as the Department's statistical agent for major lines of insurance pursuant to a transaction detail statistical plan with quarterly reporting of consumer outcomes by insurers to the statistical agent. The statistical plan will include reporting of final quotes information as well as other sales and policy information and claims information transactions.

With these data, over time, the Department will be able to independently test for unfair discrimination at both industry and individual insurer levels as well as better monitor the marketplace for emerging issues, such as changes in availability and affordability of insurance in the face of climate-related catastrophes. Once the new statistical agents and statistical plans are in place and sufficient data have been collected, the Department will eliminate reporting of the Market Conduct Annual Statement.

XI. Phased Implementation

The Department recognizes the need to phase in the testing and reporting requirements. The following is a time-table for initial reporting of testing results for specific protected or prohibited class characteristics and phases of the insurance life cycle. Subsequent reporting shall be according to the instructions in the prior Reporting section.

Phase 1: 3 Months after Publication of This Bulletin

- Initial Report of Data Types, Sources and Uses
- Initial Report of Models and Algorithms

Phase 2: 6 months after Publication of This Bulletin

- Testing for racial bias in antifraud applications, including applications that identify a claim or claimant as suspicious or requiring additional investigation. Reporting of testing results.
- Testing for unclear, misleading, confusing or deceptive language in policy forms developed via an AI System.

Phase 3: 12 months After Publication of This Bulletin

- Testing for racial bias and prohibited characteristics in claim settlement applications. Reporting of testing results.
- Testing for racial bias in underwriting and pricing applications. Reporting of testing results.

Phase 4: 18 months After Publication of This Bulletin

- Testing of racial bias in marketing, customer relations, customer information, loss prevention and risk mitigation. Reporting of test results.

XII. Advisory Organization and Other Third Party Providers of Data and Algorithms

If a third party providing an AI Systems application is licensed as an advisory organization, the Department has some oversight of that organization and the collective decision-making aspects of the development and deployment of that organization's AI Systems algorithm. Among other things, the advisory organization must file its predictive algorithm with the Department for review and approval. This regulatory approach not only ensures avoidance of potential antitrust violations, but creates great efficiencies for insurers and the Department. In the absence of an approved advisory organization filing for a particular AI Systems application, the insurer is responsible for demonstrating to the Department that the AI Systems application complies with laws and regulations, particularly compliance with unfair discrimination laws and regulation.

By licensing itself as an advisory organization and filing its algorithms with the Department, several efficiencies are generated. First, the insurer can rely on an advisory organization's approved algorithm. Second, the third party providing the algorithm does not have to provide information sought by the Department every time a different insurer wants to use the algorithm. Third, a single review by the Department is more efficient that reviewing the algorithm each time an insurer seeks to rely on that third party algorithm.

Based on the above, the Department encourages insurers to encourage their third party providers of AI Systems applications to become licensed as advisory organizations.

CENTER for ECONOMIC JUSTICE | FAIR ACCESS FAIR TREATMENT

A Meaningful Framework and Regulatory Guidance for Insurers' Use of Big Data and AI

NAIC Consumer Liaison Committee

August 12, 2023

Birny Birnbaum
Center for Economic Justice

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The Center for Economic Justice

CEJ is a non-profit consumer advocacy organization dedicated to representing the interests of low-income and minority consumers as a class on economic justice issues. Most of our work is before administrative agencies on insurance, financial services and utility issues.

On the Web: www.cej-online.org

About Birny Birnbaum

Birny Birnbaum is the Director of the Center for Economic Justice, a non-profit organization whose mission is to advocate on behalf of low-income consumers on issues of availability, affordability, accessibility of basic goods and services, such as utilities, credit and insurance.

Birny, an economist and former insurance regulator, has worked on market regulation and racial justice issues for 30 years. He performed the first insurance redlining studies in Texas in 1991 and since then has conducted numerous studies and analyses of racial bias in insurance for consumer and public organizations. He has consulted with financial service regulators and public agencies in several states and internationally. He has served for many years as a designated Consumer Representative at the National Association of Insurance Commissioners and is a member of the U.S. Department of Treasury's Federal Advisory Committee on Insurance, where he chairs the subcommittee on insurance availability.

Birny served as Associate Commissioner for Policy and Research and the Chief Economist at the Texas Department of Insurance. At the Department, Birny developed and implemented a robust data collection program for market monitoring and surveillance.

Birny was educated at Bowdoin College and the Massachusetts Institute of Technology. He holds Master's Degrees from MIT in Management and in Urban Planning with concentrations is finance and applied economics.

Why CEJ Works on Insurance Issues

Insurance Products Are Financial Security Tools Essential for Individual and Community Economic Development:

CEJ works to ensure ***fair access*** and ***fair treatment*** for insurance consumers, particularly for low- and moderate-income consumers.

Insurance is the Primary Institution to Promote Loss Prevention and Mitigation, Resiliency and Sustainability:

CEJ works to ensure insurance institutions maximize their role in efforts to reduce loss of life and property from catastrophic events and to ***promote resiliency and sustainability*** of individuals, businesses and communities.

Big Data, Artificial Intelligence and AI Systems Defined

Insurers' use of Big Data and AI have transformed the way they do product development, marketing, pricing, claims settlement, antifraud, consumer relations and their approach to risk management. For purposes of my talk, Big Data means:

- Massive databases of information about (millions) of individual consumers
- Associated data mining and predictive analytics applied to those data
- Scoring models produced from these analytics.

The scoring models generated by data mining and predictive analytics are algorithms. Algorithms are lines of computer code that rapidly execute decisions based on rules set by programmers or, in the case of machine learning, generated from statistical correlations in massive datasets.

Artificial Intelligence

With artificial intelligence (AI) or machine learning, the models can "learn" or change without human intervention based on new information. Examples:

- Chatbots that generate responses to consumer questions or requests for assistance;
- Claim settlement and anti-fraud models revised as new data are received during the claim settlement process individually or in aggregate;
- Product offerings and underwriting based on current and prior internet interactions – e.g., analyzing consumer keystrokes to identify propensity for fraud;

Any Information about / generated by a Consumer, Vehicle, Property, Built and Natural Environment is Raw Material for Insurance AI

- Telematics – Auto, Home, Wearable Devices
- Social Media
- Shopping Habits/Purchase History
- Hobbies and Interests
- Demographics/Household Data/Census Data
- Government Records/Property Records
- Web/Mobile Phone Tracking/GPS/Data Harvesting
- Vehicle Registration and Service Records
- Facial Analytics
- Mainstream Credit Files: Loans, Credit Cards
- Alternative Credit Data: Telecom, Utility, Rent Payment
- High Definition Aerial Photographs

Sources of Data include consumers (via telematics or wearable devices), government, social media platforms, web sites, mobile devices, e-mail/text, data brokers, online data aggregators, aircraft/satellite photos and many others.

What's So Big about Big Data and AI?

1. Insurers' use of Big Data has huge potential to benefit consumers and insurers by transforming the insurer-consumer relationship and by discovering new insights into and creating new tools for loss mitigation.

2. Insurers' use of Big Data has huge implications for fairness, access and affordability of insurance and for regulators' ability to keep up with the changes and protect consumers from unfair practices

3. The current insurance regulatory framework generally does not provide regulators with the tools to effectively respond to insurers' use of Big Data. Big Data has massively increased the market power of insurers versus consumers and versus regulators.

4. Market forces alone – "free-market competition" – cannot and will not protect consumers from unfair insurer practices. So-called "innovation" without some consumer protection and public policy guardrails will lead to unfair outcomes.

Insurers' Use of Big Data: Promise vs. Reality

Promise	**Reality**
Transparency	Opaque
Loss Mitigation/Behavioral Change	Black-Box Risk Segmentation/Pricing
Competitive Advantage via Policyholder Partnerships	Competitive Advantage via Proprietary Pricing/Segmentation
Transparent Risk-Based Pricing to Empower Consumers	Modeling Prices on Factors Unrelated to Risk to Optimize Revenue/Profit
Promote Greater Availability and Affordability	Increased Prices for Most Vulnerable Consumers; Discriminatory Algorithms
Cybersecurity Protections	Cybersecurity Vulnerabilities

Big Data Algorithms Can Reflect and Perpetuate Historical Inequities

Barocas and Selbst: *Big Data's Disparate Impact*[1]

Advocates of algorithmic techniques like data mining argue that they eliminate human biases from the decision-making process. But an algorithm is only as good as the data it works with. Data mining can inherit the prejudices of prior decision-makers or reflect the widespread biases that persist in society at large. Often, the "patterns" it discovers are simply preexisting societal patterns of inequality and exclusion. Unthinking reliance on data mining can deny members of vulnerable groups full participation in society.

[1] https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2477899

Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*

America's poor and working-class people have long been subject to invasive surveillance, midnight raids, and punitive public policy that increase the stigma and hardship of poverty. During the nineteenth century, they were quarantined in county poorhouses. During the twentieth century, they were investigated by caseworkers, treated like criminals on trial. Today, we have forged what I call a digital poorhouse from databases, algorithms, and risk models. It promises to eclipse the reach and repercussions of everything that came before.

Amazon Created a Hiring Tool Using A.I. It Immediately Started Discriminating Against Women.[2]

All of this is a remarkably clear-cut illustration of why many tech experts are worried that, rather than remove human biases from important decisions, artificial intelligence will simply automate them. An investigation by ProPublica, for instance, found that algorithms judges use in criminal sentencing may dole out harsher penalties to black defendants than white ones. Google Translate famously introduced gender biases into its translations. The issue is that these programs learn to spot patterns and make decisions by analyzing massive data sets, which themselves are often a reflection of social discrimination. Programmers can try to tweak the AI to avoid those undesirable results, but they may not think to, or be successful even if they try.

[2] Jordan Wasserman at, https://slate.com/business/2018/10/amazon-artificial-intelligence-hiring-discrimination-women.html

Statutory Foundation:

Fair and Unfair Discrimination in Insurance

In the U.S., fair and unfair discrimination in is defined in two ways, typically found in rating and unfair trade practice statutes and regulations.

- Actuarial – there must be an actuarial basis for distinction among groups of consumers; and

- Protected Classes – distinctions among groups defined by certain characteristics – race, religion, national origin – prohibited regardless of actuarial basis.

NAIC Principles on Artificial Intelligence

https://content.naic.org/cipr-topics/artificial-intelligence

and

https://content.naic.org/sites/default/files/inline-files/AI%20principles%20as%20Adopted%20by%20the%20TF_0807.pdf

Insurance-specific AI applications should be:

- Fair and Ethical
- Accountable
- Compliant
- Transparent
- Secure, Safe and Robust

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.

Meaningful Regulatory Oversight of Insurers' Use of AI Systems

1. Focus on Consumer Outcomes, Not Process
2. AI Governance and Risk Management procedures and documentation necessary and important, but not sufficient. Do not prescribe the process or methods of AI Governance and Risk Management – establish required outcomes.
3. Require AI System Outcomes be Disputable – a broader requirement than Transparency.
4. Require Testing by insurers of their algorithms and actual consumer outcomes for unfair discrimination on both the actuarial and protected class bases in all phases of the insurance life cycle and in both model development and post-deployment.
5. New reporting by insurers to facilitate innovation in market regulation – greater use of analytics.
6. Regulatory guidance for bias thresholds and equity trade-offs.
7. Encourage Third Party Providers to become licensed as Advisory Organizations

Insurer Testing of Algorithms / Actual Consumer Outcomes

Some have suggested an algorithmic model governance approach to addressing structural racism in insurance similar to the approach used for ORSA and preventing cyber breaches.

Model governance is essential, but not sufficient. Testing of actual consumer outcomes is reasonable and necessary because there are literally millions of such outcomes in every phase of the insurance life cycle that be analyzed.

Insurers test these outcomes as they develop the algorithms for marketing, pricing, claims settlement and anti-fraud. Testing for spurious correlations (proxy discrimination) and disparate impact on the basis of protected class characteristics should simply be part of model development.

Uniform Methods of Testing and Evaluation across Insurers

A “principles-based approach” to address structural racism is not necessary or desirable, because uniform methods of testing and evaluation across insurers is possible because all insurers share the same types of consumer outcomes, regardless of business model or product:

- Did the insurer receive an application?
- Did the application result in a policy?
- If a policy was issued, what was the premium and coverage provided?
- Was a claim filed?
- Was the claim denied or paid?
- If the claim was paid, how much?

Why Test for Disparate Impact and Proxy Discrimination in All Aspects of Insurers' Operations?

While pricing / rating has gotten the most regulatory attention in terms of complex model scrutiny by regulators, it's imperative for insurers and regulators to test algorithms used in all aspects of the insurance life-cycle for racial bias.

Antifraud algorithms are particularly susceptible to reflecting and perpetuating historic racism because antifraud algorithms can identify suspicious claims. If the identification of suspicious claims is racially-biased, so will the identification of claims as fraudulent – a claim that's not investigated will not be identified as fraud.

Marketing algorithms also raise great concern – the new data sources and algorithms used to micro-target consumers have become the *de facto* gateway for access to insurance.

Focus on Holistic Testing, Not Individual Factors in Isolation

Over the last several decades, much of the focus on efforts to address racial bias in insurance has been on data sources that are highly correlated with race with calls to ban those factors.

While insurers should surely not be using data sources and factors that are proxies for race and not predictive of insurance outcomes, testing for racial bias must be of the entire algorithm and all the data sources used in the algorithm simultaneously.

- Eliminating one factor may simply shift the racial bias to another factor instead of eliminating the racial bias. Testing of the algorithm is designed to eliminate proxy discrimination and identify disparate impact of the entire algorithm.

- Multi-variate testing can remove eliminate correlations with race and reveal the factor's true contribution to explaining the insurance outcome and provide a statistical basis for addressing disparate impact.

Modernizing Data Reporting for Market Regulation is Essential

The current regulatory data collection is woefully outdated and doesn't serve the needs of regulators and policymakers generally. In particular, testing for protected class bias requires the reporting of granular consumer outcome data by insurers and analyses of those data by regulators. Absent this type of empirical analysis by regulators, we will not be able to move beyond the historical debates about race and insurance and not be able to ground our anti-racism efforts in the risk-based foundation of insurance.

The collection of granular consumer outcome data must include individual applications for insurance that don't end up in policy issuance. As mentioned, marketing algorithms have become the new gatekeeper for insurance access – analysis of application data is essential to see if those algorithms systematically deny communities of color such access.

Regulatory Standards for Bias Thresholds and Equity Trade-Offs

While there may be some data sources and factors that lie at the extremes – pure proxies for protected classes or pure predictors of risk-based insurance outcomes – the nature of structural racism means that the vast majority of data sources will likely result in some racial disparities.

Insurers need guidance on, for example, on

- What degree of proxy discrimination should lead to prohibiting the use of that data source or factor from the deployed algorithm?

- How can an insurer utilize alternate data sources to maintain the algorithm's efficiency while reducing disparate impact?

- What trade-off between reducing disparate impact and weakening the algorithm's efficiency is reasonable? If we could change an algorithm to eliminate 95% of disparate impact at a cost of 5% of statistical predictive strength, would that be a fair trade?

Testing for Disparate Impact and Proxy Discrimination:

A Natural Extension of Typical Insurer Practices

While proxy discrimination and disparate impact are different forms of unfair discrimination, there is a common methodology to test for both.

There is a long history of and many approaches to identifying and minimizing disparate impact in employment, credit and insurance. But, the general principle is to identify and remove the correlations between the protected class characteristic and the predictive variables by explicit consideration of the protected class characteristic.

The techniques to analyze proxy discrimination and disparate impact are the same techniques insurers use in developing predictive models for all aspects of the insurance life cycle. See below for more technical explanation.

Risk Segmentation is not the Purpose of Insurance

Insurer trades argue that anything that restricts their ability to segment the population for any aspect of the insurance life cycle will destroy the cost-based foundation of insurance, will lead to "good risks" subsidizing "bad risks" and lead to insurer financial ruin.

In fact, the existence of protected class characteristics demonstrates that risk segmentation – "predicting risk" – is not the goal of insurance but a tool to help achieve the real goal of insurance – a risk pooling mechanism providing financial security for as many as possible and particularly for those with modest resources. Insurers' arguments for unfettered risk classifications are inconsistent with the goal of insurance.

While some risk segmentation is necessary to avoid adverse selection, the logical extension of that argument is not unlimited risk segmentation. In fact, if unlimited risk segmentation was necessary, we would see all insurers using all risk characteristics – they don't – and collapsing markets in states where some limitations on risk characteristics exist – they aren't.

Disparate Impact Analysis Improves Cost-Based Pricing

With proxy discrimination, an insurer is using a factor – a characteristic of the consumer, vehicle, property or environment – that is predicting race and not the insurance outcome. Proxy discrimination is, therefore, a spurious correlation and eliminating such spurious correlation improves cost-based pricing. Since proxy discrimination is indirect racial discrimination, it is currently a prohibited practice. Testing would therefore both improve risk-based pricing and stop unintentional or intentional racial discrimination.

There is a long history and many approaches to identifying and minimizing disparate impact in employment, credit and insurance. But, the general principle is to identify and remove the correlations between the protected class characteristic and the predictive variables. Testing identifies true disparate impact that may require a public policy that recognizes equity – such as the prohibition against using race itself as a factor.

Why is it Reasonable and Necessary to Recognize Disparate Impact as Unfair Discrimination in Insurance?

1. It makes no sense to permit insurers to do indirectly what they are prohibited from doing directly. If we don't want insurers to discriminate on the basis of race, why would we ignore practices that have the same effect?

2. It improves risk-based and cost-based practices.

3. In an era of Big Data, systemic racism means that there are no "facially-neutral" factors.

Draft NAIC Model Bulletin: *Use of Algorithms, Predictive Models and Artificial Intelligence Systems by Insurers*

- Exposed for Public Comment on July 17, 2023

Not a "Principles-Based Approach"

Guidance has been described as "principles-based" and not prescriptive.

In fact, not principles-based, but laissez-faire.

Doesn't provide any additional guidance beyond the AI Principles

The guidance provide is prescriptive – directing insurers how to they should govern and manage AI systems.

No guidance on how to produce good and legally-compliant outcomes or what those outcomes should be. Telling insurers to comply with existing laws and regulations is not guidance.

No Actual Guidance – Governance in Place of Guidance, Expectations Relate to Process, Not Outcomes

The Department recognizes that Insurers may demonstrate their compliance with the laws that regulate their conduct in the state in their use of AI Systems through alternative means, including through practices that differ from those described in this bulletin. The goal of the bulletin is not to prescribe specific practices or to prescribe specific documentation requirements. Rather, the goal is to ensure that Insurers in the state are aware of the Department's expectations . . .

Little of No Progression from 2020 AI Principles:

The Department recognizes the Principles of Artificial Intelligence that the NAIC adopted in 2020 as an appropriate source of guidance for Insurers as they develop and use AI systems. Those principles emphasize the importance of the fairness and ethical use of AI; accountability; compliance with state laws and regulations; transparency; and a safe, secure, fair, and robust system. These fundamental principles should guide Insurers in their development and use of AI Systems and underlie the expectations set forth in this bulletin.

No Guidance or Testing for Racial / Protected Class Unfair Discrimination.

"Current limitations on the availability of reliable demographic data on consumers make it challenging for Insurers and regulators to directly test these systems to determine whether the decisions made meet all applicable legal standards. Therefore, while the Department continues to encourage and emphasize the use of verification and testing methods for unfair bias that leads to unfair discrimination where possible, the Department recognizes that we must also rely upon robust governance, risk management controls, and internal audit functions to mitigate the risk that decisions driven by AI Systems will violate unfair trade practice laws and other applicable legal standards."

No Guidance or Testing for Racial / Protected Class Unfair Discrimination.

Beyond the lack of guidance for testing for unfair discrimination on the basis of race, the draft guidance falsely suggests such testing is not feasible and that governance processes can substitute for actual testing – despite over 40 years of such testing under federal laws for credit, employment **and insurance!**

Three years after the murder of George Floyd and the recognition by insurers, NAIC leadership and the society at large that structural racism impacts all of institutions – including insurance – the NAIC's efforts to address structural racism have disappeared from the Special Committee on Race, were sent to the H Committee / Collaboration Forum and, based on the draft AI guidance, have now been abandoned. The draft guidance not only equivocates on testing for racial bias, but doesn't even state that practices that have the effect of discriminating on the basis of protected class status – even if unintentional – are unfair discrimination.

Telling Insurers to Comply with the Law, but No Guidance on How to Measure or Ensure Appropriate Outcomes

Actions taken by Insurers in the state must not violate the Unfair Trade Practices Act or the Unfair Claims Settlement Practice Act or the UCSPA, regardless of the methods the Insurer used to determine or support its actions. As discussed below, Insurers are expected to adopt practices, including governance frameworks and risk management protocols, that are designed to assure that the use of AI Systems does not result in: 1) unfair trade practices, as defined in []; or 2) unfair claims settlement practices . . ..

Draft Guidance: Unhelpful Definitions / Missing Key Definitions

"Bias" – differential treatment that results in favored or unfavored treatment of a person, group or attribute.

Term is typically used in draft Guidance as "unfair bias that leads to unfair discrimination."

Unclear why "unfair bias" is used when fair and unfair discrimination are the statutory and long-standing terms used in insurance.

"Third Party" definition fails to distinguish between third party advisory organizations, whose activities are subject to regulatory oversight, and third parties not licensed as advisory organizations.

No definitions for the needed guidance for assessing fair and unfair discrimination – "on the basis of," proxy discrimination, disparate impact, data source, data type.

Draft Guidance Has No Realistic Path Forward for Market Regulation

The draft Guidance envisions an auditing approach by market conduct examiners regarding insurers' AI Systems processes. At best, the draft guidance suggests a check-the-box approach for documentation and procedures. Realistically, regulators lack the resources – both quantity and specific-skills – to examine every insurer's bespoke approach to avoiding unfair discrimination or entering into dialog with every insurer about each insurer's method of testing for unfair discrimination – if the insurer's governance even features such testing.

Our recommended Outcomes-Based guidance provides a path forward for meaningful oversight. Testing and reporting requirements provide common metrics across insurers that facilitate an analytic – as opposed to auditing – approach that permits evaluation of insurers' performance quickly and consistently. Our recommended guidance provides a path forward for specific and achievable regulatory resources and skill sets.

Draft Guidance – Insurers Assess What is High Risk for Consumers

"*An AIS Program that an Insurer adopts and implements* ***should be reflective of, and commensurate with, the Insurer's assessment of the risk posed by its use of an AI System, considering the nature of the decisions being made, informed, or supported using the AI System; the nature and the degree of potential harm to consumers from errors or unfair bias resulting from the use of the AI System;***

Guidance should be that ALL of insurers' consumer facing AI applications are high risk

Whether the AI system is used for product development, marketing, underwriting, pricing, claims settlement, anti-fraud, consumer relations or consumer information, a flawed algorithm can unfairly deny coverage, charge unfair prices, unfairly settle claims or provide incorrect or misleading information that denies a consumer essential insurance coverage or the benefits of coverage purchased.

Guidance Should All Consumer-Facing AI Applications Have the Potential for Catastrophic Harm to Consumers. Which of These Harms are "Low Risk?

- A marketing algorithm that systematically denies product options on the basis of race;
- A policy form algorithm that generates policy language and provisions but produces misleading, deceptive, unfair or prohibited provisions;
- A pricing algorithm that systematically charges people based on race;
- A claims settlement algorithm that systematically offers lower claims settlements on the basis of race;
- An antifraud algorithm that reflects and perpetuates historic racial discrimination in policing and criminal justice;
- A chatbot that provides misleading or false information to consumers that causes consumers to not get the benefits of their purchase;

Upturn
Toward Justice in Technology

August 7, 2023

The Honorable Joseph R. Biden
President of the United States
The White House

The Honorable Kamala D. Harris
Vice President of the United States
The White House

RE: Advancing Anti-Discrimination Testing in an Artificial Intelligence Executive Order

In announcing voluntary commitments from several artificial intelligence companies, the Biden-Harris administration noted it is currently working on developing an Executive Order "to help America lead the way in responsible innovation" in artificial intelligence.[1] As the administration considers the contents of an Executive Order on artificial intelligence, we, the undersigned civil rights, technology, policy, and research organizations, call on the administration to continue centering civil rights protections. The administration has played a key role in consistently elevating civil rights protections for artificial intelligence and related technologies. The forthcoming Executive Order offers the administration an opportunity to build upon the Blueprint for an AI Bill of Rights,[2] Executive Order 14091 ("Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government"),[3] a stream of agency actions,[4] NIST's AI

[1] The White House, "FACT SHEET: Biden-Harris Administration Secures Voluntary Commitments from Leading Artificial Intelligence Companies to Manage the Risks Posed by AI," July 21, 2023, *available at* https://www.whitehouse.gov/briefing-room/statements-releases/2023/07/21/fact-sheet-biden-harris-administration-secures-voluntary-commitments-from-leading-artificial-intelligence-companies-to-manage-the-risks-posed-by-ai/ .

[2] White House Office of Science and Technology Policy, *Blueprint for an AI Bill of Rights: Making Automated Systems Work for the American People*, October 2022, *available at* https://www.whitehouse.gov/wp-content/uploads/2022/10/Blueprint-for-an-AI-Bill-of-Rights.pdf.

[3] Executive Order 14091, "Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government," February 16, 2023, *available at* https://www.federalregister.gov/documents/2023/02/22/2023-03779/further-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal.

[4] The White House, "FACT SHEET: Biden-Harris Administration Announces Key Actions to Advance Tech Accountability and Protect the Rights of the American Public," October 4, 2022, *available at* https://www.whitehouse.gov/ostp/news-updates/2022/10/04/fact-sheet-biden-harris-administration-announces-key-actions-to-advance-tech-accountability-and-protect-the-rights-of-the-american-public/.

Risk Management Framework,[5] and the recently secured voluntary corporate commitments.

Among other actions, the forthcoming Executive Order offers the administration an opportunity to launch a new framework of testing, evaluation, and ongoing monitoring of algorithmic systems in civil rights areas. Given the foreseeability and pervasiveness of algorithmic harms,[6] the administration should consider actions that would shift burdens toward companies that develop and use AI tools, such that companies would be mandated to take measures to detect and address algorithmic discrimination — particularly if they operate in key civil rights areas. The Executive Order also offers the administration an opportunity to lead by example, by setting policy for the federal government's development, procurement, use, and funding of artificial intelligence that is rooted in the AI Bill of Rights.[7]

Within the forthcoming Executive Order on artificial intelligence, the administration should:

1. **Direct agencies to consider opportunities that would encourage or require companies to perform regular anti-discrimination testing of their systems used in sensitive civil rights contexts.** To support efforts that would require algorithmic systems used in sensitive civil rights domains to be evaluated for discriminatory effects on an ongoing basis, the Executive Order should direct agencies to consider rulemaking, guidance, policies, and all other available opportunities that would encourage or require companies that design or deploy algorithmic systems used in sensitive civil rights contexts to collect, infer, and protect sensitive demographic information for anti-discrimination testing purposes and to routinely evaluate their algorithmic systems for disparate effects

[5] National Institute of Standards and Technology, Artificial Intelligence Risk Management Framework (AI RMF 1.0), NIST AI 100-1, January 2023, *available at* https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.100-1.pdf.
[6] Inioluwa Deborah Raji, I. Elizabeth Kumar, Aaron Horowitz, and Andrew Selbst, *The Fallacy of AI Functionality*, Proceedings of the 2022 ACM Conference on Fairness, Accountability, and Transparency (2022).
[7] *See, e.g.,* Center for American Progress, the Leadership Conference on Civil and Human Rights, Center for Democracy & Technology, et al., Letter to the White House, August 3, 2023, *available at* https://www.americanprogress.org/wp-content/uploads/sites/2/2023/08/Letter-to-WH-on-AI-EO.pdf.

on a prohibited basis.[8]

2. **Direct agencies to consider opportunities that would shift the burden to companies to regularly search for less discriminatory alternative models.** Many policy proposals seek transparency and audits of AI tools for discriminatory outcomes, which is beneficial, but often stop short of prescribing what should happen once discrimination is found. The Executive Order should push one step further, by directing agencies to explore how companies operating in covered civil rights areas can affirmatively search for and adopt less discriminatory models, both before and after deployment.[9] Additionally, the Executive Order should create an Interagency Working Group that studies techniques to discover less discriminatory alternative models and provides recommendations to the Assistant to the President for Domestic Policy on potential reasonable and appropriate measures companies can take to search for and implement less discriminatory alternative algorithms.

3. **Establish a dedicated office inside the Civil Rights Division of the Department of Justice to solidify and expand the federal government's own anti-discrimination testing capabilities to uncover algorithmic discrimination**. The federal government has a long history of using undercover testing to uncover evidence of discrimination by landlords, lenders, and others.[10]

[8] *See, e.g.,* Logan Koepke, Harlan Yu, "Comment to the National Telecommunications and Information Administration re: Privacy, Equity, and Civil Rights Request for Comment," March 6, 2023, 7-14, *available at* https://www.upturn.org/static/files/2023-03-06-Upturn-NTIA-comments.pdf.

[9] Research has shown that there almost always exists an equally accurate, but less discriminatory model, even when using the same target, features, and training data, due to a phenomenon called "model multiplicity." Thus, model multiplicity suggests that it will often be possible to reduce a machine learning system's discriminatory impact without sacrificing accuracy or model performance. *See, e.g.,* Emily Black, Manish Raghavan, Solon Barocas, *Model Multiplicity: Opportunities, Concerns, and Solutions*, Proceedings of the 2022 ACM Conference on Fairness, Accountability, and Transparency (2022); Charles T. Marx, Flávio P. Calmon, Berk Ustun, *Predictive Multiplicity in Classification*, In Proceedings of the 37th International Conference on Machine Learning (2020); Kit T. Rodolfa, Hemank Lamba, Rayid Ghani, *Empirical Observation of Negligible Fairness–Accuracy Trade-offs in Machine Learning for Public Policy*, 3 Nat. Mach. Intel. 896-904 (2021). *Also see,* Equal Employment Opportunity Commission, "Select Issues: Assessing Adverse Impact in Software, Algorithms, and Artificial Intelligence Used in Employment Selection Procedures Under Title VII of the Civil Rights Act of 1964," *available at* https://www.eeoc.gov/select-issues-assessing-adverse-impact-software-algorithms-and-artificial-intelligence-used. ("One advantage of algorithmic decision-making tools is that the process of developing the tool may itself produce a variety of comparably effective alternative algorithms. Failure to adopt a less discriminatory algorithm that was considered during the development process therefore may give rise to liability.")

[10] Department of Justice, The DOJ Fair Housing Testing Program: Three Decades of Guarding Civil Rights, (Apr. 2022), *available at* https://www.justice.gov/crt/doj-fair-housing-testing-program-three-decades-guarding-civil-rights. *See also,* Government Accounting Office, *Fair Lending: Federal Oversight and Enforcement Improved but Some Challenges Remain* (Aug. 1996), *available at* https://www.govinfo.gov/content/pkg/GAOREPORTS-GGD-96-145/pdf/GAOREPORTS-GGD-96-145.pdf; Darrick

Just as the federal government stood up anti-discrimination testing efforts to detect discrimination in the physical world, it must reinvent its capabilities to detect discrimination in digital systems. This requires a sustained and directed effort, as well as new staff capacity, resources, and expertise. An Office of Technology inside the Civil Rights Division of the Department of Justice should be charged with implementing and expanding anti-discrimination testing capabilities, assistance on related cases, and other efforts to combat algorithmic discrimination, as well as coordinating with the relevant technology offices at agencies tasked with enforcing relevant civil rights laws. The Office should develop best practices and procedures for conducting anti-discrimination testing of algorithmic systems, including the development of new methods to uncover discrimination and best practices on the use of inference methodologies to infer protected class status.

4. **Direct the Office of Management and Budget to require anti-discrimination testing of algorithmic systems, as well as searches for less discriminatory alternative algorithms, in its forthcoming guidance on federal agency use of artificial intelligence.** Many civil rights groups have previously called on the administration to make the Blueprint for an AI Bill of Rights binding administration policy, and to implement it in part through the forthcoming OMB guidance.[11] The administration has previously noted that this guidance would offer "specific policies for federal departments and agencies to follow in order to ensure their development, procurement, and use of AI systems centers on safeguarding the American people's rights" and would "serve as a model for state and local governments, businesses and others to follow in their own procurement and use of AI."[12] When the federal government develops, procures, or uses algorithmic systems in covered civil rights areas, it must ensure that those systems are regularly tested for disparate effects on a prohibited basis, as called for by the administration's AI

Hamilton, Rebecca Dixon, *Shifting the Burden of Proof: Using Audit Testing to Proactively Root Out Workplace Discrimination*, (Sep. 2022), *available at* https://www.nelp.org/publication/using-audit-testing-to-proactively-root-out-workplace-discrimination.

[11] The Leadership Conference on Civil and Human Rights et al., "Letter Re: Next Steps to Advance Equity and Civil Rights in Artificial Intelligence and Technology Policy," June 13, 2023, *available at* https://cdt.org/wp-content/uploads/2023/06/6-13-23-WH-DPC-OSTP-OMB-Letter-on-AI-and-Civil-Rights.pdf.

[12] The White House, "FACT SHEET: Biden-Harris Administration Announces New Actions to Promote Responsible AI Innovation that Protects Americans' Rights and Safety," May 4, 2023, *available at* https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/04/fact-sheet-biden-harris-administration-announces-new-actions-to-promote-responsible-ai-innovation-that-protects-americans-rights-and-safety/.

Bill of Rights.[13] Similarly, it must ensure that developers maintain reasonable measures to search for less discriminatory alternative models on an ongoing basis.

In order to ensure public accountability of these measures, the AI Use Case Inventories required by Executive Order 13960 should be expanded to include summaries of any demographic information, associated outcomes, and descriptions of undertaken disparity assessments and mitigations. The National AI Initiative Office should be charged with creating an annual report assessing agencies on these AI use cases based on their adherence to the AI Bill of Rights.

Thank you for your continued attention to these matters. For any questions or further discussion, please contact Logan Koepke (Project Director, logan@upturn.org) and Harlan Yu (Executive Director, harlan@upturn.org).

Sincerely,

Algorithmic Justice League
Data & Society Research Institute
Electronic Privacy Information Center
Fight for the Future
Upturn

cc:

Jeff Zients, *Assistant to the President and Chief of Staff*
Bruce Reed, *Assistant to the President and Deputy Chief of Staff*
Neera Tanden, *Assistant to the President and Domestic Policy Advisor, Domestic Policy Council*
Arati Prabhakar, *Assistant to the President for Science and Technology, Director of the White House Office of Science and Technology Policy*
Shalanda Young, *Director, Office of Management and Budget*

[13] The White House, "Blueprint for an AI Bill of Rights: Algorithmic Discrimination Protections," Oct. 4, 2022, *available at* https://www.whitehouse.gov/ostp/ai-bill-of-rights/algorithmic-discrimination-protections-2/.

COLORADO
Department of
Regulatory Agencies
Division of Insurance

Michael Conway
Commissioner of Insurance

September 1, 2023

The Honorable Kathleen Birrane
Chair
Innovation, Cybersecurity, and Technology (H) Committee
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106

Re: Draft Model AI Bulletin

Dear Commissioner Birrane:

We would first like to express our appreciation to you and the many regulators who have had a hand in thoughtfully crafting the July 17, 2023 draft model bulletin titled "Use of Algorithms, Predictive Models and Artificial Intelligence Systems by Insurers" (bulletin). We have reviewed the draft and have several suggestions which, in our view, would strengthen the bulletin.

Our primary concern is with the bulletin's apparent ambivalence regarding insurers' responsibility for conducting quantitative testing of consumer outcomes derived from the use of algorithms and predictive models. Based on our experience in implementing Colorado's law, such testing is, in fact, possible, as discussed below, and we therefore urge the Committee to remove the sentence in the second paragraph on page 5 that starts as follows: "Current limitations on the availability of reliable demographic data. . ."

First, the availability of demographic data is context-specific and dependent on the line of insurance. For instance, gender is explicitly considered by private passenger auto insurers in ratemaking and underwriting and is thus readily available for testing across the entire auto insurance life cycle. Similarly, the age of insurance customers is directly collected by insurers when underwriting life, auto, and health insurance.

While some demographic data is not directly collected by insurers, there are tools being used now that can infer such information and we anticipate that such resources and capabilities will only grow in the future. For example, race and ethnicity can be imputed by using Bayesian Improved Surname Geocoding (BISG) or Bayesian Improved First Surname Geocoding (BISFG).

BISG and BISFG are statistical methods that are used to infer a person's race and ethnicity with a sufficient degree of accuracy. This technique is widely accepted and has been used successfully to identify potential discrimination in areas such as housing, lending, or employment where race and ethnicity data may not be available. Furthermore, the Colorado Division of Insurance has direct experience using BISFG to demonstrate its applicability for inferring race and ethnicity using life insurance application data and has received acknowledgment from the life insurance industry as to its validity and applicability in the context of life insurance underwriting. We have also heard from third-party vendors operating in the life insurance space that use BISG to test their predictive models for potential discrimination across race and ethnicity. Therefore, BISG and BISFG are entirely feasible tools for overcoming the absence of direct race and ethnicity data necessary for quantitatively testing AI Systems and their potential use should be referenced in the bulletin as reasonable methods for inferring race and ethnicity.

For these reasons, we request the bulletin be revised to remove any ambiguity concerning insurers performing quantitative testing of their AI Systems. Our preference would be for the bulletin to specifically acknowledge that outcome testing is feasible with the tools described above and others that will be developed in the future. To that end, the paragraph on page 5 could be revised as follows:

> AI Systems rely on large amounts of diverse, ever-changing, and sometimes nontraditional forms of data, sophisticated algorithms, and ML and deep learning techniques to develop complex and often opaque predictive models to make, inform, or support decisions. **Such tools as BISFG and BISG can be used to infer race/ethnicity and it is anticipated that the availability of similar methodologies will continue to expand.** ~~Current limitations on the availability of reliable demographic data on consumers make it challenging for Insurers and regulators to directly test these systems to determine whether the decisions made meet all applicable legal standards. Therefore, while~~ the Department ~~continues to encourage and emphasize~~ **EXPECTS** the use of verification and testing methods for ~~unfair~~ bias that leads to unfair discrimination where possible **AND REQUIRES**, ~~the Department recognizes that we must also rely upon~~ robust governance, risk management controls, and internal audit functions to mitigate the risk that decisions driven by AI Systems will violate unfair trade practice laws and other applicable legal standards.

We do, however, recognize that such a statement may not be one that the membership can reach consensus on. In the alternative, we would suggest that the bulletin simply reference that states may approach testing from differing perspectives while acknowledging that there are existing and emerging tools that give the industry and regulators the ability to infer race and ethnicity to perform outcome-based testing if it is required by a particular state.

In addition to that specific request for a change to the bulletin, we also thought it would be helpful to share our experience in developing our governance regulation that covers many of the same issues as the bulletin. Generally speaking, we believe we have reached a large amount of consensus with the life insurance industry on our governance regulation and there may be opportunities to amend this bulletin to strengthen consumer protections that the industry would generally find acceptable.

In particular, an increased emphasis on insurer transparency regarding the decisions made using AI Systems that impact consumers could be an area of focus. Although the importance of transparency as a principle is mentioned in the Background Section, a more detailed statement in Section 3 that insurers must be prepared to explain to consumers the rationale behind decisions related to underwriting, premiums, claim processes, etc. could be added to the bulletin. Without transparent and clear explanations, consumers are left in the dark, which contributes to distrust and perceptions of unfairness.

The following remaining comments are more technical in nature, and we will make them in the order they occur in the draft:

Background

The reference to “unfair bias” in the first paragraph seems to be inconsistent with the definition of “Bias” in Section 2. It may be more accurate to refer to “bias resulting in unfair discrimination.”

The second paragraph refers only to the AI Systems that “support” decisions. To be consistent with the introduction and with the range of possibilities for how insurers leverage AI Systems, we recommend referring to AI Systems that “make or support decisions.”

Section 2

We suggest adding “deep learning” to the definitions because of its use in Section 3 or remove it as it is the only reference to deep learning in the draft.

Section 3

It is unclear what “those laws” and “those standards” in the first paragraph refer. Also, “them” in the last sentence may need to be replaced with “decisions” for clarity.

The use of “unfair bias” in the last sentence in the third paragraph is inconsistent with how the term is used in Background in Section 1. In Section 1, the term correctly indicates that it is bias that leads to unfair discrimination. However, in Section 3 “unfair bias” is described as an AI System outcome itself. We suggest rewording this sentence to make clear that it is bias that potentially leads to unfairly discriminatory outcomes.

To be consistent with “insurance life cycle” in Section 1 Background, we recommend revising “insurance product life cycle” in 1.5 to “insurance life cycle.”

Thank you for the opportunity to provide these comments.

Sincerely,

Michael Conway
Commissioner of Insurance

NAIC Consumer Health Representatives

September 5, 2023

To: Innovation, Cybersecurity, and Technology (H) Committee Big Data and Artificial Intelligence (H) Working Group

Re: Exposure Draft of the Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers

---

As NAIC consumer representatives focusing on health care issues, we welcome the opportunity to comment on the ***Exposure Draft of the Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers.***

We appreciate the NAIC and, specifically, the H Committee's efforts to develop stronger protections around the use of artificial intelligence (AI) in insurance. The Exposure Draft is an important first step, but it should go further in monitoring and oversight of the use of technology, AI, and big data in insurance with a greater focus on health insurance. Consistent with the NAIC's Principles on Artificial Intelligence, the Exposure Draft should more fully address "the importance of accountability, compliance, transparency, and safe, secure, fair and robust outputs" as it relates to health care. Further, we believe that it should better address discrimination, including proxy discrimination, and provide safeguards to ensure that AI systems are implemented in a manner that avoids harmful or unintended consequences.

Emerging technologies, including artificial intelligence, are reshaping the way health insurers assess risk, market products, conduct utilization management, process claims, analyze claims, provide customer service, and comply with regulations. These developments have the potential to reduce prior authorization and claims processing times, lower administrative costs, and improve customer service. However, these technologies also pose challenges. They raise concerns about data privacy, algorithmic bias and risk of discrimination, lack of transparency and accountability in the use of AI, AI systems being fed inaccurate or incomplete data, and consumer consent.

We are already seeing that, as health insurers increasingly rely on AI, patients and providers are experiencing higher denial rates for services. We are concerned that use of AI surreptitiously deprives people of benefits by increasing the rationing of resources, falsely identifying widespread fraud, and frustrating access through the black-box of algorithmic care determinations.

As the H Committee proceeds in establishing a regulatory framework to protect consumers from AI abuses in insurance, it must center the experience of consumers who use health insurance.

Expand the scope to include automated decision making systems

Insurers increasingly rely on automated decision making systems (ADS) in health care delivery, supplanting individualized assessments and the judgment of medical professionals in prior authorization, level of care assessments, and other health coverage determinations.

ADS will play an increasing role in health care, but there are insufficient transparency requirements, guardrails, accountability measures, beneficiary protections, exceptions processes, and protections against bias. The lack of requirements around the use of ADS in health care leaves many consumers without the care they need, often without much information about why care recommended by their clinicians is denied by insurers. Some ADS interfere with generally accepted standards of care and clinician judgment, insert bias into clinical decisions, and deny necessary and medically appropriate care.

More fully address bias and discrimination in AI, including proxy discrimination

The Exposure Draft fails to address proxy discrimination. Moreover, it fails to acknowledge implicit bias and structural racism. Bias in ADS for health insurers is well documented. ADS in health care can perpetuate health disparities by embedding long-standing inequities and structural racism. Officials at the U.S. Department of Health and Human Services (HHS) recognized that clinical algorithms can be discriminatory and that insurers should be held responsible for relying on these tools when they have discriminatory effects. (See U.S. Dept. of Health and Human Services, Notice of Proposed Rulemaking, Nondiscrimination in Health Programs and Activities, proposed §92.210 Nondiscrimination in the use of clinical algorithms in decision-making.)

Algorithms used to guide health decisions have been determined to incorporate significant racial bias because they are based solely on health care costs. Such algorithms have denied care based on ADS that rely on historical access and ability to afford health care rather than need.

Even where ADS appears to be based on “objective” results from a pulse oximeter, a physical device that has been in common use for four decades as a means of detecting low blood oxygenation that can lead to organ failure and death, the device’s results have higher variance in Black and Asian patients than in white patients. Unfortunately,

many hospitals use blood oxygenation readings to establish Medicare reimbursement and drug treatment eligibility. Researchers have shown that even where physicians try to use a race-based subtraction to account for the false high readings that pulse oximeters give to Black patients, no subtraction would allow blood oxygenation to be detected as well for Black patients as for white patients. The Exposure Draft roots its definition of bias in "differential treatment" but does not acknowledge that treating persons or groups the same can itself be unfair when the underlying criteria for treatment come from different starting points.

Some ADS in health care use race as a determining factor. For example, the estimated glomerular filtration rate (eGFR) used to measure kidney function incorporated race into the calculations and limited access to treatment and care until the National Kidney Foundation (NKF) and the American Society of Nephrology (ASN) Task Force recommended removing that factor from the calculation.

Harm, including discrimination, from ADS is not just limited to bad programming or design. ADS used in health care programs and activities are often some type of assessment tool that assigns values to information based on formulas, decision trees, or other tools with the system, to result in a score or other output that is assigned meaning. These systems inherently perpetuate the human decision-making biases throughout the lifecycle, since they incorporate data, research, and presumptions that are likely biased.

The science and data used as the basis for the ADS can also incorporate bias, not just in what the researchers choose to study and their approach, but also in who participates in clinical research trials and who is excluded. In addition, there can be significant bias in the very research journals that publish the studies and articles that may be the origin of ADS and that play a significant factor in funding academic research, which is also a significant piece of many ADS. ADS are largely based on statistics, clinical research, and other data sources that are rife with institutional bias, not only racial, but on the basis of disability, gender, and other historically excluded or marginalized identities.

Furthermore, there is often bias in who participates in clinical research, who performs research, and in the underlying data.[1] Throughout history, access to health care has

[1] *See, e.g.,* Maia Szalavitz, *The Pain Was Unbearable, So Why Did Doctors Turn Her Away?,* WIRED (Aug. 11, 2021), https://www.wired.com/story/opioid-drug-addiction-algorithm-chronic-pain/ (denial of care due to algorithm that flagged a woman with chronic pain as a drug seeker because of pet's medications); Skyler Rosellini, Nat'l Health L. Program, *Limited Data Collection for LGBTQI+ Health Promotes Bias* (June 22, 2021), https://healthlaw.org/limited-data-collection-for-lgbtqi-health-promotes-bias/ (describing how

largely been a privilege and not a right, meaning many people have been excluded or underrepresented in the health care system. This means that the data underlying most ADS is skewed in similar ways, often resulting in bias. To compound matters, often the technologists that create the ADS can add bias given the lack of diversity in the field and failure to recognize the impact of an ADS in practice.

In addition, health care has historically been a system of austerity--providing limited amounts of care, which may be determined by a variety of factors including service availability, ability to pay, or policies that dictated what would be provided in a particular treatment setting at that point in time for the population or person in question. All too often, factors such as a patient's race, income, and gender have resulted in limiting health care interventions. It is all too easy for these biases to be perpetuated by ADS.

ADS can also be used to hide non-clinical standards in clinical guidelines or in utilization review standards that are supposed to be based on generally accepted standards of care. The use of algorithms has been found to be particularly problematic regarding utilization review in behavioral health care, such as in the NY settlement and in the *Wit v. UBH* case where an investigation identified fiscal considerations in what were supposed to be standards that complied with generally accepted standards of care.[2]

Insurers use AI not only in coverage and level of care determinations, but also in marketing. We are concerned about the potential for discriminatory marketing through the use of predictive analytics on big data to target specific audiences for online ads.

"gender conflicts" lead to misdiagnoses and discrimination in health care settings); Kendra Albert & Maggie Delano, *Sex Trouble: Sex/gender slippage, sex confusion, and sex obsession in machine learning using electronic health records,* PATTERNS, Aug. 12, 2022, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9403398/ (discussing false assumptions regarding sex in medical data and the resulting problems); Laleh Seyyed-Kalantari *et al.*, *Underdiagnosis Bias of Artificial Intelligence Algorithms Applied to Chest Radiographs in Under-Served Patient Populations,* NATURE (Dec. 10, 2021), https://www.nature.com/articles/s41591-021-01595-0; Milena A Gainfrancesco *et al.*, *Potential Biases in Machine Learning Algorithms Using Electronic Health Record Data,* 178 JAMA INTERN. MED. 1544-47 (Jan. 25, 2019), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6347576/; *see also Wit v. United Behavioral Healthcare*, 14-cv-2346-JCS, 2019 WL 1033730 (N.D. Cal. July, 27, 2020) (although not explicitly an ADS, discovery into utilization management tools found that the criteria used did not align with clinically accepted criteria and was unduly influenced by fiscal rationales); The Kennedy Forum, *A Breakdown of United Healthcare's Recent Parity Settlements* (Aug. 24, 2021), https://www.thekennedyforum.org/blog/a-breakdown-of-unitedhealthcares-recent-parity-settlements/ (describing role or algorithm in an "Alert Program" that improperly led to utilization review and denied care);

[2] *Wit v. United Behavioral Healthcare*, 14-cv-2346-JCS, 2019 WL 1033730 (N.D. Cal. July, 27, 2020) (finding parity compliance issues with utilization management tools that used criteria that did not align with clinically accepted criteria and was unduly influenced by fiscal rationales).

Provide for greater transparency and monitoring in AI use by insurers

AI will likely continue to be a critical part of health care and insurance, but it must have more regulation and accountability generally. Importantly, there needs to be a greater focus on how the ADS impacts the people on which it is being used. However, any policy approaches to regulating ADS must go back to the beginning of the lifecycle and focus on the people impacted, putting the burden on showing compliance and transparency on the entities that are benefiting from the use of the technology.

The AI Principles also recognize the importance of transparency. However, transparency, which is commonly part of algorithmic accountability, is critical but cannot be the only answer. As research identifying ADS issues has proven, simple transparency of the ADS itself is insufficient without the underlying data and design assumptions. Transparency may mean very little without clear explanation, so that people can understand how the system works, limitations, and potential sources of bias.

Transparency also has the challenge of trade secret protections, which are frequently asserted when advocates want to inspect ADS.[3] However, transparency has proven key in addressing compliance with mental health parity requirements, and can serve as a useful framework for regulators addressing AI systems.[4] Transparency and enforcement are crucial to reigning in the discriminatory activities of insurers in response to allegations of discriminatory benefit design. All necessary information regarding coverage decisions and denials needs to be sufficiently detailed and be disclosed to those impacted and regulators.[5]

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[3] *See, e.g., Salazar v. Dist. of Columbia*, 596 F. Supp. 2d 67 (D.D.C. Feb. 6, 2009) (copyright law and local trade secret laws do not trump the federal Medicaid statute and regulations); *Ark. Dept. of Commerce, Div. of Workforce Servs. v. Legal Aid of Ark,* 645 S.W.3d 9 (S.C. Ark. 2022) (finding that unemployment claimants are not competitors for the purpose of the proprietary information exception and granting access to algorithm and related information requested through freedom of information act request to state); *Kate Crawford & Jason Schultz*, *AI Systems as State Actors*, 119 Columbia L. Rev. 1941 (2019), https://columbialawreview.org/content/ai-systems-as-state-actors/; Yale Law School, *Algorithmic Accountability*, https://law.yale.edu/mfia/projects/government-accountability/algorithmic-accountability (report and posted documents reveal problems with trying to access algorithms).

[4] *See, e.g., Wit v. United Behavioral Healthcare*, note 2 *supra*.

[5] *See, e.g.,* Amicus Brief of Nat'l Health L. Program & The Kennedy Forum in *E.W. v. Health Net*, *available at* *https://healthlaw.org/resource/amicus-brief-of-nhelp-and-the-kennedy-forum-in-e-w-v health/?fbclid=IwAR3sBc20UO2ZqOhO1GbjHGuJJeboMAQ1T1ImH6K-IynOiIasEBoC5muxFwM* (discussing the importance of disclosure of plan documents).

In addition, transparency still leaves the burden on others to identify problems in the ADS; a task that often takes skill, resources, and time from a variety of fields. Transparency is important, but the burden of compliance must be on those creating, selling, and using ADS, not those impacted by it. The level of expertise and resources required to investigate an ADS, even if individuals impacted can get access to the ADS and the underlying data, is too much of a burden to bear.

As recognized in NAIC's Principles on AI, yet absent from the Exposure Draft, the earlier stages of the ADS life cycle are critically important. In our experience with ADS, it is incredibly difficult to fix ADS problems after implementation. Regulation of ADS in health care contexts needs to be much more strenuous around testing, impact analysis, ongoing analysis and validation, and use standards, including limitations, as well as disclosure requirements for all of these pieces. There is also far too little attention paid to the policies and processes around the ADS.

For example, if an ADS were validated under certain circumstances, including training of users or language used, then the ADS should only be used under processes that recreate those circumstances. The human use element of ADS can greatly impact the effectiveness of ADS and the risk of bias or error. ADS processes should include disclosure of the use of AI, the intended purpose or scope of the system, any limitations or known biases of an AI system, the right to dispute a decision, and how a person can ask to be an exception from the outcome of AI. In addition, there should be safeguards around ADS being used on populations for which it is not appropriate or validated, such as children, people with disabilities, or people who prefer languages other than English. Because many ADS are based on statistical analyses, they will not accurately predict the needs of all individuals and there must be a process for a person to raise their hand to say the ADS may have said they do not qualify, but they actually do.

Ensure accountability from third-party AI systems

State regulators are the last line of defense to ensure the fair, ethical, and lawful use of AI systems in insurance. The burden of proof should be on AI developers and insurers to show affirmatively that their AI reduces, or at least does not worsen, disparate impacts on protected classes. While most evidence of disparate impact focuses on race/ethnicity/ language, evaluations should also consider disability, socioeconomic status, sexual orientation, gender/gender identity, age, economic status, and other potentially discriminatory factors. States should look beyond just the data used as input and the automated decision-making logic. They should develop trainings for agency employees and relevant contractors who administer the AI on strategies to recognize

and reduce potential implicit and explicit bias, mitigate potential conflicts of interest, and ensure the ADS supports participants' legal rights.

Conclusion

Often AI systems are designed for efficiency, cost-savings, objectivity, standardization, or other principles. Too often, the focus is whether the system is accurate or meets certain performance standards. But there should be significant focus on how AI systems impact people both at the individual and population level. Our experience has shown how minor issues in AI systems in health care can have irreparable consequences for the people impacted.

Signed by

Wayne Turner
Carl Schmid
Bonnie Burns
Rachel Klein
Lucy Culp
Silvia Yee
Yosha Dotson
Harry Ting
Ashley Blackburn
Kara Nett Hinkley
Deborah Darcy
Maanasa Kona
Mathew Smith
Anna Schwamlein Howard
Kelly Headrick
Kellan Baker

Resources on ADS

- **Preventing Harm from Automated Decision-Making Systems in Medicaid**
- **NHeLP Comments on NIST's Proposal for Identifying and Managing Bias in Artificial Intelligence**
- **Race-Based Prediction in Pregnancy Algorithm Is Damaging to Maternal Health**
- **NHeLP AHRQ Comments on the Use of Clinical Algorithms that Have the Potential to Introduce Racial/Ethnic Bias into Healthcare Delivery**
- **Demanding Ascertainable Standards: Medicaid as a Case Study**
- **Q&A: Using Assessment Tools to Decide Medicaid Coverage**
- **Ensuring that Assessment Tools are Available to Enrollees**

NAIC Consumer Health Representatives

- **Medicaid Assessments for Long-Term Supports & Services (LTSS)**
- **Evaluating Functional Assessments for Older Adults**
- **Opportunities for Public Comment on HCBS Assessment Tools – National Health Law Program**
- **A Promise Unfulfilled: Automated Medicaid Eligibility Decisions**
- **AAPD and Center for Technology and Democracy, Centering Disability in Technology Policy (2021)**
- **Encoding Normative Bias: On Algorithmic Bias and Disability (2023)**
- **Center for Technology and Democracy, Ableism And Disability Discrimination In New Surveillance Technologies: How new surveillance technologies in education, policing, health care, and the workplace disproportionately harm disabled people (2022)**
- **Center for Technology and Democracy, Report: Challenging the Use of Algorithm-driven Decision-making in Benefits Determinations Affecting People with Disabilities (2020)**

NAIC Consumer Representatives

To: Innovation, Cybersecurity, and Technology (H) Committee Big Data and Artificial Intelligence (H) Working Group

Re: Exposure Draft of the Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers

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The undersigned **NAIC Consumer Representatives** write to provide additional comments on the July 17th, 2023, draft Model Bulletin on the Use of Algorithms, Predictive models, and Artificial Intelligence.[1] Several of us briefly addressed our concerns at H Committee's August 13 meeting in Seattle and this letter is intended to support those comments.

First, we recognize the extensive amount of time and work involved in drafting this model bulletin and the challenges of drafting a document that addresses the many comments made by numerous stakeholders, and producing a bulletin the NAIC membership will support. We are critical of sections of this exposure draft, but also appreciate the drafters' commitment to producing a flexible document to guide regulators and protect insurance consumers. The comments in this letter largely address what we believe are the Model Bulletin's shortcomings.

A major benefit of this draft bulletin is the description of adequate AIS governance, including risk management and internal controls, and addressing the use of third party (vendor) AI systems and models. Even cautiously phrased as regulatory expectations rather than requirements, the bulletin sets out several standards that should ultimately benefit consumers. For example, Section 3 would establish documentation expectations for how insurers will manage AI systems quote "at each stage of the AI system life cycle." In addition, the provisions regarding data management and retention of algorithmic and predictive models in Section 4, part 1.3 will be helpful to regulators, but should be improved by including specific expectations for how long insurers must maintain this information, which at a minimum should extend well beyond the last date the model was used These retention standards should also recognize that such documentation may be necessary or useful for federal agencies or other state regulators to access.[2]

These potential benefits are tangible and may advance the NAIC's efforts in developing an appropriate regulatory framework for states to consider and implement. However, overall, this draft retreats from the NAIC's Principles of Artificial Intelligence (Principles) adopted by the Plenary Committee on August 14, 2020. The AI principles were intended to be the high-level document that would "inform and establish general expectations for AI actors and systems emphasizing the importance of accountability, compliance, transparency, and safe, secure, fair

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[1] We support the statements and recommendations submitted to H Committee by other consumer groups, including the Center for Economic Justice and the September 5, 2023 comments by our consumer representative colleagues that focus on health care and health insurance.

[2] We are not suggesting that the bulletin should address what information should be available to other government agencies, or under what criteria it can be shared, but that the bulletin should set retention standards for regulated entities that recognizes such information may later become equally important for other regulatory or law enforcement agencies.

and robust outputs."[3] Those Principles were forward-thinking and perhaps the NAIC's high watermark to date for its work in this area; this bulletin (as drafted) does not significantly advance those aspirations.[4]

More than three years later, the NAIC has yet to implement its AI principles and standards in any meaningful way, and remains fixated on background, definitions, and cautious guidance and recommendations that too often fall back to the admonition that insurers' use of AI must be consistent with existing insurance laws. The repetitiveness of this truism implies that the big data and AI revolution in insurer operations can be adequately regulated by tinkering with laws and standards designed for a different and less complex technological and regulatory world.[5] It is time to move beyond "high level principles" to the actual drafting of model statutes, regulations, or standards that if enacted would provide specific requirements and consumer protections.

Critically, this draft bulletin retreats from the AI Principles' statement that "responsible stewardship of trustworthy AI' means providing outcomes that benefit consumers, including avoiding "proxy discrimination against protected classes."[6] This standard acknowledges that harmful discrimination is not limited to intended or deliberate discrimination but also the use of data or risk classifications (proxies) that unintentionally result in similar harm. As various state insurance commissioners have noted on multiple occasions, the harm caused is not diminished or made less serious simply because it was unintentional, as recognized by the Accelerated Underwriting Working Group's educational paper.[7]

The draft bulletin, in contrast, is carefully worded to avoid taking any similar position. Rather than setting out standards addressing or even acknowledging what the AI Principles stated three years ago – that insurers' responsible use of AI includes proactively avoiding risk classifications and predictive models that discriminate against people and groups already disadvantaged in our society. Instead, the bulletin meekly suggests that AI use can risk "unfair bias resulting in unfair discrimination," which can be interpreted as simply reiterating the limited meaning of "unfair discrimination" that has existed for many decades – that rates should not be "excessive, inadequate, or unfairly discriminatory," with the latter term historically defined as actuarial

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[3] NAIC AI Principles, second paragraph, page 1.
[4] Similarly, the A Committee's Accelerated Underwriting Working ("AUW") Group spent three years developing an education paper that set out general, high level regulatory recommendations for reviewing accelerated underwriting practices that are similar to this draft's guidelines. That paper, and this draft bulletin are the NAIC's public, tangible work product specifically addressing regulatory responses to AI since the AI Principles were adopted in August 2020, and neither move the discussion from aspirational to operational. Consumer representatives who commented on the AUW educational paper were told the paper was a preliminary step on that path toward drafting substantive regulations or requirements, while similar "high-level" work has continued at the H Committee.
[5] If so, this conclusion is increasingly inconsistent with governmental concern and scrutiny of AI systems in other industries, particularly at the federal level, and invites federal involvement and possible preemption in this area.
[6] NAIC AI Principles, paragraph b., page 1, under Fair and Ethical.
[7] That paper states that "actuarial fairness" is by itself not a sufficient regulatory criteria, and risk classifications "may lead to unexpected or unfairly discriminatory outcomes even though the input data may not be overtly discriminatory."

fairness.[8] Vagueness in this area ultimately benefits no one, and this bulletin should clearly affirm the NAC's commitment to opposing unfair proxy discrimination.

While we support the development of this model bulletin, we believe it necessary that it both reflect and advance the NAIC's AI Principles. To this end, we make the following suggestions for changes to the bulletin.

Of particular concern is the lack of transparency guidelines in the draft bulletin. Insurance markets and insurance consumers rely on trust, that insurers will treat them fairly and honor the "money for a promise" nature of insurance contracts. Trust in financial institutions is already low and while AI and machine learning have the potential to contribute significantly to transparency, that is not the trend we see. Instead, the growing complexity of AI-generated models makes insurance even more opaque to insurance consumers, and an emphasis on transparency more important than ever. The AI Principles reflected the importance of transparency and consumer access to information about their data and how it was being used, and the draft bulletin would be flawed and incomplete if it does not adequately address this vital principle.

We request the Committee add a clear statement about the role and importance of transparency to both regulators and consumers. The draft bulletin contains provisions (albeit ambiguously drafted ones) that addresses insurer claims of proprietary information, but not public transparency. Sections (3)(3.5) and 4(1.1)(e)(iii) address the protection of "non-public information, including unauthorized access to algorithms or models themselves" but fail to note the corresponding importance of transparency under the NAIC's AI Principles. It is also unclear what problem the provisions are meant to address. From the perspective of a consumer representative, what is important to consumers it the protection of their personal data – not an algorithm that analyzes their data. What is "unauthorized access to algorithms or models themselves"? The term "unauthorized access" does not appear to be defined. Nor have insurers provided any examples where consumer access to their own data has resulted in inappropriate disclosure of trade secrets. We believe this provision as currently drafted is vague and could limit or constrain the transparency of models to regulators and the public. Insurers are certainly entitled to protect actual trade secrets, but it is a false dichotomy that consumer (and regulator) transparency necessarily jeopardizes proprietary information. Insurers' expansive definitions of trade secrets need not and should not come at the expense of transparency to regulators or consumers about the outcomes of models that are impacting consumers. It is vital the draft bulletin be revised to acknowledge the need for transparency to consumers about their personal information that impacts their privacy, not just the privacy interests of insurer.

We also suggest a minor change to the text on Page 4 of the bulletin to further the goal of transparency for AI systems:

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[8] The draft bulletin's definition of "bias" (p. 3), is similarly equivocal – "the differential treatment that results in favored or unfavored treatment of a person, group or attribute." This could refer to harmful proxy discrimination, or equally, describing the use of speeding tickets and prior accidents to classify drivers and price insurance more favorably for those who avoid them, the type of bias that is typically encouraged.

> AI Systems rely on large amounts of diverse, ever-changing, and sometimes nontraditional forms of data, sophisticated algorithms, and ML and deep learning techniques to develop complex ~~and often opaque~~ predictive models to make, inform, or support decisions.

The descriptor "opaque" should be deleted. The goal should be for insurers to develop predictive models that are transparent to regulators and the public.

Second, the model bulleting should not invite federal regulation by suggesting state insurance regulators will not test or require insurers to test AI predictive models. We suggest the following modification to the text of page 4 of the Model Bulletin:

> ~~Current limitations on the availability of reliable demographic data on consumers make it challenging for Insurers and regulators to directly test these systems to determine whether the decisions made meet all applicable legal standards. Therefore, w~~While the Department continues to encourage and emphasize the use of verification and testing methods for unfair bias that leads to unfair discrimination where possible, the Department recognizes that ~~we must also rely upon~~ robust governance, risk management controls, and internal audit functions should also play a role in ~~to mitigate~~ mitigating the risk that decisions driven by AI Systems will violate unfair trade practice laws and other applicable legal standards.

The first sentence should be stricken and the second edited to make it clear that governance, risk management controls and internal audit functions are supplemental tools that do not replace or supplant the authority of regulators to test AI systems. The Bulletin currently suggests that regulators will abstain from testing models, which could invite federal intervention and jeopardize some of the protections the McCarran-Ferguson Act provides. *See* https://content.naic.org/cipr-topics/mccarran-ferguson-act. If a statement about the limits of current data is required, it should – rather than stating that testing cannot be done by state insurance regulators – simply provide that "Current limitations on the availability of reliable demographic data on consumers may make it challenging for insurers and regulators to test some predictive models, the Department will encourage the development and use of future tools as they become available to ensure these systems meet all applicable legal standards." As currently drafted, this portion of the bulletin would serve as fuel for proponents of the federal regulation of insurance and regulators should not tie their hands by writing off the testing of models in the future as technology advances.

Third, written AI systems plans must be required, not merely suggested. We suggest the following edits for page 4 of the Model Bulletin:

> For these reasons, all Insurers authorized to do business in this state are ~~encouraged~~ required to develop, implement, and maintain a written program for the use of AI Systems that is designed to assure that decisions impacting consumers made or supported by AI Systems are accurate and do not violate unfair trade practice laws or other applicable legal standards (AIS Program).

Any entity that is using BD, AI or algorithms must do so pursuant to a written methodology. Implementing and running predictive models that use millions or billions of recorded (i.e. written) data elements without having a written plan to govern the use of models would be perilous to both the industry and consumers. Written program plans should be required, rather than made optional.

Section 4(1.1)(a) should also be revised:

> The written AIS Program ~~or any decision by the Insurer not to develop and adopt a written AIS Program.~~

As noted above, we believe written AIS Program plans should be required rather than optional. Otherwise, an insurer could seemingly opt out of much of the rest of the bulletin (which contains many references to the "AIS Program") by electing not to have a written plan thereby avoiding the application of many of the guidelines set forth in the Section 4 as currently drafted (because they would be inapplicable without a written AIS Program).

Finally, we recommend the following edits.

Page 1:

> AI can potentially facilitate the development of innovative products, improve consumer interface and service, simplify and automate processes, and promote efficiency and accuracy.

The following sentence appropriately notes the "potential" risks posed by the use of AI and BD, and the same qualifier should be included in this sentence – as the cited potential benefits cannot yet be quantified.

Section 3(4.2)(b):

> Entitle the Insurer and Department to audit the third-party vendor for compliance.

While the rest of Section 4.2(b) suggests that regulators could seek to investigate the systems of third-party vendors for compliance, it is better to make it clear and incorporate that right into any contracts regulated entities enter into with third-party vendors. Perhaps more effective would be stating that regulated entities cannot use models or data that it refuses to provide to the regulator[9] and to hold insurers responsible for any regulatory violations attributable to their third-party vendors, leaving it to them on how best to obtain indemnification from their vendors for any penalties they may incur.

[9] This approach comes from comments and statements made by state insurance regulators over the years on this issue.

We thank you for considering these comments and look forward to working with you on this vital Model Bulletin.

Sincerely,

Brendan Bridgeland
Michael DeLong
Kenneth Klein
Peter Kochenburger
Richard Weber

EXPOSURE DRAFT **Indiana Department of Insurance Comments**
07.17.2023

NAIC MODEL BULLETIN:

USE OF ALGORITHMS, PREDICTIVE MODELS,
AND ARTIFICIAL INTELLIGENCE SYSTEMS BY INSURERS

TO: All Insurers Licensed to Do Business In (*Insert Name of Jurisdiction*) ("Insurers")

FROM: [Department/Commissioner]

DATE: [Insert]

RE: The Use of Artificial Intelligence Systems in Insurance

This bulletin is issued by the [] (Department) to remind all Insurers that hold certificates of authority to do business in the state that decisions impacting consumers that are made or supported by advanced analytical and computational technologies, including artificial intelligence (AI) systems (as defined below), must comply with all applicable insurance laws and regulations. This includes those laws that govern unfair trade practices. This bulletin sets forth the Department's expectations as to how Insurers will govern the development/acquisition and use of such technologies and systems by or on behalf of the Insurer to make or support such decisions. This bulletin also advises Insurers of information and documentation that the Department may request during an investigation or examination of any Insurer that addresses the use of such technologies or systems.

SECTION I: INTRODUCTION, BACKGROUND, AND LEGISLATIVE AUTHORITY

Background

Artificial Intelligence (AI) techniques, including the application of sophisticated algorithms and machine learning (ML) to big data (BD), are transforming the insurance industry. AI techniques are deployed across all stages of the insurance life cycle, including product development, marketing, sales and distribution, underwriting and pricing, policy servicing, claim management, and fraud detection. AI can facilitate the development of innovative products, improve consumer interface and service, simplify and automate processes, and promote efficiency and accuracy. At the same time, using AI can bring unique risks, including the potential for inaccuracy, unfair bias resulting in unfair discrimination, and data vulnerability.

The Department encourages the development and use of innovation and AI Systems that contribute to safe and stable insurance markets. The Department also expects that Insurers that use AI Systems to support decisions that impact consumers will do so in a manner that complies with and is designed to assure that the decisions made using those systems meet the requirements of all applicable federal and state laws.

The Department recognizes the *Principles of Artificial Intelligence* that the NAIC adopted in 2020 as an appropriate source of guidance for Insurers as they develop and use AI systems. Those principles emphasize the importance of the fairness and ethical use of AI; accountability; compliance with state laws

and regulations; transparency; and a safe, secure, fair, and robust system. These fundamental principles should guide Insurers in their development and use of AI Systems and underlie the expectations set forth in this bulletin.

Legislative Authority

The regulatory expectations and oversight considerations set forth in Section 3 and Section 4 of this bulletin rely on the following laws and regulations:

- ***Unfair Trade Practices Model Act* (#880)**: The *Unfair Trade Practices Act* [*insert citation to state statute or regulation corresponding to Model #880]* (UTPA), regulates trade practices in insurance by: 1) defining practices that constitute unfair methods of competition or unfair or deceptive acts and practices; and 2) prohibiting the trade practices so defined or determined.

- ***Unfair Claims Settlement Practices Model Act* (#900)**: The *Unfair Claims Settlement Practices Act*, [*insert citation to state statute or regulation corresponding to Model #900*] (UCSPA), sets forth standards for the investigation and disposition of claims arising under policies or certificates of insurance issued to residents of [insert state].

Actions taken by Insurers in the state must not violate the UTPA or the UCSPA, regardless of the methods the Insurer used to determine or support its actions. As discussed below, Insurers are expected to adopt practices, including governance frameworks and risk management protocols, that are designed to assure that the use of AI Systems does not result in: 1) unfair trade practices, as defined in []; or 2) unfair claims settlement practices, as defined in [].

- ***Corporate Governance Annual Disclosure Model Act* (#305)**: The *Corporate Governance Annual Disclosure Act* [*insert citation to state statute or regulation corresponding to Model #305*] (CGAD), requires Insurers to report on governance practices and to provide a summary of the Insurer's corporate governance structure, policies, and practices. The content, form, and filing requirements for CGAD information are set forth in the *Corporate Governance Annual Disclosure Model Regulation* (#306) [*insert citation to state statute or regulation corresponding to Model #306])* (CGAD-R).

The requirements of CGAD and CGAD-R apply to elements of the Insurer's corporate governance framework that address the Insurer's use of AI Systems to support decisions that impact consumers.

- ***Property and Casualty Model Rating Law* (#1780)**: The *Property and Casualty Model Rating Law*, [*insert citation to state statute or regulation corresponding to the Model #1780]*, requires that property/casualty (P/C) insurance rates not be excessive, inadequate, or unfairly discriminatory.

The requirements of [] apply regardless of the methodology that the Insurer used to develop rates, rating rules, and rating plans subject to those provisions. That means that an Insurer is responsible for assuring that rates, rating rules, and rating plans that are developed using AI techniques and predictive models that rely on BD and ML do not result in excessive, inadequate, or unfairly discriminatory insurance rates with respect to all forms of casualty insurance—including fidelity, surety, and guaranty bond—and to all forms of property insurance—including fire, marine, and inland marine insurance, and any combination of any of the foregoing.

- ***Market Conduct Surveillance Model Law* (#693)**: The *Market Conduct Surveillance Model Law* [*insert citation to state statute or regulation corresponding to Model #693*] establishes the framework pursuant to which the Department conducts market conduct actions. These are comprised of the full range of activities that the Department may initiate to assess and address the market practices of Insurers, beginning with market analysis and extending to targeted examinations. Market conduct actions are separate from, but may result from, individual complaints made by consumers asserting illegal practices by Insurers.

An Insurer's conduct in the state, including its use of AI Systems to make or support decisions that impact consumers, is subject to investigation, including market conduct actions. Section 4 of this bulletin provides guidance on the kinds of information and documents that the Department may request in the context of an AI-focused investigation, including a market conduct action.

SECTION 2: DEFINITIONS

Commented [BA(1]: Do we want to define AIS Program?

For the purposes of this bulletin[1]:

"**AI Systems**" is an umbrella term describing artificial intelligence and big data related resources utilized by Insurers.

"**Algorithm**" means a computational or machine learning process that augments or replaces human decision-making in insurance operations that impact consumers.

"**Artificial Intelligence**" is a term used to describe machine-based systems designed to simulate human intelligence to perform tasks, such as analysis and decision-making, given a set of human-defined objectives. This definition treats machine learning as a subset of artificial intelligence.

"Bias" is the differential treatment that results in favored or unfavored treatment of a person, group or attribute.

"**Big Data**" are data sets that are characterized by, at a minimum, their volume (i.e., size), velocity (i.e., speed of transmission), and variety (i.e., internal, external, including third-party data) that requires scalable computer architecture to analyze and model.

"Machine Learning" is a subset of Artificial Intelligence that simulates human learning by identifying patterns in data either supervised, unsupervised or through reinforcement learning styles to make decisions. "Predictive Analytics" and "Predictive Modeling" are related terms that refer to methods to identify patterns in data to make predictions.

"**Third-Party**" for purposes of this bulletin means an organization other than the Insurer that provides services, data or other resources related to AI.

SECTION 3: REGULATORY GUIDANCE AND EXPECTATIONS

[1] Drafting note: Individual states may have adopted definitions for terms that are included in the model bulletin that may be different from the definitions set forth herein.

Decisions impacting consumers that are made by Insurers using AI Systems must comply with all applicable legal and regulatory standards, including unfair trade practice laws. Those laws require, at a minimum, that decisions made by Insurers not be arbitrary, capricious, or unfairly discriminatory. Compliance with those standards is required regardless of the tools and methods Insurers use to make them.

AI Systems rely on large amounts of diverse, ever-changing, and sometimes nontraditional forms of data, sophisticated algorithms, and ML and deep learning techniques to develop complex and often opaque predictive models to make, inform, or support decisions. Current limitations on the availability of reliable demographic data on consumers make it challenging for Insurers and regulators to directly test these systems to determine whether the decisions made meet all applicable legal standards. Therefore, while the Department continues to encourage and emphasize the use of verification and testing methods for unfair bias that leads to unfair discrimination where possible, the Department recognizes that we must also rely upon robust governance, risk management controls, and internal audit functions to mitigate the risk that decisions driven by AI Systems will violate unfair trade practice laws and other applicable legal standards.

Commented [BA(2]: When AI is implemented incorrectly or is inaccurate etc., insurers should also clarify and develop policies for self-correction.

For these reasons, all Insurers authorized to do business in this state are encouraged to develop, implement, and maintain a written program for the use of AI Systems that is designed to assure that decisions impacting consumers made or supported by AI Systems are accurate and do not violate unfair trade practice laws or other applicable legal standards (AIS Program). An AIS Program that an Insurer adopts and implements should be reflective of, and commensurate with, the Insurer's assessment of the risk posed by its use of an AI System, considering the nature of the decisions being made, informed, or supported using the AI System; the nature and the degree of potential harm to consumers from errors or unfair bias resulting from the use of the AI System; the extent to which humans are "in-the-loop"; and the extent and scope of the Insurer's use or reliance on data, models, and AI Systems from third parties.

As discussed in Section 4, an Insurer's use of AI Systems is subject to the Department's examination to determine whether decisions made or actions taken in reliance on AI Systems are compliant with all applicable legal standards. Regardless of whether an Insurer adopts a formal AI Program or the scope of that Program, an Insurer's use of AI and AI Systems is subject to investigation, including market conduct actions. However, the existence of an AIS Program, including documentation related to the Insurer's adherence to the standards, processes, and procedures set forth in the AIS Program, will facilitate such investigations and actions.

AIS Program Guidelines

1.0 General Guidelines

1.1 The AIS Program should be designed to mitigate the risk that the Insurer's use of AI Systems to make or support decisions that impact consumers will result in decisions that are arbitrary or capricious, unfairly discriminatory, or that otherwise violate unfair trade practice laws.

1.2 The AIS Program should address governance, risk management controls, and internal audit functions.

1.3 The AIS Program should be adopted by the board of directors or an appropriate committee of the board. The AIS Program should vest responsibility for the development, implementation, monitoring, and oversight of the AIS Program and for setting the Insurer's strategy for AI Systems with senior management reporting to the board or an appropriate committee of the board.

1.4 The AIS Program should be tailored to and proportionate with the Insurer's use and reliance on AI and AI Systems. The AIS Program may be independent of or part of the Insurer's existing enterprise risk management (ERM) program. The AIS Program may adopt, incorporate, or rely upon, in whole or in part, a framework or standards developed by an official third-party standard organization, such as the National Institute of Standards and Technology.

1.5 The AIS Program should address the use of AI Systems across the insurance product life cycle, including product development and design, marketing, lead generation and use, applications, underwriting, rating, case management, claim administration and payment, and fraud detection.

1.6 The AIS Program should address all phases of an AI System's life cycle.

1.7 The AIS Program should address all of the AI Systems used by or on behalf of the Insurer to make decisions that impact consumers, whether developed by the Insurer or a third party and whether used by the Insurer or by an authorized agent or representative of the Insurer.

2.0 Governance

The AIS Program should include a governance framework for the oversight of AI Systems used by the Insurer. Governance should prioritize transparency, fairness, and accountability in the design and implementation of the AI Systems. An Insurer may consider adopting new internal governance structures or rely on the Insurer's existing governance structures, but the governance structure should address:

2.1 The standards that the Insurer adopted for its development of AI Systems generally and at each stage of the AI System life cycle.

2.2 The policies, processes, and procedures, including risk management and internal controls, to be followed at each stage of an AI System life cycle.

2.3 The requirements adopted by the Insurer to document compliance with the AIS Program policies, processes, procedures, and standards. Documentation requirements should be developed with Section 4 in mind.

2.4 Commensurate with the Insurer's development and use of AI Systems, defined roles, and responsibilities for key personnel charged with carrying out the AIS Program generally and at each stage of an AI System life cycle, including consideration of:

a) A centralized or federated committee comprised of representatives from all disciplines and units within the Insurer, such as business units, product specialists, actuarial, data science and analytics, compliance, and legal.

Commented [BA(3]: Is this too broad or do we need to more specifically outline parameters?

b) A description of the roles and responsibilities of each discipline and/or unit of the Insurer as they relate to the AI System, the AIS Program, and, where applicable, on the Insurer's internal AIS Program committee.

c) The qualifications of the persons serving in the roles identified.

d) Coordination and communication between persons with roles and responsibilities with the committee and among themselves.

e) Scope of authority, chains of command, and decisional hierarchies.

f) The independence of decision-makers and lines of defense at successive stages of the AI System life cycle.

g) Escalation procedures and requirements.

h) Development and implementation of ongoing training and supervision of personnel.

2.5 Monitoring, auditing, and reporting protocols and functions.

2.6 Specifically with respect to predictive models: the Insurer's processes and procedures for designing, developing, verifying, deploying, using, and monitoring predictive models, including a description of methods used to detect and address errors or unfair discrimination in the insurance practices resulting from the use of the predictive model.

3.0 Risk Management and Internal Controls

The AIS Program should document the Insurer's risk identification, mitigation, and management framework and internal controls for AI Systems generally and at each stage of the AI System life cycle. Risk management and internal controls should address:

3.1 The oversight and approval process for the development, adoption, or acquisition of AI Systems, as well as the identification of constraints and controls on automation and design to align and balance function with risk.

3.2 Data practices and accountability procedures, including data lineage, quality, integrity, bias analysis and minimization, suitability, and updating.

3.3 Management and oversight of algorithms and predictive models, including:

a) Inventories and descriptions of algorithms and predictive models.

b) Detailed documentation of the development and use of algorithms and predictive models demonstrating compliance with the AIS Program requirements.

c) Measurements such as interpretability, repeatability, robustness, regular tuning, reproducibility, traceability, and the auditability of those measurements.

d) Benchmarking against alternative models and systems.

e) Evaluation for drift.

3.4 Validation, testing, and auditing of data, algorithms, and predictive models.

3.5 The protection of non-public information, including unauthorized access to algorithms or models themselves.

3.6 Data and record retention.

3.7 Establishment of a standardized process to correct potential AI System mistakes, problems, or errors;

Commented [BA(4]: Insurers need a standardized process to correct any AI system errors/mistakes/etc to ensure that reparative measures are implemented and not haphazardly fixed.

3.7 Specifically with respect to models: a narrative description of the model's intended goals and objectives and how the model is developed and validated to ensure that the AI Systems that rely on such models correctly and efficiently predict or implement those goals and objectives.

4.0 Third-Party AI Systems

Each AIS Program should address the Insurer's standards for the acquisition, use of, or reliance on AI Systems developed or deployed by a third-party, including, as appropriate, the establishment of standards, policies, procedures, and protocols relating to:

4.1 Due diligence and the methods employed by the Insurer to assess the third-party, its AI Systems, and its AI governance and risk management protocols in order to assure that third-party AI Systems used to make or support decisions that impact consumers are designed to meet the legal standards imposed on the Insurer itself.

4.2 The inclusion of terms in contracts with third parties that:

a) Require third-party data and model vendors and AI System developers to have and maintain an AIS Program commensurate with the standards expected of the Insurer.

b) Entitle the Insurer to audit the third-party vendor for compliance.

c) Entitle the Insurer to receive audit reports by qualified auditing entities confirming the third-party's compliance with standards.

d) Require the third-party to cooperate with regulatory inquiries and investigations related to the Insurer's use of the third-party's product or services and require the third-party to cooperate with the Insurer's regulators as part of the investigation or examination of the Insurer.

4.3 The performance of audits and other confirmatory activities to confirm the third-party's compliance with contractual and, where applicable, regulatory requirements.

SECTION 4: REGULATORY OVERSIGHT AND EXAMINATION CONSIDERATIONS

The Department's regulatory oversight of Insurers includes oversight of an Insurer's conduct in the state, including its use of AI Systems to make or support decisions that impact consumers. Regardless of the existence or scope of a written AIS Program, in the context of an investigation or market conduct action, an Insurer can expect to be asked about its governance framework, risk management, and internal controls (including the considerations identified in Section 3), as well as questions regarding any specific model, AI System, or its application, including requests for the following kinds of information and/or documentation:

1. Information and Documentation Relating to AI System Governance, Risk Management, and Use Protocols

Commented [BA(5]: Include when material updates are made from a previous version to a new version, insurer should maintain information about reasons for updates.

1.1. Information and documentation related to or evidencing the Insurer's AIS Program, including:

a) The written AIS Program or any decision by the Insurer not to develop and adopt a written AIS Program.

b) Information and documentation relating to or evidencing the adoption of the AIS Program.

c) The scope of the Insurer's AIS Program, including any AI Systems and technologies not included in or addressed by the AIS Program.

d) How the AIS Program is tailored to and proportionate with the Insurer's use and reliance on AI Systems.

e) The policies, procedures, guidance, training materials, and other information relating to the adoption, implementation, maintenance, monitoring, and oversight of the Insurer's AIS Program, including:

i. Processes and procedures for the development, adoption, or acquisition of AI Systems, such as:

(1) Identification of constraints and controls on automation and design.

(2) Data governance and controls, any practices related to data lineage, quality, integrity, bias analysis and minimization, suitability, and updating.

ii. Processes and procedures related to the management and oversight of algorithms and predictive models, including measurements, standards, or thresholds adopted or used by the Insurer in the development, validation, and oversight of models and AI Systems.

iii. Protection of non-public information, including unauthorized access to algorithms or models themselves.

1.2. Information and documentation relating to the Insurer's pre-acquisition/pre-use diligence, monitoring, oversight, and auditing of AI Systems developed or that a third party deployed, including any authorized agent or representative of the Insurer when acting as such.

1.3. Information and documentation relating to or evidencing the Insurer's implementation and compliance with its AIS Program, including documents relating to the Insurer's monitoring and audit activities respecting compliance, such as:

a) Documentation relating to or evidencing the formation and ongoing operation of the Insurer's coordinating bodies for the development, use, and oversight of AI Systems, including documentation identifying key personnel and their roles, responsibilities, and qualifications.

b) Management and oversight of algorithms, predictive models, and AI Systems, including:

i. The Insurer's inventories and descriptions of algorithms, predictive models, and AI Systems used by or on behalf of the Insurer to make or support decisions that impact consumers.

ii. As to any specific algorithm, predictive model, or AI System that is the subject of investigation or examination:

(1) Documentation of compliance with all applicable AI Program policies, protocols, and procedures in the development, use, and oversight of algorithms, predictive models, and AI Systems deployed by or on behalf of the Insurer.

(2) Information about data used in the development and oversight of the specific model or AI System, including the data source, provenance, data lineage, quality, integrity, bias analysis and minimization, suitability, and updating.

(3) Information related to the techniques, measurements, thresholds, benchmarking, and similar controls adopted by the Insurer.

(4) Validation, testing, and auditing, including evaluation of drift.

2. Third-Party AI Systems

Investigations and examinations of an Insurer may include requests for the following kinds of information and documentation related to data, models, and AI Systems developed by third parties that are relied on or used by or on behalf of the Insurer, directly or by an agent or representative.

2.1 Due diligence conducted on third parties and their data, models, or AI Systems.

Commented [BA(6]: By insurers?

2.2 Contracts with third-party AI System, model, or data vendors, including terms relating to representations, warranties, data security and privacy, data sourcing, data use,

intellectual processes rights, confidentiality and disclosures, and cooperation with regulators.

2.3 Audits and confirmation processes performed with respect to third-party compliance with contractual and, where applicable, regulatory obligations.

2.4 Documentation pertaining to [third-party? Insurer?] validation, testing, and auditing, including evaluation of drift.

The Department recognizes that Insurers may demonstrate their compliance with the laws that regulate their conduct in the state in their use of AI Systems through alternative means, including through practices that differ from those described in this bulletin. The goal of the bulletin is not to prescribe specific practices or to prescribe specific documentation requirements. Rather, the goal is to ensure that Insurers in the state are aware of the Department's expectations as to how AI Systems will be governed and managed and of the kinds of information and documents about an Insurer's AI Systems that the department expects an Insurer to produce when requested.

As in all cases, investigations and market conduct actions may be performed using procedures that vary in nature, extent, and timing in accordance with regulatory judgment. Work performed may include inquiry, examination of company documentation, or any of the continuum of market actions described in the NAIC's *Market Regulation Handbook*. These activities may involve the use of contracted specialists with relevant subject matter expertise.

INSURED RETIREMENT INSTITUTE

Electronically Submitted to maromero@naic.org

September 5, 2023

TO: The NAIC Innovation, Cybersecurity and Technology (H) Committee

Re: Exposure Draft of the Model Bulletin on the Use of Algorithms, Predictive Models and Artificial Intelligence Systems by Insurers

On behalf of our members, the Insured Retirement Institute (IRI)[1] writes to share comments on the Exposure Draft of the Model Bulletin on the Use of Algorithms, Predictive Models and Artificial Intelligence Systems by Insurers. We commend the NAIC taking on such an important topic for the industry, and we share the NAIC's goal of ensuring that decisions impacting consumers that are made or supported by advanced analytical and computational technologies, including artificial intelligence (AI) systems, comply with all existing applicable insurance laws and regulations. We offer the following comments below, however, to ensure that the guidance provided in the Bulletin is workable and practical for insurers.

First, our members have some concerns around the expectations for third-party AI systems and contracts with such third parties. Third-party vendors may be unwilling to provide proprietary information regarding their data or models directly to insurance companies, and we believe recognition of this issue within the Bulletin is important. We agree that third-party AI systems should be included in an insurer's governance framework, however, to the extent that a state regulator requests proprietary information that a third party is unwilling to provide, the Bulletin should provide compliance pathways for insurers. For example, an insurer could demonstrate compliance if the third-party vendor provides requested information directly to the state regulator, or the vendor could attest or certify to an industry standard or report as a demonstration of its compliance. Having the Bulletin acknowledge different ways that an insurer could fulfil its obligations in this manner would be helpful. Additionally, narrower contractual requirements are needed, particularly around the insurer's ability to audit third parties. These terms will likely be difficult to negotiate due to the nature of the proprietary information utilized

[1] The Insured Retirement Institute (IRI) is the leading association for the entire supply chain of insured retirement strategies, including life insurers, asset managers, and distributors such as broker-dealers, banks and marketing organizations. IRI members account for more than 95 percent of annuity assets in the U.S., include the top 10 distributors of annuities ranked by assets under management, and are represented by financial professionals serving millions of Americans. IRI champions retirement security for all through leadership in advocacy, awareness, research, and the advancement of digital solutions within a collaborative industry community.

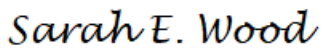
by third party vendors, and we'd urge the Committee to consider alternative pathways for compliance for insurers when it comes to third party AI systems.

Generally, we believe these issues around the third-party vendors need to be addressed as highlighted above. We also urge the Committee to continue approaching this issue in a thoughtful manner so as not to create an environment where only one or two vendors are available while others that may otherwise be compliant are shut out from use by the industry.

Second, we wanted to offer some general comments regarding the different types of AI technologies to ensure that the Bulletin appropriately considers the risk of these different types. For example, we believe that there is a difference between predictive models that are trained on defined, labeled data (supervised by humans), and AI technologies that cannot be fully supervised (i.e., ChatGPT) and may or may not lead to a specific outcome. It would be appropriate to differentiate between these different models and perhaps create a standard that is separate for each modeling type. We'd be happy to collaborate further with the Committee on how to address this issue, but we wanted to at least raise it for consideration at this time.

We appreciate the Committee's consideration of these comments, and we look forward to working with the Committee on this important issue. Please do not hesitate to reach out with any questions or concerns, or if there's anything else with which we can assist.

Sincerely,



Sarah Wood
Director, State Policy & Regulatory Affairs
Insured Retirement Institute
swood@irionline.org

InsurTech COALITION

September 5, 2023

Commissioner Kathleen Birrane, Chair

Innovation, Cybersecurity, and Technology (H) Committee
National Association of Insurance Commissioners

Dear Commissioner Birrane:

The InsurTech Coalition, a diverse group of InsurTech companies, welcomes the opportunity to collaborate with the NAIC on the Big Data & AI Working Group's draft AI Model Bulletin ("Bulletin"). We are some of the fastest growing companies in the country and the future of insurance. As leaders in both technology and insurance, we believe in the NAIC's work to help all stakeholders benefit from the improvements in insurance that AI will provide. To that end, the Insurtech Coalition supports reasonable regulation of the use of artificial intelligence ("AI") by insurance companies, managing general agencies, and other insurance market participants.

AI has the potential to transform the way insurance business is conducted, enabling insurers and insurance producers to reach new markets, including traditionally underserved communities, more accurately price risks, and realize various operational efficiencies. Therefore, it is important that the emerging regulatory framework for AI strikes a necessary balance between establishing prudent consumer protections and unduly inhibiting useful innovation. The Insurtech Coalition is pleased to be a resource to both the NAIC and state insurance regulators as well as the insurtech community with respect to the use of AI in the insurance industry.

Below, please find a few specific comments on key areas of the draft Bulletin. We hope to hold further discussions with the NAIC to advance our shared goal to encourage a vital and robust insurance market in each state, while protecting and educating consumers.

Key Concerns

We have three overarching concerns about the draft Bulletin.

First, we believe that concerns about AI Systems should be addressed by a risk management framework rather than a governance framework. Oversight of AI Systems does not need to deviate from the risk management controls that insurance carriers currently place around underwriting, claims, special investigation units, etc. The draft Bulletin focuses to a high degree on documentation of the preparation of AI systems or models, but should instead focus on the outcomes or impacts of the models and systems themselves. We agree that there ought to be

reasonable and logical methods by which insurers go about designing and developing models, but we disagree with the way in which the draft Bulletin specifies those methods and focuses on the documentation. We think that we are all better served by focusing on the key concern of stakeholders, not whether the development process meets a list of specific criteria and every step is specifically documented.

Second, we believe that there is a mismatch between the draft Bulletin's goal and its proposed method of implementation. The draft Bulletin's goal is clear: ensure that "decisions impacting consumers" are made in accordance with law. A number of the prescriptions in the draft Bulletin do not, in our view, follow that guiding light. For instance, specifying that insurers must document "key personnel and their roles, responsibilities and qualifications," seems unrelated to the draft Bulletin's goal. We suggest that the draft Bulletin be explicit in that the Bulletin applies to the universe of AI Systems which are responsible for or integral to decisions impacting consumers.

Third, we are concerned about the broad use of examination authority to evaluate AI Systems. The use of examination authority in the manner laid out in the Bulletin belies an assumption that AI Systems are inherently biased and dangerous to consumers in a way that human decision-making is not. Investigations and examinations are and should continue to be reserved for instances in which issues with an insurers' practices have been identified. The Bulletin confers authority on Departments of Insurance to review AI Systems via examination authority without an objective need. In this way, the Bulletin creates a regulatory double standard for technology-forward companies. We would encourage the Working Group to consider adopting an approach that would require Departments of Insurance to first discern whether there is a problem with the practice of the insurer and how, if at all, AI was used in those practices.

Confidentiality

Based on the draft Bulletin, we anticipate that, in the future there will be demands for specific confidential and proprietary data. Our companies will provide necessary data but are concerned about the protection of that data. We believe that current statutes provide reasonable legal protection for data under the examination authority of the Departments of insurance, but we are concerned about the inadvertent disclosure or activity by threat actors. We suggest that the Bulletin express that the regulators should facilitate information disclosures in as secure a process as possible and specify that disclosure methods that do **not** result in an actual transfer of data be the preferred method of disclosure.

Definitions

"AI Systems" - We suggest that the defined term needs to be more specific. Referring to it as an "umbrella term" would allow for all types of systems that do not utilize AI or big data. Moreover, it is a definition which could help narrow the scope of the entire Bulletin to focus on "decisions impacting consumers."

“Algorithm”,“Artificial Intelligence”, “Big Data”, “Machine Learning” - We encourage the Committee to review the definition to consider using a widely accepted third-party definition, such as those used by NIST or similar organizations.

“Bias” - We submit that the definition of bias needs to be tethered to present legal standards, as they may be amended in the future. As we are all well aware, insurance is different from most, if not all, other industries in that consumers are often treated differently from one another by design. We would encourage the Committee to preserve the integrity of risk based pricing as it seeks to prevent unfair discrimination.

Third Party AI Systems

We submit that the draft Bulletin’s expectations of insurers’ abilities to monitor and control the activity of third-parties is unrealistic. This is particularly true for the members of our group which, although growing, remain quite small. Even if our members were large companies we find it difficult to imagine negotiating with Amazon or Alphabet to insist that their AI governance systems meet our standards; particularly since multiple standards may apply depending on the state in which we operate and that Department’s view of AI governance requirements.

The advancements in technology are an evolution and progression of insurance that will benefit consumers with fairer and better products. The InsurTech Coalition appreciates your attention to these changes and welcomes further conversations. If you have questions regarding our comments, please feel free to contact Jennifer Crutchfield at jcrutchfield@clearcover.com.

Signed,

InsurTech Coalition

NAIC MODEL BULLETIN

USE OF ALGORITHMS, PREDICTIVE MODELS, AND ARTIFICIAL INTELLIGENCE SYSTEMS BY INSURERS

TO: All Insurers Licensed to Do Business In (*Insert Name of Jurisdiction*) ("Insurers")

FROM: [Department/Commissioner]

DATE: [Insert]

RE: The Use of Artificial Intelligence Systems in Insurance

This bulletin is issued by the [] (Department) to remind all Insurers that hold certificates of authority to do business in the state that decisions impacting consumers and the marketplace that are made or supported by advanced analytical and computational technologies, including artificial intelligence (AI) systems (as defined below), must comply with all applicable insurance laws and regulations. This particularly includes those laws that govern unfair trade practices. This bulletin sets forth the Department's expectations as to how Insurers will govern the development/acquisition and use of such technologies and systems by or on behalf of the Insurer to make or support such decisions. This bulletin also advises Insurers of information and documentation that the Department may request during an investigation or examination of any Insurer that addresses the use of such technologies or systems.

SECTION I: INTRODUCTION, BACKGROUND AND LEGISLATIVE AUTHORITY

Introduction

CMA: Draft a paragraph explaining the dual audience for this bulletin – both companies and regulators. Technological changes/improvements are happening so fast – this bulletin is meant to give some guidance to both; also explain regulatory expectations. Exams/reviews need to review these types of items; reg need to know what they are looking at. Pull language from our charge?

[from page 10 – move it here] The Department recognizes that Insurers may demonstrate their compliance with the laws that regulate their conduct in the state in their use of AI Systems through alternative means, including through practices that differ from those described in this bulletin. The goal of the bulletin is not to prescribe specific practices or to prescribe specific documentation requirements. Rather, the goal is to ensure that Insurers in the state are aware of the Department's expectations as to how AI Systems will be governed and managed and of the kinds of information and documents about an Insurer's AI Systems that the department expects an Insurer to produce when requested.

Background

Artificial Intelligence (AI) techniques, including the application of sophisticated algorithms and machine learning (ML) to big data (BD), are transforming the insurance industry. AI techniques are deployed across all stages of the insurance life cycle, including product development, marketing, sales and distribution, underwriting and pricing, policy servicing, claim management, and fraud detection. AI can facilitate the development of innovative products, improve consumer interface and service, simplify and automate processes, and promote efficiency and accuracy. At the same time, using AI can result in ~~bring~~ unique risks, including the potential for inaccuracy, unfair bias resulting in unfair discrimination, and data vulnerability.

The Department encourages the development and use of innovation and AI Systems that contribute to safe and stable insurance markets. The Department ~~also~~ expects ~~that~~ Insurers that use AI Systems to support decisions that impact consumers will do so in a manner that complies with and is designed to ensure ~~assure~~ that the decisions made using those systems meet the requirements of all applicable federal and state laws.

The Department recognizes the *Principles of Artificial Intelligence* that the NAIC adopted in 2020 as an appropriate source of guidance for Insurers as they develop and use AI systems. Those principles emphasize the importance of the fairness and ethical use of AI; accountability; compliance with state laws and regulations; transparency; and a safe, secure, fair, and robust system. These fundamental principles should guide Insurers in their development and use of AI Systems and underlie the expectations set forth in this bulletin.

Legislative Authority

Actions taken by Insurers in the state must not violate the Unfair Trades Practices Act {UTPA} or the Unfair Claims Practices Act {UC~~S~~PA}, regardless of the methods the Insurer used to determine or support its actions. As discussed below, Insurers are expected to adopt practices, including governance frameworks and risk management protocols, that are designed to ensure ~~assure~~ that the use of AI Systems does not result in: 1) unfair trade practices, as defined in [§]; or 2) unfair claims settlement practices, as defined in [§].

An Insurer's conduct in the state, including its use of AI Systems to make or support decisions that impact consumers, is subject to investigation, including market conduct actions. Section 4 of this bulletin provides guidance on the kinds of information and documents that the Department may request in the context of an AI-focused investigation, including a market conduct action.

Refer to the Appendix of this Bulletin for references to applicable model laws/regulations.

SECTION 2: DEFINITIONS

For the purposes of this bulletin[1] the following terms are defined:

"**AI Systems**" is an umbrella term describing artificial intelligence and big data related resources utilized by Insurers.

"**Algorithm**" means a computational or machine learning process that augments or replaces human decision-making in insurance operations that impact consumers.

"**Artificial Intelligence**" is a term used to describe machine-based systems designed to simulate human intelligence to perform tasks, such as analysis and decision-making, given a set of human-defined objectives. This definition considers ~~treats~~ machine learning to be ~~as~~ a subset of artificial intelligence. This term is usually abbreviated as AI.

"Bias" is the differential treatment that results in favored or unfavored treatment of a person, group or attribute.

"**Big Data**" are data sets that are characterized by, at a minimum, their volume (*i.e.*, size), velocity (*i.e.*, speed of transmission), and variety (*i.e.*, internal, external, including third-party data) that requires scalable computer architecture to analyze and model.

"Machine Learning" is a subset of Artificial Intelligence that simulates human learning by identifying patterns in data either supervised, unsupervised or through reinforcement learning styles to make decisions. "Predictive Analytics" and "Predictive Modeling" are related terms that refer to methods to identify patterns in data to make predictions. This term is usually abbreviated as ML.

"**Third-Party**" ~~for purposes of this bulletin~~ means an organization other than the Insurer that provides services, data or other resources related to AI.

CMA: I think if we cite the sources for our definitions and show the terms are from reliable, industry-accepted sources, we can avoid having to revisit these terms. Perhaps we also add a drafting note or foot note explaining the numerous conference calls we had in order to develop these definitions.

[1] Drafting note: Individual states may have adopted definitions for terms that are included in the model bulletin that may be different from the definitions set forth herein.

SECTION 3: REGULATORY GUIDANCE AND EXPECTATIONS

Decisions impacting consumers that are made by Insurers using AI Systems must comply with all applicable legal and regulatory standards, including unfair trade practice laws. Those laws require, at a minimum, that decisions made by Insurers not be arbitrary, capricious, or unfairly discriminatory. Compliance with these ~~those~~ standards is required regardless of the tools and methods Insurers use to make them.

AI Systems rely on large amounts of diverse, ever-changing, and sometimes nontraditional forms of data, sophisticated algorithms, and ML and deep learning techniques to develop complex and often opaque predictive models to make, inform, or support decisions. Current limitations on the availability of reliable demographic data on consumers make it challenging for Insurers and regulators to directly test these systems to determine whether the decisions made meet all applicable legal standards. Therefore, while the Department continues to encourage and emphasize the use of verification and testing methods for unfair bias that leads to unfair discrimination where possible, the Department recognizes that it ~~we~~ must also rely upon robust governance, risk management controls, and internal audit functions to mitigate the risk that decisions driven by AI Systems could ~~will~~ violate unfair trade practice laws and other applicable legal standards.

For these reasons, all Insurers authorized to do business in this state should ~~are encouraged to~~ develop, implement, and maintain a written program for the use of AI Systems. This AIS Program should be ~~that is~~ designed to ensure ~~assure~~ that decisions impacting consumers and the marketplace, that are made or supported by AI Systems, are accurate and do not violate, at a minimum, the UTPA, the UCPA ~~unfair trade practice laws~~ or other applicable legal standards. ~~(AIS Program).~~ CMA: The first 2-3 sentences of this paragraph need to be rewritten. Too many commas!

An AIS Program that an Insurer adopts and implements should be reflective of, and commensurate with, the Insurer's own assessment of the risk posed by its use of an AI System, considering the nature of the decisions being made, informed, or supported using the AI System; the nature and the degree of potential harm to consumers from errors or unfair bias resulting from the use of the AI System; the extent to which humans are "in-the-loop"; and the extent and scope of the Insurer's use or reliance on data, models, and AI Systems from third parties.

As discussed in Section 4, an Insurer's use of AI Systems is subject to the Department's examination to determine whether decisions made or actions taken in reliance on AI Systems are compliant with all applicable legal standards. Regardless of whether an Insurer adopts a formal AI Program or the scope of that Program, an Insurer's use of AI and AI Systems is subject to investigation, including market conduct actions. ~~However, the~~ The existence of an AIS Program, including documentation related to the Insurer's adherence to the standards, processes, and procedures set forth in the AIS Program, will facilitate such investigations and actions. ADD – written protocols will also enhance a company's ability to monitor its own behavior

AIS Program Guidelines

1.0 General Guidelines

1.1 The AIS Program should be designed to mitigate the risk that the Insurer's use of AI Systems ~~to make or support decisions that impact consumers~~ will result in decisions that are arbitrary or capricious, unfairly discriminatory, ~~or that otherwise~~ violate unfair trade practice laws, or that otherwise violate the laws of this State.

1.2 The AIS Program should address governance, risk management controls, and internal audit functions.

1.3 The AIS Program should be adopted by the board of directors or an appropriate committee of the board. The AIS Program should vest responsibility for the development, implementation, monitoring, setting strategy and oversight of the AIS Program with senior management ~~and for setting the Insurer's strategy for AI Systems with senior management~~ reporting to the board or an appropriate committee of the board.

1.4 The AIS Program should be tailored to and proportionate with the Insurer's use and reliance on AI and AI Systems. The AIS Program may be independent of or part of the Insurer's existing Enterprise Risk Management (ERM) program. The AIS Program may adopt, incorporate, or rely upon, in whole or in part, a framework or standards developed by an official third-party standard organization, such as the National Institute of Standards and Technology (NIST).

1.5 The AIS Program should address the use of AI Systems across the insurance product life cycle, including areas such as product development and design, marketing, ~~lead generation and use~~, applications, underwriting, rating, case management, claim administration and payment, and fraud detection.

1.6 The AIS Program should address all phases of an AI System's life cycle. See the Appendix. [CMA: how detailed should we get when explaining the meaning of 'life cycle' and its parameters?]

1.7 The AIS Program should address all of the AI Systems used by or on behalf of the Insurer ~~to make decisions that impact consumers~~, whether developed by the Insurer or a third party vendor and whether used by the Insurer or by an authorized agent or representative of the Insurer.

2.0 Governance

The AIS Program should include a governance framework for the oversight of AI Systems used by the Insurer. Governance should prioritize transparency, fairness, and accountability in the design and implementation of the AI Systems. An Insurer may consider adopting new internal governance structures or rely on the Insurer's existing governance structures, however, ~~but~~ the governance structure should address the following items:

2.1 The standards that the Insurer adopted for its development of AI Systems generally and at each stage of the AI System life cycle.

2.2 The policies, processes, and procedures, including risk management and internal controls, to be followed at each stage of an AI System life cycle.

2.3 The requirements adopted by the Insurer to document compliance with the AIS Program policies, processes, procedures, and standards. Documentation requirements should be developed with Section 4 in mind.

2.4 Commensurate with the Insurer's development and use of AI Systems, defined roles, and responsibilities for key personnel charged with carrying out the AIS Program generally and at each stage of an AI System life cycle, including consideration of:

a) A centralized or federated committee comprised of representatives from all disciplines and units within the Insurer, such as business units, product specialists, actuarial, data science and analytics, compliance, and legal.

b) A description of the roles and responsibilities of each discipline and/or unit of the Insurer as they relate to the AI System, the AIS Program, and, where applicable, ~~on~~ the Insurer's internal AIS Program committee.

c) The qualifications of the persons serving in the roles identified.

d) Coordination and communication between persons with roles and responsibilities with the committee and among themselves.

e) Scope of authority, chain~~s~~ of command, and decisional hierarchies.

f) The independence of decision-makers and lines of defense at successive stages of the AI System life cycle.

g) Escalation procedures and requirements.

h) Development and implementation of ongoing training and supervision of personnel.

2.5 Monitoring, auditing, and reporting protocols and functions.

2.6 Specifically with respect to predictive models: the Insurer's processes and procedures for designing, developing, verifying, deploying, using, and monitoring predictive models, including a description of methods used to detect and address errors ~~or unfair discrimination~~ in the insurance practices resulting from the use of the predictive model.

3.0 Risk Management and Internal Controls

The AIS Program should document the Insurer's risk identification, mitigation, and management framework and internal controls for AI Systems generally and at each stage of the AI System's life cycle. Risk management and internal controls should address the following items:

3.1 The oversight and approval process for the development, adoption, or acquisition of AI Systems, as well as the identification of constraints and controls on automation and design to align and balance function with risk.

3.2 Data practices and accountability procedures, including data lineage, quality, integrity, bias analysis and minimization, suitability, and updating.

3.3 Management and oversight of algorithms and predictive models, including:

a) Inventories and descriptions of algorithms and predictive models.

b) Detailed documentation of the development and use of algorithms and predictive models demonstrating compliance with the AIS Program requirements.

c) Measurements such as interpretability, repeatability, robustness, regular tuning, reproducibility, traceability, and the auditability of those measurements.

d) Benchmarking against alternative models and systems.

e) Evaluation for drift. See the Appendix.

3.4 Validation, testing, and auditing of data, algorithms, and predictive models.

3.5 The protection of non-public information, including unauthorized access to algorithms or models themselves.

3.6 Data and record retention.

3.7 Specifically with respect to models: a narrative description of the model's intended goals and objectives and how the model is developed and validated to ensure that the AI Systems that rely on such models correctly and efficiently predict or implement those goals and objectives.

4.0 Third-Party AI Systems

Each AIS Program should address the Insurer's standards for the acquisition, use of, or reliance on AI Systems developed or deployed by a third-party, including, ~~as appropriate,~~ the establishment of standards, policies, procedures, and protocols relating to the following items:

4.1 Due diligence and the methods employed by the Insurer to assess the third-party, its AI Systems, and its AI governance and risk management protocols in order to ensure ~~assure~~ that the third-party's AI Systems ~~used to make or support decisions that impact consumers~~ are designed to meet the legal standards imposed on the Insurer itself.

4.2 The inclusion of the following terms in contracts with third parties: ~~that:~~

a) Require third-party data and model vendors and AI System developers to have and maintain an AIS Program commensurate with the standards expected of the Insurer.

b) Entitle the Insurer to audit the third-party vendor for compliance.

c) Entitle the Insurer to receive audit reports by qualified auditing entities confirming the third-party's compliance with standards.

d) Require the third-party to cooperate with regulatory inquiries and investigations related to the Insurer's use of the third-party~~'s~~ products or services and require the third-party to cooperate with the Insurer's regulators. ~~as part of the investigation or examination of the Insurer.~~

4.3 The performance of audits and other confirmatory activities to confirm the third-party's compliance with contractual and, where applicable, regulatory requirements.

SECTION 4: REGULATORY OVERSIGHT AND EXAMINATION CONSIDERATIONS

The Department's regulatory oversight of Insurers includes oversight of an Insurer's conduct in the state, including its use of AI Systems to make or support decisions that impact consumers and the marketplace. Regardless of the existence or scope of a written AIS Program, in the context of an investigation or market conduct action, an Insurer can expect to be asked about its governance framework, risk management, and internal controls (including the considerations identified in Section 3). In addition to conducting a review of any of the items listed in this bulletin, a regulator may also pursue ~~as well as~~ questions regarding any specific model, AI System, or its application, including requests for the following kinds of information and/or documentation:

1. Information and Documentation Relating to AI System Governance, Risk Management, and Use Protocols

1.1. Information and documentation related to or evidencing the Insurer's AIS Program, including:

The written AIS Program or any decision by the Insurer not to develop and adopt a written AIS Program.

a) Information and documentation relating to or evidencing the adoption of the AIS Program.

b) The scope of the Insurer's AIS Program, including any AI Systems and technologies not included in or addressed by the AIS Program.

c) How the AIS Program is tailored to and proportionate with the Insurer's use and reliance on AI Systems.

d) The policies, procedures, guidance, training materials, and other information relating to the adoption, implementation, maintenance, monitoring, and oversight of the Insurer's AIS Program, including:

i. Processes and procedures for the development, adoption, or acquisition of AI Systems, such as:

(1) Identification of constraints and controls on automation and design.

(2) Data governance and controls, any practices related to data lineage, quality, integrity, bias analysis and minimization, suitability, and updating.

ii. Processes and procedures related to the management and oversight of algorithms and predictive models, including measurements, standards, or thresholds adopted or used by the Insurer in the development, validation, and oversight of models and AI Systems.

iii. Protection of non-public information, including unauthorized access to algorithms or models themselves.

1.2. Information and documentation relating to the Insurer's pre-acquisition/pre-use diligence, monitoring, oversight, and auditing of AI Systems developed or that a third party deployed, including any authorized agent or representative of the Insurer when acting as such.

1.3. Information and documentation relating to or evidencing the Insurer's implementation and compliance with its AIS Program, including documents relating to the Insurer's monitoring and audit activities respecting compliance, such as:

a) Documentation relating to or evidencing the formation and ongoing operation of the Insurer's coordinating bodies for the development, use, and oversight of AI Systems, including documentation identifying key personnel and their roles, responsibilities, and qualifications.

b) Management and oversight of algorithms, predictive models, and AI Systems, including:

i. The Insurer's inventories and descriptions of algorithms, predictive models, and AI Systems used by or on behalf of the Insurer to make or support decisions that impact consumers.

ii. As to any specific algorithm, predictive model, or AI System that is the subject of investigation or examination:

(1) Documentation of compliance with all applicable AI Program policies, protocols, and procedures in the development, use, and oversight of algorithms, predictive models, and AI Systems deployed by or on behalf of the Insurer.

(2) Information about data used in the development and oversight of the specific model or AI System, including the data source, provenance, data lineage, quality, integrity, bias analysis and minimization, suitability, and updating.

(3) Information related to the techniques, measurements, thresholds, benchmarking, and similar controls adopted by the Insurer.

(4) Validation, testing, and auditing, including evaluation of drift.

2. Third-Party AI Systems

Investigations and examinations of an Insurer may include requests for the following kinds of information and documentation related to data, models, and AI Systems developed by third parties that are relied on or used by or on behalf of the Insurer, directly or by an agent or representative.

2.1 Due diligence conducted on third parties and their data, models, or AI Systems.

2.2 Contracts with third-party AI System, model, or data vendors, including terms relating to representations, warranties, data security and privacy, data sourcing, data use, intellectual processes rights, confidentiality and disclosures, and cooperation with regulators.

2.3 Audits and confirmation processes performed with respect to third-party compliance with contractual and, where applicable, regulatory obligations.

~~The Department recognizes that Insurers may demonstrate their compliance with the laws that regulate their conduct in the state in their use of AI Systems through alternative means, including through practices that differ from those described in this bulletin. The goal of the bulletin is not to prescribe specific practices or to prescribe specific documentation requirements. Rather, the goal is to ensure that Insurers in the state are aware of the Department's expectations as to how AI Systems will be governed and managed and of the kinds of information and documents about an Insurer's AI Systems that the department expects an Insurer to produce when requested.~~ [CMA: condense since moved to page 1/or better, rewrite a conclusion paragraph]

As in all cases, investigations and market conduct actions may be performed using procedures that vary in nature, extent, and timing in accordance with regulatory judgment. Work

performed may include inquiry, examination of company documentation, or any of the continuum of market actions described in the NAIC's *Market Regulation Handbook*. These activities may involve the use of contracted specialists with relevant subject matter expertise.

APPENDIX

The regulatory expectations and oversight considerations set forth in Section 3 and Section 4 of this bulletin rely on the following laws and regulations:

- ***Unfair Trade Practices Model Act* (#880)**: The *Unfair Trade Practices Act* [*insert citation to state statute or regulation corresponding to Model #880]* (UTPA), regulates trade practices in insurance by: 1) defining practices that constitute unfair methods of competition or unfair or deceptive acts and practices; and 2) prohibiting the trade practices so defined or determined.

- ***Unfair Claims Settlement Practices Model Act* (#900)**: The *Unfair Claims Settlement Practices Act*, [*insert citation to state statute or regulation corresponding to Model #900*] (UCSPA), sets forth standards for the investigation and disposition of claims arising under policies or certificates of insurance issued to residents of [insert state].

- ***Corporate Governance Annual Disclosure Model Act* (#305)**: The *Corporate Governance Annual Disclosure Act* [*insert citation to state statute or regulation corresponding to Model #305*] (CGAD), requires Insurers to report on governance practices and to provide a summary of the Insurer's corporate governance structure, policies, and practices. The content, form, and filing requirements for CGAD information are set forth in the *Corporate Governance Annual Disclosure Model Regulation* (#306) [*insert citation to state statute or regulation corresponding to Model #306])* (CGAD-R).

The requirements of CGAD and CGAD-R apply to elements of the Insurer's corporate governance framework that address the Insurer's use of AI Systems to support decisions that impact consumers.

- ***Property and Casualty Model Rating Law* (#1780)**: The *Property and Casualty Model Rating Law*, [*insert citation to state statute or regulation corresponding to the Model #1780]*, requires that property/casualty (P/C) insurance rates not be excessive, inadequate, or unfairly discriminatory.

The requirements of [§] apply regardless of the methodology that the Insurer used to develop rates, rating rules, and rating plans subject to those provisions. That means that an Insurer is responsible for assuring that rates, rating rules, and rating plans that are developed using AI techniques and predictive models that rely on BD and ML do not result in excessive, inadequate, or unfairly discriminatory insurance rates with respect to all forms of casualty insurance—including fidelity, surety, and guaranty bond—and to all forms of property insurance—including fire, marine, and inland marine insurance, and any combination of any of the foregoing.

- ***Market Conduct Surveillance Model Law* (#693)**: The *Market Conduct Surveillance Model Law* [*insert citation to state statute or regulation corresponding to Model #693*] establishes the framework pursuant to which the Department conducts market conduct actions. These are comprised of the full range of activities that the Department may initiate to assess and address the market practices of Insurers, beginning with market analysis and extending to targeted examinations. Market conduct actions are separate from, but may result from, individual complaints made by consumers asserting illegal practices by Insurers.

NOTES

Ai Life Cycle – is the sequential progression of tasks and decision that drive the development of an Ai solution. The life cycle is usually comprised of six phases:

1. Problem definition

2. Data acquisition and preparation

3. Model development and training [also known as 'feeding']

4. Model evaluation and refinement

5. Deployment

6. Machine Learning Operations

Ai drift - is the change in data distribution over time, which can cause a machine-learning model to become less accurate. For example, if a model is not updated to reflect the changes in data, it can start to make inaccurate predictions. Ai "drift" also refers to when large language models (LLMs) behave in unexpected or unpredictable ways that stray from the original parameters. This may happen because attempts to improve parts of complicated Ai models cause other parts to perform worse.

MONITAUR

September 5, 2023

Chair Birrane, Co-Vice Chairs Conway and Ommen, and Members of the H Committee

We are pleased to have the opportunity to offer our feedback on the Exposure Draft of the Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers 7/17/2023 (AI Bulletin). This vital project has the potential to accelerate effective governance and assurance of artificial intelligence (AI) and machine learning (ML) systems.

At Monitaur, we believe that, by creating more trust and confidence in how these technologies are developed, applied and managed, all stakeholders – industry, regulators, and consumers – can benefit from extraordinary innovations that will improve our lives and make insurance more accessible. We also believe that good AI requires great governance to ensure that these systems are more fair, safe, compliant, and robust than the human processes that they replace or enhance.

Monitaur is an AI and model governance software company serving the insurance industry. Our customers and relationships include carriers, data providers, AI vendors, reinsurers and ecosystem platforms. Our software helps each of these stakeholders to build, manage, and automate responsible and ethical model governance across the full journey of AI projects, whether built internally or bought from vendors.

Since 2020, Monitaur has also had the privilege of presenting to and collaborating with the NAIC, DOI's, and industry trade associations to support alignment and education on the topic of AI risks and governance.

Our feedback on this bulletin is intentionally limited in scope from the perspective of a company that is expert at enabling model risk management and governance that has invested substantial time and effort to understand and uniquely serve the needs of the insurance industry.Our feedback does not include opinions on the lawfulness, legality, or enforceability of this bulletin.

We believe this bulletin achieves a delicate balance between creating new requirements and leveraging existing laws. We also believe this bulletin thoughtfully leverages other standards and influences to find the right balance between a principles based approach and overly prescriptive guidelines.

Formal model risk management and governance are new domains for the insurance industry and we encourage regulators to offer reasonable periods for development and implementation of new requirements. Overall, we believe implementation of the bulletin requirements will result in better AI, not just regulatory compliance.

In the below document, you will find our detailed responses listed by section. Thank you for your valuable time and consideration.

Sincerely,
Anthony Habayeb and Andrew Clark
Chief Executive Officer and Chief Technology Officer
Monitaur, Inc

MONITAUR

Key Observations and Comments

Section 1 - Introduction, Background, and Legislative Authority

No comments

Section 2 - Definitions

- The separate, but complementary, definitions of “AI System”, “Artificial Intelligence”, and “Machine Learning” serve as helpful framing for the bulletin. They will help industry to appreciate the broader context and scope of model governance.
- The definition of “Bias” is technically valuable as it recognizes the concept of differential treatment. However the industry develops in regards to what is fair or unfair bias, we support the technical requirement that companies establish tests and controls for the statistical analysis of bias as fundamental to managing and mitigating bias.
- We recommend using a defined term: “Model - A simplified representation of relationships among real world variables, entities, or events using statistical, financial, economic, mathematical, non-quantitative, or scientific concepts and equations. A model consists of three components: an information input component, which delivers data and assumptions to the model; a processing component, which transforms input into output; and a results component, which translates the output into useful business information.”, as specified in Actuarial Standards of Practice (ASOP) No.56, section 2.8. The addition of this defined term would further complement existing definitions and support further use throughout the bulletin and align with ASOPs definition, which is inclusive of AI systems. In addition, we would support removing the term “Algorithm” or modifying it to: “a set of computational rules used to solve a problem”.

Section 3 - Regulatory Guidance and Expectations

- We believe the word “commensurate” is under-utilized within this bulletin and could offer valuable guidance regarding what levels of effort and governance are required, including for third-party systems. All model risk management policies and practices, as part of a well designed governance program, are structured to establish control commensurate with risk. The level of risk determines the degree of evidence required as well as the frequency of validation and review. As an example, the level of governance and validation expected from a model that automates underwriting should be different than a third-party AI-based grammar productivity enhancer. Whether U.S. insurance regulations follow the EU AI Act approach of prescribing AI risk levels and corresponding commensurate governance requirements, or alternatively allowing companies to document their internal risk assessment methods, it is critical that governance effort and oversight is always commensurate with the actual use and risk.
- Even though we agree that insurers often do not collect key information that can help evaluate bias, there are still well documented and accepted statistical methods that are available to model developers and

organizations to perform technical analysis as a key component of holistic model risk management best practices. As mentioned earlier, while the definition of fair or unfair is not settled as an insurance regulatory matter, the expectation that statistical bias evaluations are performed needs to be a consistent expectation similar to other technical data and model validation techniques.

- The mention of "...made, informed, or supported using the AI system..." is important and valuable to maintain. A modeling system can be high risk and high impact, but not autonomous in making decisions. The autonomy of the application's decision making should only be one element of risk assessment and management and should not exclusively define model governance requirements.
- 1.6 – Naming the stages of an AI System's lifecycle could be helpful. We offer the following adapted from CRISP-DM: Business Understanding, Data Understanding, Data Preparation, Modeling, Evaluation, and Deployment
- 2.4.a – A centralized or federated committee ("decisions by committee") is not a model that is proving hugely successful or scalable, and thus, we suggest that, wherever possible, an independent, second line risk management function, which owns model risk management and is not part of the model development organization, is a superior approach (1.4). Cross-functional teams can be helpful to establish robust policies and corporate guidance; however, effective and scalable governance can and should leverage proven distribution of responsibilities across three lines of defense and establish objective and appropriately incented model risk and governance stakeholders over time. The second line function would employ experienced, well compensated individuals with backgrounds from the representative disciplines, such as actuarial and data science. This second line function would be responsible for independently and objectively validating both the carrier's AI systems on a risk assessed frequency and how well documentation is in compliance with internal company policies and greater best practices in the field. We recommend being explicit about the need for objective, independent validation and assessment reviews, especially for high-risk applications. Reviewers need to be fully independent and incentivized to find issues. The independent second line function, as described above, promotes this approach.
- 2.6 – We suggest the following edit from "to detect and address errors or unfair discrimination" to "to detect and address errors, performance issues, outliers, and/or Biases"
- 3.6 – We recommend adding that data and record retention should be "*at the level of detail that a competent, independent third party can understand the inputs to the AI system and how the output was created.*"
- 4.0 – We believe the same risk assessments and commensurate governance requirements can and should be implemented for third parties as they are for internally developed models and AI projects. Therefore, we believe this section could be eliminated or simplified to reinforce scope of AIS Program to include third parties. As a reference, the Office of the Comptroller of the Currency (OCC) and their SR 11-7 guidance on model risk management requires financial service and banking institutions to equally apply commensurate model risk across 3rd party systems. These laws and guidance have caused the vendor community in this neighboring industry to build and prove governance as a requirement for any opportunity to earn relationships with regulated banking and financial service companies. In sum, placing third party providers under the same regulatory purview creates positive synergies, reduces complexity, and inculcates a stronger ecosystem across first and third party model builders.

Section 4 - Regulatory Oversight and Examination Considerations

- 2.0 – We offer the same feedback as provided above in Section 3, 4.0. We believe organizations should have a single comprehensive program that has clear internal ownership; establishes control policies commensurate with risk; and applies those policies equally across internal and third party systems.

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September 5, 2023

The Hon. Kathleen A. Birrane (MD), Chair
NAIC Innovation, Cybersecurity, and Technology (H) Committee
c/o Miguel Romero, NAIC Director, P&C Regulatory Services
Via email maromero@naic.org

Re: NAMIC Comments on the Draft Model Bulletin on Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers

Dear Chair Birrane, Vice-Chairs, and Members of the Committee:

On behalf of the National Association of Mutual Insurance Companies (NAMIC)[1], we would like to thank the NAIC Innovation, Cybersecurity, and Technology (H) Committee for requesting and accepting comments on the Model Bulletin concerning *Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers*. Through robust discussion amongst stakeholders, we hope that reasonable and rational consensus can be achieved that enhances the regulatory response to various concerns and focuses on those inquiries that will most likely produce desired and fair results.

As mentioned during NAMIC's oral comments during the NAIC Summer Meeting to the Committee, we implore the Committee to embrace the many positive aspects of AI/ML that can have important and transformational results for policyholders and consumers. NAMIC and its members understand regulatory concerns and likewise do not want any legitimate harm to come to consumers or policyholders.

As an overview of the document itself, we believe the model bulletin as drafted provides a draft framework that can accomplish the intended goals of the Committee while finding common ground with industry and all stakeholders. NAMIC acknowledges and appreciates the time and effort that went into this important task of providing a framework and guardrails for insurer use of AI and associated systems. We thank the Committee for the diligent product that has resulted in the initial draft version. By way of positive feedback regarding the Model Bulletin, we would like to discuss several overarching considerations and then provide some technical thoughts as well which we believe can only improve the current draft.

[1] The National Association of Mutual Insurance Companies consists of more than 1,500 member companies, including seven of the top 10 property/casualty insurers in the United States. The association supports local and regional mutual insurance companies on main streets across America as well as many of the country's largest national insurers. NAMIC member companies write $357 billion in annual premiums and represent 69 percent of homeowners, 56 percent of automobile, and 31 percent of the business insurance markets. Through its advocacy programs NAMIC promotes public policy solutions that benefit member companies and the policyholders they serve and fosters greater understanding and recognition of the unique alignment of interests between management and policyholders of mutual companies.

From the outset, NAMIC clearly understands the need for regulators to obtain information that will reduce or eliminate concerns especially regarding compliance in artificial intelligence and/or machine learning usage. Once all stakeholders embark on this road to provide a fuller understanding AI/ML usage, the guardrails, and assumptions which underly the path forward should be clear and unassailable to provide the necessary confidence in the process and resulting findings as well as further action taken.

Consequently, NAMIC would provide these additional general inquiries, substantive, and technical thoughts to the exposure.

Overall

Scope?

An initial query would be the intended scope of the Model Bulletin. While we understand and support a need for the protection of individual consumer policyholders, we believe a risk-based approach should be applied and commercial insurance lines should be scoped out of the application of many of its provisions as those lines typically involve sophisticated brokers and policyholders. As the Model Bulletin develops, the ramifications and compliance determinations will have to be ascertained at varying levels and it would be helpful if we had an understanding of the intention more clearly concerning the scope of products to which the Model Bulletin applies and whether this was intended or unintended over-inclusiveness.

Additionally, with inclusion of predictive models and analytics – is this again an over-inclusive unintended consequence of this discussion? We believe there are already existing guardrails and discussions in these areas and making the document so broad will create an exponentially larger data accumulation that may not be necessary to adequately perform intended roles.

We would also recommend consideration of removing algorithms from the scope of this document or greatly narrowing the scope of its definition. "Algorithm" is defined as virtually any computational process that impacts customers in insurance operations. To categorize every algorithm at work in a modern insurance company would be a herculean task that would range from which visual elements are shown to customers on a web page all the way to pricing and claims decisions. We recommend narrowing the definition of "algorithm" to something along the lines of "Algorithm" means a computational or machine learning process that augments or replaces human decision-making in insurance operations that impacts the price paid, insurance terms, or claim resolution for consumers where there is no human in the decision-making loop or remove entirely as it will unintentionally create a much broader universe of compliance that may be untenable.

Grounded in state law?

It is axiomatic that the proposed usage of these questions should factor in and mirror existing state law and its accompanying regulations and potentially bulletins or other directives from state insurance departments. However, all accompanying authority and usage including mentioned regulations, bulletins, directives, must generally flow from existing laws. It is only through these existing laws and other authority that the insurance industry can prospectively plan for compliance in each and every endeavor that ensues from their operations and state regulators can function in their role accordingly. Stability in existing law or an ability to feasibly comply with reasonable compliance frameworks allows for lack of

significant disruption which can significantly affect regulators, consumers, and the insurance industry in a dramatic fashion if not provided for.

Risk-focused and risk-based

Any discussion of artificial intelligence and machine learning as well as predictive analytics should embrace (as do the NAIC AI Principles) that there is a risk-based history and industry foundation concerning usage in this area that needs to be recognized and understood fully in determining way forward in many instances and it most definitely is a part of any equation when reviewing insurer activity.

"Bias"

The Draft properly emphasizes insurers' responsibility to avoid unfair discrimination. But it intermingles use of the term "bias" in a manner which we believe cannot be implemented by insurers consistent with the controlling legal framework pertaining to fair and unfair discrimination in risk classification. **We thus respectfully submit the basis for our concerns below and ask that the term "bias" be removed from the Draft.**

The first sentence of the Draft emphasizes that its ultimate purpose is to enforce existing insurance regulatory codes: "This bulletin is issued . . . to remind all insurers . . . that decisions impacting consumers . . . must comply with all applicable insurance laws and regulations."

The Draft also states that "The regulatory expectations and oversight considerations set forth in Section 3 and Section 4 of this bulletin rely on the following laws and regulations," including the Property and Casualty Model Rating law, which "requires that property/casualty (P/C) insurance rates not be excessive, inadequate, or unfairly discriminatory."

Reiterating this point, the Draft explains that, "As discussed in Section 4 ['Regulatory Oversight and Examination Considerations'], an Insurer's use of AI Systems is subject to the Department's examination to determine whether decisions made, or actions taken in reliance on AI Systems are compliant with all applicable legal standards."

The code citations in these well-crafted provisions of the Draft control the rest of the document, as is necessary in any directive issued by a statutory regulator. As you know, standards enforced by an insurance department must be clearly understandable to regulated entities and unmistakably tethered to insurance statutes.

As used in the Draft, however, the non-statutory term, "bias" would appear to establish a regulatory standard untethered to insurance statutes. Insurers are instructed to not engage in "unfair bias that leads to unfair discrimination" and "unfair bias resulting from the use of the AI system"; that their controls should "address . . . bias analysis and minimization"; and that a regulatory "investigation or market conduct action" will review "bias analysis and minimization."

Insurers required to comply with the Draft's standards would need to understand what "unfair bias" and "bias . . . minimization" mean, and how they fit into the controlling statutory framework.

The Model Bulletin defines "bias" as "the differential treatment that results in favored or unfavored treatment of a person, group or attribute." This definition is essentially equivalent to the way that the term "discrimination" is used in insurance regulation.

For instance, the NAIC CIPR paper, "Milestones in Racial Discrimination within the Insurance Sector," begins by explaining: "[B]y its nature, insurance aims to discriminate by risk types and charge premiums accordingly. There has been and will always be discrimination by risk types in insurance unless everyone is charged the exact same price for a product."

Discrimination means "differential treatment,"[2] the phrase used to define "bias" in the Draft. Differential treatment between consumers is not problematic in insurance regulation, as explained by the NAIC to the U.S. Supreme Court: "[R]isk selection is the very essence of the business of insurance. . .. In insurance, discrimination is not necessarily a negative term so much as a descriptive one. For insurance fair discrimination is not only permitted, but necessary."[3]

Accordingly, the courts have consistently recognized that the term "discrimination" has a different and specific meaning in the business of insurance and its regulatory state than it does in many other legal contexts. See, e.g., *Thompson v. IDS Life Ins. Co.*, 274 Or. 649, 654 (1976) ("The Insurance Commissioner is instructed to eliminate unfair discrimination, whereas the Public Accommodations Act prohibits all discrimination. The reason for the different standards . . . is that insurance . . . always involves discrimination . . . based on statistical differences and actuarial tables. The legislature specifically intended . . . to only prohibit unfair discrimination in the sale of insurance policies.").

Insurers are instructed to engage in "bias analysis and minimization." Because "bias" is "the differential treatment that results in favored or unfavored treatment of a person, group or attribute," then "bias . . . minimization" on its face requires insurers to reduce "differential treatment that results in favored or unfavored treatment."

But "differential treatment that results in favored or unfavored treatment" is, as explained above, the work of risk classification— "the very essence of the business of insurance,"[4] because "insurance . . . always involves discrimination . . . based on statistical differences."[5]

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[2] Both in insurance regulation, as explained in the CIPR paper, and also in dictionary definitions, which include "recognition and understanding of the difference between one thing and another" (Oxford Languages); and "the quality or power of finely distinguishing, the act or making or perceiving a difference" (Merriam-Webster).

[3] NAIC Amicus Brief to the U.S. Supreme Court in *Nationwide v. Cisneros*, 1996 WL 33467770

[4] NAIC Amicus Brief, supra

[5] Oregon Supreme Court, supra

Thus, a regulatory directive, such as in the Draft bulletin, to engage in "bias . . . minimization," will be challenging to implement for insurers who are engaged in a business that, "by its nature . . . aims to discriminate by risk types and charge premiums accordingly."[6]

"Bias . . . minimization" is presented by the Draft as a regulatory standard—a standard which, based on the Draft's definition of "bias" as equivalent with insurance discrimination, does not square with the prevailing rules about insurance discrimination—which allow, and require, insurers to differentiate and classify insureds based on their risk profile.

The Draft references the term "unfair bias" multiple times, expressing regulatory concern regarding "unfair bias resulting in unfair discrimination" and "unfair bias that leads to unfair discrimination," and "potential harm to consumers from . . . unfair bias resulting from the use of the AI System."

Because "unfair bias" is not a defined term in the Draft, an insurer attempting to understand its compliance obligations would need to turn to the definition of "bias" and infer the most likely meaning of "unfair bias." Since "bias" is defined in a manner equivalent to "discrimination," then "unfair bias" would seem to mean "unfair discrimination." But the Draft speaks of "unfair bias resulting in unfair discrimination" and "unfair bias that leads to unfair discrimination," which unavoidably suggests that "unfair bias" and "unfair discrimination" are not the same thing.

At best,[7] this communicates to the industry an imprecise and confusing regulatory standard, which is antithetical to the purpose of regulatory bulletins—which themselves cannot create law or standards, but rather are used to explain and elaborate on how statutory standards and obligations apply to the market.

The standard for evaluating the fairness of differential treatment of insurance consumers is statutory, well-established, and found, as stated in the Draft, in Section 4, Rate Standards, of the NAIC Property and Casualty Model Rating Law (#1780).

The Model Rating Law instructs that "rates shall not be excessive, inadequate or unfairly discriminatory," and elaborates on the basics of insurance risk discrimination:

> "Risks may be grouped by classifications for the establishment of rates and minimum premiums. Classification rates may be modified to produce rates for individual risks in accordance with rating plans which establish standards for measuring variations in hazards or expense provisions, or both. Such standards may measure any differences among risks that can be demonstrated to have a probable effect upon losses or expenses. No risk classification, however, may be based upon race, creed, national origin, or the religion of the insured."

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[6] CIPR Paper, supra

[7] At worst, because insurers are instructed to avoid both unfair bias and unfair discrimination, this places licensees in the untenable position of being required to follow two different core discrimination standards at the same time.

This is the familiar two-pronged rule that insurers follow throughout the country: A single core standard, applicable to all risk classifications, which must all be based on demonstrable correlation with risk; with a codified exception from the core standard for protected class status, which cannot be a rating factor, even if predictive.

If an insurer's use of AI produces a rating factor which is not predictive of risk or which is itself a protected class, then such conduct is not compliant with the prohibition on unfair discrimination. Insurers have been applying these objective and understandable rules for many decades and are continuing to do so today.

As noted, this Draft represents a thoughtful and important response to issues raised by the use of artificial intelligence by insurers. Critical to the Draft's stated purpose of reminding insurers that they must comply with all applicable insurance laws and regulations when making decisions using AIS is the removal of the word "bias."

Testing and Auditing

While the NAIC acknowledges the problems with testing at the outset, section 3.4 references testing and auditing as part of the risk management and internal controls. It is hard to know from the text what kind of testing that is being referenced and more clarification is needed in this regard. As the bulletin appropriately acknowledged, testing for bias (or similar constructs) has a host of challenges and limitations that will make such testing difficult, imprecise and creates liability risks for insurers. In addition, absent clarification, there could be a host of compliance mismatches across the country with usage of the same product for instance.

Third-party providers

Any required changes to contracts should be forward looking and only at renewal. Section 4.1(a) requires that third parties meet the standards expected of insurers. Many of these vendors aren't insurers themselves but AI vendors. NAMIC would suggest that the third parties meet the standards expected of insurers or other recognized AI standards.

While setting forth expectations for insurers to include a provision in their third-party contracts that they have the right to audit third parties could be helpful (4.19b), many vendors may be resistant to such provisions. In addition, 4.3 suggests that insurers have to perform audits of their third parties. Eventually all third parties will be using AI, so this effectively requires the industry to audit every third party even in cases when due diligence does not uncover an issue or there is low risk. This would be extremely costly and resource intensive. We would suggest insurers should have the flexibility to determine when an audit may be necessary and that judgment should be risk-based, informed by the likelihood of potential concerns based on the due diligence. There is also real risk that an insurer's third-party vendors won't allow us to do audits and certainly not without a sufficient basis to do so. The level of documentation required of vendors will inhibit innovation at insurance companies by making business too onerous and too risky of disclosing trade secrets. Additionally, we recommend amending/changing the third-party audit requirement to be an assessment requirement for further flexibility, and permit insurance companies to review independent audits of vendors rather than requiring each insurer perform its own audit or assessment as an alternative.

Confidentiality Protections

NAMIC would suggest there should be some clear indication in the bulletin that any documents or filings be subject to the highest level of confidentiality protection under state law given the topic itself and the extremely proprietary nature of the discussions in this regard. Over accumulation of data which is unnecessary subjects insurers to potential significant harm and disruption and will ultimately harm policyholders themselves if data is compromised. While NAIC has been sharing information amongst its members for many decades now, we would suggest this is a good time to continue to review and update any existing information-sharing agreements and continue to enhance regulatory protections of this data from cyber-attacks and other unintended exposures.

Board and Governance

The draft suggests Board level involvement. This could be intrusive and seemingly unnecessary to be a Board level committee or even senior management function. While AI/ML is important, insurer self-governance may vary and one approach doesn't necessarily fit all insurance companies (i.e., mutual insurers, associations, reinsurers, stock-held publicly traded insurers are potentially managed differently) or all uses of AI/ML. Rather than requiring the Board to approve the AI system program, management should be charged with implementing a program that matches the risk appetite set by the Board.

The draft suggests use of a centralized or federated committee. Again, this is intrusive, overly prescriptive, and ignores management differences between companies. It may be more effective to have a person with authority and responsibility for AI compliance and who can consult with others within the organization as needed.

Excessive Compliance Burden

There are areas in the Model Bulletin that could be interpreted as being overly prescriptive. For the most part, the draft comes up with general premises that are with exceptions noted accepted as reasonable but then in attempting to explain or expound upon the concept may overly prescribe conduct that may or may not fit particular purposes. We suggest that an overall review of the document with flexibility for particular issues be considered for an even more principle-based approach. Further, to the extent there are already existing applicable governance/compliance obligations, those principles should be leveraged.

<u>Technical Edit Suggestions</u>

With the overall suggestions in mind, please also find some suggested technical and substantive edits, we believe may be helpful in arriving at a final document regarding the AIS Program Guidelines and providing further flexibility in implementation.

- Removing 1.3 would be advantageous and then allow each insurer to address based on their specific enterprise and structure.
- 2.0 Governance: This section is very detailed. Including only the intro section – removing the detailed sub-sections would allow each insurer to address based on their specific governance framework. Remove 2.1 – 2.6.

- 3.0 Risk Management and Internet Controls: This section is very detailed and prescriptive. It would be advantageous to keep this high-level and include only the intro section – removing the detailed sub-sections would allow each insurer to address based on their specific governance framework and own controls (or listing only as optional for insurer consideration). Remove 3.1 – 3.7.
- 4.0 Third-Party AI Systems: This section is very detailed and sets forth numerous contractual requirements (4.2). It would be advantageous to keep this high-level and include only the intro section – removing the detailed sub-sections would allow each insurer to address third parties based on their specific standards and not have strict contractual requirements, which might not be feasible for all third parties (or listing only as optional for consideration). Remove 4.1 – 4.3.
- Even if the various sections above (2.0, 3.0, & 4.0) remain as drafted, an important thought would be to request significant time to implement and comply with the various detailed provisions and requirements. Proposing two years from final version to comply and meet provisions. Noting, with section 4.0 Third-Party AI Systems, we would need time to try and re-negotiate with existing vendors and, if a replacement or new vendor would need to take place, insurers would need time for an RFP and time for new vendor contracting, programming, implementation, etc.

In addition to the above discussion on that essential edit, we offer a few additional suggestions pertaining to the AIS Program Guidelines in the Draft. We note that we generally agree in concept with the principles of governance, risk management and internal control stated in the Draft, but urge you to consider the following edits to provide necessary clarity for regulated entities:

- SECTION 3, 2.0: We suggest the following edit to the second sentence, consistent with state laws protecting proprietary and trade secret information: "Governance should prioritize transparency, fairness, and accountability in the design and implementation of the AI Systems, recognizing that proprietary and trade secret information must be protected."
- SECTION 3, 2.4(a): We suggest editing "all" to "appropriate," noting that not every discipline or unit of an insurer plays a role in AIS governance. This is consistent with the Draft's words "such as" when referencing disciplines and units that would be represented on the governing committee.
- SECTION 3, 4.1: We support the intent of the Draft to encourage insurers to include third-party considerations in their AIS governance but urge a reasonableness standard pertaining to the due diligence assurances, recognizing that third parties have intellectual property rights and may not provide all details that the due diligence provisions of the Draft seem to contemplate. For example: "Due diligence and the methods employed by the Insurer to assess the third-party, its AI Systems, and its AI governance and risk management protocols in order to reasonably assure, based on available information, that third-party AI Systems used to make or support decisions that impact consumers are designed to meet the legal standards imposed upon the insurer itself."

In Summary

We close by again thanking the H Committee for allowing NAMIC to submit oral and written comments to engage on this extremely important discussion on AI systems. We merely point out some of the concerns and inconsistencies as there are issues regarding the ramifications of enforcement of potential alleged standards that do not provide sufficient legal and

compliance support for taking adverse action against insurance companies for their alleged non-compliance of these aspects yet to be determined. The ramifications for industry are enormous as the Model Bulletin results can not only foster additional litigation and reputational risk, but distinct harm to operations that can have longstanding impact and reverberations.

We respectfully suggest, however, that, with respect to the regulatory standards established by the Draft, the use of the commonly understood, statutory term "unfair discrimination" is sufficient—and necessary—to ensure that State bulletins perform their intended and helpful task of providing clear and statutorily grounded guidance to licensees. We thus respectfully urge you to remove "bias," "unfair bias," and "bias . . . minimization" from the Draft and to adopt the other clarifying suggestions made above.

NAMIC looks forward to working with the Committee to arrive at solutions that protect and stabilize the insurance marketplace while fostering growth and innovation that benefit all stakeholders.

Sincerely,

Andrew Pauley, CPCU, WCP
Public Policy Counsel
NAMIC

NATIONAL ALLIANCE OF LIFE COMPANIES
An Association of Life and Health Insurance Companies

September 5, 2023

Commissioner Kathleen Birrane
Chair, Innovation, Cybersecurity, and Technology (H) Committee
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64105

Re: NAIC Model Bulletin: Use of Algorithms, Predictive Models, and Artificial Intelligence Systems By Insurers

Dear Chair Birrane and Committee Members:

I am the Executive Director of the National Alliance of Life Companies (the NALC), a trade group of more than fifty life and health insurance companies and associates that represents the interests of small and mid-sized insurers and their policyholders.

This letter responds to the (H) Committee's request for comments to the proposed draft *NAIC Model Bulletin: Use of Algorithms, Predictive Models, and Artificial Intelligence Systems By Insurers ("Model Bulletin").*

As we stated at the NAIC Summer Meeting in Seattle, Washington, a few weeks ago, we appreciate the efforts by the Committee to seek input on these critical issues. The NALC offers a unique perspective- that of smaller life and health insurers balancing the desire to embrace useful innovation while maintaining close relationships with our customer base.

The NALC appreciates the significant effort that this Committee and the NAIC are making to develop regulatory frameworks suitable for the use of artificial intelligence (AI), machine learning and predictive analytics. AI and other forms of digital innovation will create significant opportunities for companies committing themselves to ethical use of these technologies. This is particularly true for many smaller and medium sized companies that will find it easier to increase efficiency, lower costs, and expand into new products and markets.

The greatest potential beneficiaries to these forms of innovation, however, will be the insurance consumers who stand to benefit greatly from significant improvements in service, increased availability of coverage, pricing, convenience, and eventually, truly innovative products that will enable individuals to manage their key risks in new ways. That is the correct lens to utilize in examining issues around AI.

In our view the Model Bulletin is an important first step in the development of a regulatory framework for AI that achieves the following objectives:

1. Establishes principles for insurers and third-party technology providers/vendors regarding regulator expectations for the responsible use of AI.
2. Enables insurers to design and implement an AI governance framework that is calibrated to the company's current and future use of AI. Particularly from the perspective of smaller and mid-sized

companies, the Committee's decision to adopt a risk-based approach is the most important and significant aspect of the Model Bulletin.

3. Ensures essential flexibility as digital innovation and its use by insurance companies continues to evolve.

While we applaud those steps, there are several areas of concern that we would like to bring to the Committee's attention as it works to finalize the Model Bulletin.

1. Definitions. We appreciate the Committee's desire to provide a degree of clarity around key terms. However, many of those terms are evolving and do not yet have commonly accepted definitions. As the technology continues to develop, so will the common understanding of key terms. The Committee may need to refresh/revisit the Model Bulletin as definitions change to reflect developments in the technology. We are also concerned that some of the definitions, (e.g., "algorithm') may unintentionally capture long accepted actuarial methodologies that clearly fall outside the scope of an effort to regulate insurer use of AI.

2. Third Party AI Systems. We agree that a vital aspect of an insurer's governance and risk management framework for AI includes "due diligence and methods" to assess third party vendor and their technologies. We also appreciate regulators' desire for transparency, including the ability to access and examine third party vendor technologies. In our view, achieving the level of desired transparency with third party vendors presents significant challenges as insurers and third-party vendors work through contractual and other issues. These challenges could be especially difficult for smaller and mid-sized companies that lack the negotiating leverage possessed by larger companies. These issues can be resolved, but these technology vendors need a seat at the regulatory table to better ensure regulator concerns are addressed in a productive manner.

3. Reliance on Existing Statutory Authority. We support the decision to use states' existing legislative and regulatory market regulation authority to govern insurers' use of AI. Given the uneven interpretation and application of many of those standards across states that already occurs in the traditional market regulation context, we have serious concerns about uniform treatment and application of those standards with regards to the use of AI. Specifically, we have a concern that a particular AI process or business use case may be deemed appropriate in one state, and an unfair trade practice in another. Lack of uniformity will discourage the use of innovative tools beneficial to consumers, and potentially punish those at the forefront of innovation. We would encourage the Committee and the NAIC to prioritize achieving meaningful uniformity in this area as a critical and necessary goal.

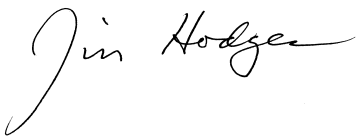
4. Cooperation With Other Policymakers. We note that other state and federal policymakers and regulators are wrestling with these same issues. For instance, other financial service regulators are currently examining the use of AI by their regulated businesses. State legislators are poised to introduce legislation impacting AI as well. Where possible, it is important to collaborate with policymakers and regulators to provide consistent definitions, standards, and expectations. This will not only better spur innovation, but also ensure a fairer and more consistent approach for consumers, insurers and regulators.

5. Communication With Technology Providers. As noted earlier, we believe it is important to bring technology providers to the table to share the points of sensitivity of regulators to try and have those addressed in a manner beneficial to all. This should be an ongoing exercise. It will lead to better products that comply with regulatory concerns and mandates, and will allow all companies, regardless of size, to benefit from positive innovation.

6. Pilot Program. Finally, we believe it is always useful to provide pilot initiatives around new regulatory approaches to test effectiveness and fairness. History provides evidence of plenty of unintended consequences. For that reason, we would suggest the pilot include companies of various sizes in different segments of the insurance markets. This will allow regulators, companies and technology companies to make adjustments prior to broad implementation of new rules.

Thank you again for the opportunity to address our comments.

Sincerely,



Jim Hodges
Executive Director
NALC

616 Fifth Avenue, Suite 106
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CHIEF EXECUTIVE OFFICER: Thomas B. Considine

September 5, 2023

The Honorable Kathleen A. Birrane
Commissioner, Maryland Insurance Administration
Chair, Innovation, Cybersecurity, and Technology (H) Committee
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

Attn: Miguel Romero – Director, P&C Regulatory Services
Via e-mail: maromero@naic.org

RE: NCOIL Comments on Exposure Draft of Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers

Dear Commissioner Birrane:

Thank you for the opportunity to provide comments on the NAIC's exposure draft of a Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers (Bulletin). The National Council of Insurance Legislators (NCOIL) values its longstanding relationship with the National Association of Insurance Commissioners (NAIC), and we look forward to working with you and the Committee on this very important issue.

We acknowledge that comments on the Bulletin are due by today, September 5. However, we have circulated the Bulletin to our Officers and other key NCOIL member legislators for feedback and we are still awaiting some responses. Accordingly, please accept this letter as meeting the September 5 deadline, and we will follow up with specific comments later this month. I do note that some of our member legislators have expressed concerns with the Bulletin, and those will be explained in our follow-up letter.

With appreciation for your consideration and best regards, I am,

Very truly yours,

Thomas B. Considine
CEO
NCOIL

616 Fifth Avenue, Suite 106
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CHIEF EXECUTIVE OFFICER: Thomas B. Considine

September 21, 2023

The Honorable Kathleen A. Birrane
Commissioner, Maryland Insurance Administration
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1100 Walnut Street, Suite 1500
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Attn: Miguel Romero – Director, P&C Regulatory Services
Via e-mail: maromero@naic.org

RE: NCOIL Comments on Exposure Draft of Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers

Dear Commissioner Birrane:

The National Council of Insurance Legislators (NCOIL) appreciates the opportunity to submit these comments, focusing on a few high-level issues, regarding the Draft Model Bulletin on Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers ("the Proposal").

NCOIL Appreciates the NAIC's Attention to These Critically Important Issues

The subject matter of the Proposal is of substantial importance to NCOIL and its members. We commend NAIC for its attention to issues regarding artificial intelligence and proper risk classification. NCOIL has been following these issues for some time and believes that proper regulatory oversight over developing technology is essential for ensuring consumer confidence in this important industry.

Regulatory Bulletins Must Apply, Rather Than Create, Law And Regulatory Standards

As part of that process, we wish to offer our conviction, as representatives of the branch of government that makes the laws, that any bulletin issued by an insurance regulator must be carefully crafted to carry

out its necessary role of applying existing, codified law to market conditions—and to avoid any hint of establishing new legal regulatory standards. Our comments focus on this distinction and are offered in the spirit of the strong and mutually beneficial working relationship between NAIC and NCOIL. The Proposal properly recognizes in its first paragraph that "decisions impacting consumers . . . must comply with all applicable insurance laws and regulations," and entitles its first section "Introduction, Background, and Legislative Authority." This is a proper format for regulatory bulletins, which are not produced by a lawmaking process and therefore must be issued solely in the furtherance of the enforcement of the insurance code crafted by elected legislators.

We believe that defining terms in a Model Bulletin that are undefined in statute or regulation invites regulators to implement the usage of those definitions without proper process and oversight. While we will discuss just two terms from the Proposal herein, we do believe this larger point applies to all uncodified terms.

"Bias" is Not a Statutory Standard, and, as Defined in the Proposal, is Not Nefarious

The direction of the Proposal to insurers to avoid the non-statutory term "bias" is sufficiently troubling to merit special mention. Insurers are instructed to engage in "bias analysis and minimization," and to avoid "unfair bias." This establishes "bias" as a regulatory standard, but bias is not a term found in the insurance codes.

"Bias" is currently defined in the Proposal as "the differential treatment that results in favored or unfavored treatment of a person, group or attribute." This could just as easily be a clinical description of the basic work of the business of insurance—discriminating between, and classifying, risks. *See Telles v. Com'r of Ins.*, 574 N.E.2d 359, 361-362 (Mass. 1991) ("The statutory pattern which deals with insurance regulation authorizes insurers to 'discriminate fairly.'...[T]he basic principle underlying statutes governing underwriting practices is that insurers have the right to classify risks and to elect not to insure risks if the discrimination is fair....The intended result of the...process is that persons of substantially the same risk will be grouped together."); NAIC Product Filing Review Handbook at 12 ("'Unfairly discriminatory' is a concept often based on 'cost based pricing,' with the key word being 'unfairly.' For example, charging different prices to a man vs. a woman is discriminatory; however, it is only unfairly discriminatory if it cannot be reasonably explained by differences in expected costs.").

But the Proposal creates a regulatory standard of "bias analysis and minimization." If bias, the "differential treatment that results in favored or unfavored treatment of a person, group or attribute," is based on risk, then the state insurance statutes authorize (and require) this result—unless the classification method is itself a protected class (or a proxy for protected class under the NCOIL (but not

the NAIC) Model).[1] "Bias . . . minimization" is therefore generally not a goal of the insurance statutes, and instead is generally anathema to these laws.[2]

Algorithm is Defined Very Broadly

Interested parties have raised specific concerns regarding the breadth of some of the definitions used in the Proposal. In the interest of brevity, we limit our comments to one: The Proposal's definition of "algorithm"—"A computational or machine learning process that augments or replaces human decision-making in insurance operations that impact consumers." This definition would appear to impose very burdensome compliance obligations and to extend a new compliance regime designed to protect against AI abuses to more mundane and established practices.

Because computational processes that augment human decision making in insurance operations are well-established and common, and insurers have used technology in this way for decades, this definition appears to be broad enough to sweep in ordinary rating practices which are qualitatively different from the types of artificial intelligence driven decision making that we understand to be the underlying concern behind the Proposal. We thus are concerned that the current definition of "algorithm" could thus impose an unnecessarily costly burden upon insurers.

We also seek a better understanding about how the broad sweep of the definition of "algorithm" and the strictures in the Proposal might interact with existing rules. For instance, would credit based insurance scoring methods which have been in place for as long as a quarter century, and which are comprehensively regulated by the NCOIL Model Act Regarding Use of Credit Information in Personal Insurance, be captured by this definition? If so, is a new compliance regime necessary in an area where consumers are enjoying the benefits of accurate risk classification with substantial, proven regulatory protections?

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[1] *See* NCOIL Property/Casualty Insurance Modernization Act ("'Unfairly discriminatory' refers either to rates that cannot be actuarially justified, or to rates that can be actuarially justified but are based on proxy discrimination. It does not refer to rates that produce differences in premiums for policyholders with like loss exposures, so long as the rate reflects such differences with reasonable accuracy. . . . Risks may be classified in any way except that no risk may be classified on the basis of race, color, creed, or national origin. . . . 'Proxy Discrimination' means the intentional substitution of a neutral factor for a factor based on race, color, creed, national origin, or sexual orientation for the purpose of discriminating against a consumer to prevent that consumer from obtaining insurance or obtaining a preferred or more advantageous rate due to that consumer's race, color, creed, national origin, or sexual orientation."); NAIC Model 1775, Property and Casualty Model Rating Law (File and Use Version) ("Unfair discrimination exists if, after allowing for practical limitations, price differentials fail to reflect equitably the differences in expected losses and expenses.").

[2] The Proposal's other references to "bias"—"unfair bias" "resulting in" or "lead[ing] to . . . unfair discrimination," or causing "potential harm to consumers"—are also problematic. These suggest "bias" is different from discrimination, and "unfair bias" is different from "unfair discrimination." If so, that would be of great concern to legislators, who insist that core regulatory standards can only be created by lawmaking. And if "bias" and "unfair bias" are meant to be equivalent to "discrimination" and "unfair discrimination," then we respectfully suggest that only the latter, statutory, terms should be used.

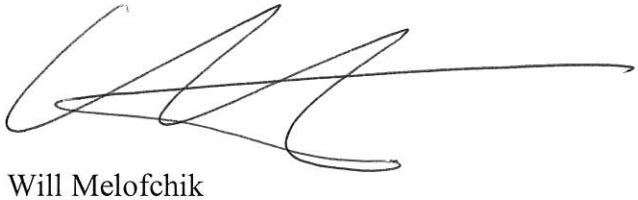
Conclusion

Because the use and utilization of the word "bias" is a significant potential problem that threatens the viability of an otherwise potentially valuable Proposal, we respectfully suggest that this non-statutory term should be removed from the document. Given the already substantively complicated and politically charged recent debates over unfair discrimination standards, we believe it is imperative that any regulatory guidance regarding compliance take place within the confines of codified statutory rules.[3]

We also believe that the Committee should review the scope of its definitions, including considering tightening up the definition of "algorithm" to focus on supervising truly AI-directed decision making rather than established uses of technology in risk classification.

Thank you again for the opportunity to provide these comments, and we look forward to continue working with you on this important issue.

Sincerely,



Will Melofchik
General Counsel
NCOIL

[3] The non-statutory term "bias" has appeared in NAIC dialogue many times throughout the past few years. "Bias" is a floater term being used in a manner which we respectfully suggest can only introduce confusion into this important matter.

KATHY HOCHUL
Governor

ADRIENNE A. HARRIS
Superintendent

National Association of Insurance Commissioners
Innovation Cybersecurity and Technology (H) Committee
444 North Capitol Street NW, Suite 700
Washington, DC 20001

RE: Exposure Draft of the Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers 7/17/2023

Dear Chair Birrane:

The New York State Department of Financial Services ("DFS", the "Department" or "we") appreciates the opportunity to provide the National Association of Insurance Commissioners ("NAIC") with the following comments on the proposed Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers ("Model Bulletin").[1]

The Department supervises and regulates the activities of nearly 3,000 financial institutions across the State of New York, including more than 1,700 insurance companies with assets of more than $5.5 trillion. As a member of the NAIC Innovation Cybersecurity and Technology (H) Committee, the Department collaborates closely with other state insurance regulators on a variety of innovation and emerging technology issues, including the use of artificial intelligence, machine learning, and other algorithmic tools employed by insurers to improve efficiency and customer experiences, while ensuring that robust consumer protection standards are maintained throughout the New York insurance industry.

The Department fully supports responsible innovation and the use of technology to improve access to financial services. In January 2019, the Department took a leading role in this space with the issuance of Circular Letter No. 1, which advised New York life insurers of their legal obligations regarding the use of external consumer data and information sources ("ECDIS")

[1] National Association of Insurance Commissioners, Exposure Draft of the Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers, July 17, 2023, https://content.naic.org/sites/default/files/07172023-exposure-draft-ai-model-bulletin.docx.

in underwriting.[2] There, DFS noted its concern regarding the accuracy and reliability of external data sources, which can vary greatly in quality and often originate from companies not subject to regulatory oversight and consumer protections. Furthermore, the Department is continuing to explore the use of algorithmic decisioning systems, such as artificial intelligence and machine learning in the insurance industry. Given the Department's experience in this area, we encourage the NAIC to consider providing additional guidance within the Model Bulletin on data suitability and model output testing.

I. Additional Guidance on Data Suitability and Testing

The Department fully supports the NAIC's attention to governance and risk management controls as they relate to AI Systems,[3] however the Department believes that further guidance should be provided on data suitability for such AI System. As noted in the Model Bulletin, AI Systems may rely on large amounts of diverse, ever-changing, and sometimes nontraditional forms of data that make it challenging for insurers and regulators to directly test these systems to determine whether the subsequent decisions made comply with all applicable legal standards. Therefore, we believe it is imperative that model inputs be given significant attention and guidance for insurers to understand what types of data are permissible for AI Systems.

The Department believes insurers must be able to demonstrate that the ECDIS and any other variables employed by AI Systems are based on sound actuarial principles. Any such information or variables that are used in the underwriting and pricing process should be supported by generally accepted actuarial principles or actual or reasonably anticipated experience, including but not limited to statistical studies, predictive modeling, and risk assessments. Insurers should demonstrate a clear, empirical, and statistically significant, causal relationship between the variables used and the relevant risk(s) of the insured, regardless of the tools and methods used by insurers.

Furthermore, the Department believes AI System inputs should be properly screened to ensure such data does not serve as a proxy for any protected classes that may result in unfair discrimination between similarly situated policyholders. DFS encourages the NAIC to consider

[2] New York State Department of Financial Services, Insurance Circular Letter No. 1 (2019), January 18, 2019, https://www.dfs.ny.gov/industry_guidance/circular_letters/cl2019_01.

[3] "AI Systems" is an umbrella term describing artificial intelligence and big data related resources utilized by Insurers. *See* Model Bulletin, *supra* note 1.

providing additional guidance on how insurers should properly screen data inputs and conduct proxy assessments.

II. Additional Guidance for Assessing AI System Outputs for Bias

The Department fully supports the NAIC's attention to bias in the Model Bulletin. While recognizing the potential of AI Systems to benefit insurers and consumers alike through potentially more accurate underwriting and pricing assessments, the Department is also cognizant of the potential for AI Systems to replicate historical biases. Therefore, the Department encourages the NAIC to provide additional clarity regarding how insurers should measure and analyze model outputs for potential unfair or unlawful discrimination.

The Department believes disparate impact theory provides an appropriate three-part methodology for insurers to assess whether their AI Systems result in unfair or unlawful bias. Under such an approach, insurers would consider the following:

i. Does the AI System produce disproportionate adverse effects on insured or potential insured individuals of a protected class?;
ii. If there is prima facie showing of such a disproportionate adverse effect, is there a legitimate, nondiscriminatory explanation or rationale for the differential treatment of insured or potential insured individuals of a protected class?; and
iii. If there is a legitimate, nondiscriminatory explanation or rationale for the differential treatment:
    a. Has the insurer conducted and appropriately documented a search and analysis for a less discriminatory alternative variable(s) or methodology that would reasonably meet the insurer's legitimate business needs?; and
    b. If such a less discriminatory alternative exists, has the insurer modified its AI System accordingly?

Furthermore, the Department encourages additional guidance for insurers on quantitative methods for testing for bias. DFS recognizes there is no one-size-fits-all approach to measuring bias and therefore encourages insurers to use multiple statistical metrics jointly in evaluating data and model fairness to ensure a comprehensive understanding and assessment. Such metrics may include, among others:

i. Adverse Impact Ratio: Analyzing the rates of favorable outcomes between protected and control groups to identify any disparities.

ii. Denials Odds Ratios: Computing the odds of adverse decisions for protected groups compared to control groups.

iii. Marginal Effects: Assessing the effect of a marginal change in a predictive variable on the likelihood of unfavorable outcomes, particularly for members of protected classes.

Conclusion

The Department appreciates the opportunity to comment on the Model Bulletin and applauds the NAIC's leadership on this topic. We believe the proposed guidance would be strengthened with additional clarity on AI System input data suitability—in particular, clarification that sound actuarial principles should be present for any variables used in the underwriting and pricing process regardless of tool or methodology—and further guidance on how insurers can assess their AI System output for bias. DFS looks forward to continuing our collaboration with the NAIC and all stakeholders on these important topics.

Respectfully,

John Finston
Executive Deputy Superintendent for Insurance
New York State Department of Financial Services

Kaitlin Asrow
Executive Deputy Superintendent for Research & Innovation
New York State Department of Financial Services

CC: Miguel Romero, Director for Property and Casualty Regulatory Services
National Association of Insurance Commissioners

75 Varick St, 5th Floor
New York, NY 10013

September 5, 2023

Commissioner Kathleen Birrane
Chair, Innovation, Cybersecurity, and Technology (H) Committee
National Association of Insurance Commissioners
1100 Walnut Street, Ste. 1500
Kansas City, MO 64106-2197

Sent via email: MARomero@naic.gov

Dear Commissioner Birrane:

Oscar Health, Inc. ("Oscar") appreciates the opportunity to comment on the July 17, 2023 Exposure Draft of the Innovation, Cybersecurity, and Technology (H) Committee's Model Bulletin entitled "USE OF ALGORITHMS, PREDICTIVE MODELS, AND ARTIFICIAL INTELLIGENCE SYSTEMS BY INSURERS."

As a tech-driven insurer with a vision[1] for how Artificial Intelligence ("AI") can make healthcare more affordable and accessible, Oscar welcomes the opportunity to engage with the NAIC and state regulators to ensure appropriate governance of artificial intelligence so that it can be responsibly used to its full potential.

There are a number of regulatory constructs that already exist to protect consumers in insurance transactions–thus, any AI-specific regulation should focus on AI-specific risks and the specific governance in place to mitigate those unique risks. Oscar believes that regulators and ultimately our members will be best served by narrowing the focus of regulatory oversight to high-risk AI use cases. In this vein, we offer the following comments on the bulletin:

(1) **Oscar agrees that all three of the cited laws in the draft bulletin should and do currently apply to AI: Unfair Trade Practices Model Act (#880), Unfair Claims Settlement Practices Model Act (#900), and Corporate Governance Annual Disclosure Model Act (#305) (CGAD). Oscar further appreciates that the NAIC is working to standardize regulator expectations for payer self-governance of AI, and level-setting expectations for Market Conduct Examinations in a way that is predictable and uniform.**

[1] See: https://www.hioscar.com/ai

(2) **Oscar cautions that as currently drafted, the proposed definitions of "AI Systems,"[2] "Artificial Intelligence,"[3] and "Big Data"[4] create a regulatory focus that is far too broad, potentially subjecting low-risk, established use cases to comprehensive oversight and diverting needed focus on items of significant risk. These broad terms also detract from the standardization and clear direction that the bulletin otherwise seeks to provide.**

As currently defined, the terms trigger many innocuous automations that rely on data and analytics to inform future predictions, which can encompass widely accepted practices as simple as spell check in internet browsers or filters for spam or relevant search results. These definitions could have the unintended consequence of triggering vigorous audits and oversight of low-risk, widely accepted AI use cases, rather than carefully targeting the AI use cases that are most prone to the unique risks outlined in the bulletin.

These broad definitions also undermine the bulletin's attempt to create a scalable, risk-based framework to the AIS program. Page 4 of the Bulletin introduces the concept of scalability in an AIS Program, stating that:

> *An AIS Program that an Insurer adopts and implements should be reflective of, and commensurate with, the Insurer's assessment of the risk posed by its use of an AI System, considering the nature of the decisions being made, informed, or supported using the AI System; the nature and the degree of potential harm to consumers from errors or unfair bias resulting from the use of the AI System; the extent to which humans are "in-the-loop"; and the extent and scope of the Insurer's use or reliance on data, models, and AI Systems from third parties."*

Scalability is also consistent with the Principles Document adopted by the Task Force in 2020, which states that "The level or regulatory oversight may vary based on the risk and impact to the consumer."[5]

However, a payer's own assessment of risk (and corresponding governance framework the payer assigns to such risk) may not be sufficient oversight if the regulator's view of such risk is broader, since the broad definitions subject any use case at all to regulatory scrutiny. In this way, the breadth of the definitions in this bulletin dilutes the intended clarity of regulator expectations with regard to the required scope of the AIS Programs, and the breadth of self-governance expected for the purpose of market conduct exams**.**

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[2] "**AI Systems**" is an umbrella term describing artificial intelligence and big data related resources utilized by Insurers.

[3] "**Artificial Intelligence**" is a term used to describe machine-based systems designed to simulate human intelligence to perform tasks, such as analysis and decision-making, given a set of human-defined objectives. This definition treats machine learning as a subset of artificial intelligence.

[4] "**Big Data**" are data sets that are characterized by, at a minimum, their volume (i.e., size), velocity (i.e., speed of transmission), and variety (i.e., internal, external, including third-party data) that requires scalable computer architecture to analyze and model.

[5] See: "National Association of Insurance Commissioners (NAIC) Principles on Artificial Intelligence (AI). Available online at: https://content.naic.org/sites/default/files/inline-files/NAIC%20Principles%20on%20AI.pdf at page 1 (accessed 8/30/23).

(3) **Oscar suggests that these definitions be narrowed to focus AIS Programs and Market Conduct Inquiries on AI applications that truly create unlawful risks such as unfair discrimination in decision making (i.e., applications to underwriting and rate making), thus necessitating the thoughtful self-auditing and oversight by payers contemplated by this bulletin.**

A more refined definition and scope for self-governance and market conduct examinations will enable payers to effectively apply a safe, secure, and robust risk-based approach to AI governance.

(4) **As regulators and industry evaluate the opportunities and risks that new AI technologies pose, we recommend that we evaluate their performance against the best human alternative currently in use.**

While AI is still in early stages of development and in some cases poses risk for inaccuracy and bias, the current human processes for similar use cases often present these same dangers to consumers (if not more so). Oscar believes that human errors and biases can be reduced with the help of AI models in the long-term.

(5) **Finally, we echo the comments proffered by our trade group, AHIP, with respect to third party vendors.**

Due to the proprietary nature of the information held by third party vendors, it is not feasible to require an Insurer to require a non-Insurer third-party to subscribe to 100% of the requirements on the insurer for internally generated models. More public discussion on the appropriate level of third party oversight in this space should occur, and should include direct feedback from prominent third party vendors on feasibility, practicality and competitive concerns.

We welcome the opportunity to further discuss these comments and to serve as a resource to the NAIC as it continues its work on this bulletin. We appreciate your consideration of stakeholder comments on this draft.

Sincerely,

C Grason

Catherine Grason, Esq.
Senior Counsel and Head of Government Affairs
Oscar Health

About Oscar

Since its founding in 2012, Oscar, the first health insurance company built around a full stack technology platform, has been on a mission to make a healthier life accessible and affordable for all. By leveraging technology and member engagement to design innovative products, Oscar is able to improve healthcare outcomes and reduce the total cost of care for its members.

Memo

To:	Commissioner Kathleen A. Birrane (Chair of the NAIC: Innovation, Cybersecurity and Technology (H) Committee)
From:	Dave Heppen, FCAS, MAAA (Partner, RRC) Lauren Cavanaugh, FCAS, MAAA (Actuarial Consultant, RRC) Jennifer Balester, FCAS, MAAA (Actuarial Consultant, RRC) Scott Merkord, FCAS, MAAA (Actuarial Consultant, RRC)
Date:	September 5, 2023
Subject:	RRC Comments Regarding the NAIC Model Bulletin: Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers

Background

The Innovation, Cybersecurity and Technology Committee provided a model bulletin regarding the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers.

RRC appreciates the opportunity to offer our comments. Should you have any questions, we would be glad to discuss our comments with you and the Committee members.

RRC Comments

We applaud the Committee for its work related to the topic of Algorithms, Predictive Models, and Artificial Intelligence Systems (AIS) by Insurers. We provide the following comments to aid members of the Committee as they work towards a final NAIC Model Bulletin.

1. The issues, information, and documentation that Departments may request during an investigation or examination related to the topics of algorithms, predictive models, and artificial intelligence are related to the general concept of model risk. The phrase model risk does not appear anywhere within the bulletin. The Committee may consider including definitions of model and model risk. Such definitions would provide clarity and allow the Committee to connect the specialized concepts referenced throughout the bulletin to model risk. Further, the Committee may consider referencing any current NAIC guidance or model bulletins related to model risk if they exist today. Actuarial Standard of Practice No. 56 *Modeling*[1] ("ASOP 56") defines model risk as "The risk of adverse consequences resulting from reliance on a model that does not adequately represent that which is being modeled, or the risk of misuse or misinterpretation." ASOP 56 defines a model as "A simplified representation of relationships among real world variables, entities, or events using statistical, financial, economic, mathematical, non-quantitative, or

[1] ASOP No. 56: http://www.actuarialstandardsboard.org/asops/modeling-3/

scientific concepts and equations. A model consists of three components: an information input component, which delivers data and assumptions to the model; a processing component, which transforms input into output; and a results component, which translates the output into useful business information."

2. Under Section 2: Definitions, the Committee has defined several terms including AI Systems, Artificial Intelligence, and Big Data. Given the complexity of the topics along with a wide range of audience expertise, more focused definitions would provide further clarity for insurers and regulators.
3. Within Section 2: Definitions, we recommend that the Committee also include definitions for unfair bias, unfair discrimination, deep learning, and drift.
4. Under Section 3: Regulatory Guidance and Expectations, the bulletin states "all Insurers authorized to do business in this state are encouraged to develop, implement, and maintain a written program for the use of AI Systems that is designed to assure that decisions impacting consumers made or supported by AI Systems are accurate and do not violate unfair trade practice laws or other applicable legal standards." We acknowledge that the bulletin references existing governance in Section 2.0. The Committee may consider also referencing model risk management programs that are currently used by insurers under Section 2.0 and/or 3.0. The Committee may consider elaborating how the AIS program should be connected to and/or incorporated into any current model risk management programs.
5. Within Item 1.1, the bulletin states the "AIS Program should be designed to mitigate the risk that the Insurer's use of AI Systems to make or support decisions that impact consumers will result in decisions that are arbitrary or capricious, unfairly discriminatory, or that otherwise violate unfair trade practice laws." We recommend that the Committee expand the scope to also include the impact to consumers of decisions that are based on model output that is inaccurate.
6. Within Item 1.4, National Institute of Standards and Technology is referenced. We recommend that a specific risk management framework from this organization be described or referenced further through a footnote such as the Artificial Intelligence Risk Management Framework version 1.0.
7. Within Item 1.5, we recommend adding pricing to the list of the insurance product life cycle.
8. Within Item 1.6, we recommend that the Committee list the expected phases of the AI System's life cycle to add clarity. We would propose the following phases of a life cycle: Design, Development, Validation, Implementation (both systems and business), Use, Ongoing Monitoring, and Updating/Retirement. If the Committee identifies the life cycle phases, additional clarity in the bulletin would allow more effective frameworks across insurers.
9. Within Item 2.4(a), we recommend including claims along with the other listed disciplines.
10. Within Item 2.6, we recommended including "updating" predictive models within the other items already referenced.
11. Within Item 2.6, the bulletin specifies "…including a description of methods used to detect and address errors or unfair discrimination in the insurance practices resulting from the use of the predictive model." While we understand the Committee may not want to prescribe methods, we believe that more details and guidance on the methods used to detect and address unfair discrimination resulting from the use of the predictive model would be helpful to insurers.
12. Within Section 4.0, we recommend that third party-data used by AI systems be included. We recommend the following title for Section 4.0: "Third-Party AI Systems and Third-Party Data". We

recommend the following language: "Each AIS Program should address the Insurer's standards for the acquisition, use of, reliance on AI Systems developed or deployed by a third-party, or use of third-party data within an AI System, including, as appropriate, the establishment of standards, policies, procedures, and protocols relating to:".

13. Within Item 4.2(d), we agree that the proposed guidance is helpful for the regulation of algorithms, predictive models, and AI systems. In practice, this item may be difficult to implement given current written contracts between an insurer and third-party vendor and unwillingness of third-party vendors to share information with insurance regulators. In the initial implementation, the Committee may consider alternative approaches to gaining comfort over the third-party models, such as reviewing the AIS Program, or reviewing reports by qualified auditing entities.
14. The bulletin does not include guidance around the final outcome of the model use. The Committee should consider that it may not be sufficient to ensure that the model itself does not produce unwanted outcomes. The final outcome of decisions that are influenced by a model also have human intervention (e.g., underwriters, claims adjusters) that should be assessed for adherence to statutes and regulations.
15. Within Section 3.0, we recommend an additional item focused on variables. We recommend an additional item 3.3(f) that states "A list of all variables within the AI System along with an attestation that the variables are approved by all states where the model is utilized."

Thank you for the opportunity to provide comments on this important bulletin. We can be reached at the contact information below if you or other members have any questions.

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U.S. Chamber of Commerce

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September 5, 2023

Commissioner Kathleen Birrane, Chair
Mike Conway, Co-Vice Chair
Doug Ommen, Co-Vice Chair
Innovation, Cybersecurity, and Technology (H) Committee
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

Re: Comments on NAIC Model Bulletin on Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers

Dear Chair Birrane and Co-Vice Chairs Conway and Ommen:

The U.S. Chamber of Commerce ("Chamber") appreciates the opportunity to provide comments on the NAIC Model Bulletin on "Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers.[1]" The Chamber represents industries from all sectors, including the insurance and financial sectors. As such, the Chamber has concerns about the proposed model bulletin in its current form.

Artificial intelligence is poised to transform our world, and it will help us solve problems and work more efficiently. It's assisting scientists in developing vaccines and treating patients more effectively, securing our nation's networks and critical infrastructure against cyberattacks, alerting customers of bank fraud and expanding financial opportunities for underserved communities through access to credit, and much more. However, to meet this moment, we must all work together to address potential concerns while witnessing the outstanding benefits of the technology. For this reason, the Chamber is providing the following high-level comments on the model bulletin.

The Chamber appreciates the model bulletin's understanding that insurers already "must comply with all applicable laws and regulations[2]." The Chamber agrees that enforcement of existing laws is paramount; our independent AI commission recently found, "Appropriate enforcement of existing laws and regulations provides regulatory certainty and guidance to stakeholders[3]."

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[1] Materials - Innovation, Cybersecurity, and Technology (H) Committee (naic.org)
[2] Materials - Innovation, Cybersecurity, and Technology (H) Committee (naic.org)
[3] https://www.uschamber.com/assets/documents/CTEC_AICommission2023_Report_v6.pdf

Furthermore, we appreciate the NAIC's acknowledgment of the National Institutes of Standards and Technology (NIST) work regarding Artificial Intelligence. The Chamber has long supported NIST's work, including their recently published AI Risk Management Framework. The Chamber strongly supported the NIST AI Risk Management Framework's "open and iterative process…and the Framework represents a promising collaborative risk management model.[4]" The Chamber supports an interactive process such as the soon-to-be-developed NIST profiles, which "illustrate and offer insights into how risk can be managed at various stages of the AI lifecycle or in specific sector, technology, or end-use applications. AI RMF profiles assist organizations in deciding how they might best manage AI risk that is well-aligned with their goals, considers legal/regulatory requirements and best practices, and reflects risk management priorities.[5]"

The following are areas in which the Chamber would like to highlight our concerns with the NAIC's Model Bulletin:

The term "bias" is not based in existing insurance law or regulation.

As noted above, the stated purpose of the bulletin is to remind insurers that decisions made or supported by artificial intelligence systems must comply with existing laws and regulations. State laws and regulations governing insurance do not mention the term "bias." The insertion of this term into the bulletin is not only counter to the bulletin's stated purpose, but also counter to established legal constructs. It is critical that each reference to "bias" is removed. The bulletin rightfully references various laws that do govern insurers' use of artificial intelligence, including state Unfair Claims Practices Act provisions and requirements that insurance rates are not "unfairly discriminatory."

Terminology & Definitions:

The Chamber has strongly advocated the need for appropriate harmonization around terminology and definitions regarding Artificial Intelligence. For this reason, we believe that terms and definitions used within the bulletin must be precise, consistent, and aligned with definitions already in law.

Board Adopted:

[4] https://americaninnovators.com/advocacy/letter-to-senators-hickenlooper-and-blackburn-on-trustworthy-ai/

[5] https://airc.nist.gov/AI_RMF_Knowledge_Base/AI_RMF/Core_And_Profiles/6-sec-profile

The Chamber fully believes that good AI governance comes from an entire organization participating in these critical discussions and each person within an organization understanding their essential roles within the AI life cycle. We agree that the board should have knowledge of their organization's written program for the use of AI Systems (program) and receive reports. However, development and implementation should be delegated to senior management. We suggest clarifying that the board does not necessarily need to write the program.

Needed Clarity:

The Chamber believes the following areas need further clarity within the model bulletin so that stakeholders can understand the practicality of the bulletin if it is to be put into practice.

- Section 1.4: States that a Program must be "proportionate with the Insurer's use and reliance on AI and AI Systems." We believe that such a Program should be proportionate to risk, rather than use. We suggest changing the wording to "appropriate for the insurer's uses." or "proportionate to the risk of such systems".
- Sections 1.5 and 1.6: As written, appear to be redundant. These should be combined, or differences clarified.
- Section 2.4.F: Requires "the independence of decision-makers and lines of defense at successive stages of the AI System life cycle." Clarifying what determines independence is essential to ensure compliance with this requirement.
- Section 3: On page 4, paragraph 2, the phrase "complex and often opaque predictive models" is used. We believe the "often opaque" wording is not appropriate and implies that the models are not explainable and/or assessments are not possible. Difficulties in assessments are acknowledged in the paragraph below and should be adequate. We suggest removing "often opaque".
- Section 3.3: refers to "measurements," but not all items listed are amenable to quantitative measures. For this reason, we would suggest using the term "assessments" instead.
- Section 4.2: requires the inclusion of specific terms in insurers' contracts with third-parties, many of which may not be palatable to third-party service providers. The requirement in 4.2(d), requiring third-parties to subject themselves to the jurisdiction of insurance regulators would be particularly difficult.
- Section 4.2C and D: We suggest combining these very similar items. Also, this section should consider the intellectual property rights of the third party.

Third-Party AI Systems and Vendor Management:

The Chamber supports the AI Model Bulletin's intent to encourage insurers to include third-party AI considerations in their program governance. As suggested above, we would like to see further consideration for intellectual property rights and alternative strategies for ensuring third-party compliance. Furthermore, we believe further discussions around standards development with all stakeholders regarding developers' and deployers' responsibilities and information sharing is vital.

We appreciate the opportunity to outline our initial concerns with the model bulletin. The comments above provide a non-exhaustive list of changes we believe must be made to the bulletin to allow adequate review from stakeholders and to ensure the proposal is workable.

Sincerely,

Michael Richards
Director
Chamber Technology Engagement Center
U.S. Chamber of Commerce

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September 5, 2023

The Honorable Kathleen A. Birrane
Maryland Insurance Administration
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Suite 2700
Baltimore, MD 21202

Re: Comments on the Exposure Draft of the Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers

Dear Commissioner Birrane,

The Virginia Bureau of Insurance ("Bureau") appreciates the ability to offer its comments on the exposure draft of the Model Bulletin on the Use of Algorithms, Predictive Models, and Artificial Intelligence Systems by Insurers (the "Model Bulletin") released by the Innovation, Cybersecurity, and Technology (H) Committee and its Big Data and Artificial Intelligence (H) Working Group on July 17, 2023.

The Model Bulletin correctly notes, "Artificial Intelligence (AI) techniques, including the application of sophisticated algorithms and machine learning (ML) to big data (BD), are transforming the insurance industry."[1] The use of algorithms, predictive models, and AI Systems (collectively referred to as "AI Systems" for ease hereafter) in the insurance industry has the potential to transform how insurers conduct business in a way that will benefit policyholders, but their use also presents the risk of unfair discrimination, perpetuating inaccuracies, and data vulnerability.

We find the work on the Model Bulletin to be important, timely, and in line with other recent regulatory developments.[2] The Model Bulletin is appropriately tailored to the insurance industry, striking a delicate

[1] Model Bulletin at 1.

[2] The Colorado Division of Insurance is in the process of adopting a new regulation to improve governance and risk management related to AI Systems. *See Governance and Risk Management Framework Requirements for Life Insurers' Use of External Consumer Data and Information Sources, Algorithms, and Predictive Models*, Draft Proposed New Regulation 10-2-XX, *available at* https://drive.google.com/file/d/1AY5UJrU7B_SN3jP-7T-Jay803xp7gdAH/view. The National Institute of Standards and Technology ("NIST") released its "Artificial Intelligence Risk Management Framework" in January of this year. *See NIST Risk Management Framework Aims to Improve Trustworthiness of Artificial Intelligence* (rel. Jan. 26, 2023), *available at* https://www.nist.gov/news-events/news/2023/01/nist-risk-management-framework-aims-improve-trustworthiness-artificial. The White House released a "Blueprint for an AI Bill of Rights" in October 2022. *See Blueprint for an AI Bill of Rights: Making Automated Systems Work for the American People* (rel. Oct. 2022), *available at* https://www.whitehouse.gov/wp-content/uploads/2022/10/Blueprint-for-an-AI-Bill-of-Rights.pdf. The European Union is negotiating an artificial intelligence regulation after the European Parliament adopted a framework for the regulation in June. *See EU AI*

balance by offering meaningful guidance to industry without stifling continuing innovation. It succeeds in doing so by reminding insurers to engage in proper corporate governance, prudent risk management, and strong internal controls in this quickly evolving and ever-changing area.

The Bureau offers the comments below for the Committee's and Working Group's consideration. These comments seek to build upon the strong work set forth in the exposure draft.

1. *The Model Bulletin should include guidance on regulatory expectations that insurers be transparent with their policyholders, the insurance-buying public, and other stakeholders.*

The Model Bulletin succeeds, in large part, because it builds on the Principles of Artificial Intelligence (the "Principles") adopted by the NAIC in 2020[3] with clear, substantive guidance. We would note, however, that unlike the Principles, the Model Bulletin provides little guidance on the need for transparency by insurers regarding their use of AI Systems.

The Bureau believes that the Model Bulletin should provide additional guidance on regulatory expectations of transparency for insurers using AI Systems. Building from the Principles of committing to "responsible disclosures" regarding AI Systems and allowing stakeholders to "inquire about, review and seek recourse for AI-driven insurance decisions," we propose new text to be added to Section 3:[4]

> 1.8. The AIS Program should provide plain language documentation that includes clear descriptions of overall AI System function, the role AI Systems play, notice that AI Systems are in use, and explanations of outcomes from AI Systems (including a description of decisive factors) that are clear, timely, accessible, and informative about potential recourse.

2. *Testing, retesting, and validation of results are key components of an insurer's AIS Program and must be added to the Model Bulletin's regulatory expectations.*

To ensure compliance with applicable laws and regulations, including prohibitions against unfair discrimination, the Bureau expects insurers to engage in regular testing of their AI Systems. Testing should occur before an insurer incorporates an AI System into practice. Retesting should occur on regular intervals and in response to regulatory inquiries and compliance concerns. Insurers should also validate their results from testing and retesting.

We therefore recommend that testing, retesting, and validation be added to the list of regulatory expectations of an AIS Program in Section 3 of the Model Bulletin. Relatedly, we also propose that the Model Bulletin include regulatory expectations that insurers provide documentation, upon request, to support their testing, retesting, and validation practices along with the results of such testing. These expectations are consistent with best practices to protect policyholders and the insurance-buying public.

Act First Regulation on Artificial Intelligence (rel. June 8, 2023), *available at* https://www.europarl.europa.eu/news/en/headlines/society/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence.

[3] *National Association of Insurance Commissioners (NAIC) Principles of Artificial Intelligence (AI)* (adopted Aug. 14, 2020), *available at* https://content.naic.org/sites/default/files/inline-files/AI%20principles%20as%20Adopted%20by%20the%20TF_0807.pdf.

[4] *Id.* at 2.

3. *The Model Bulletin should be streamlined into a short bulletin followed by an addendum of regulatory expectations.*

The Bureau believes the Committee and Working Group should consider streamlining and restructuring the Model Bulletin to better convey its guidance and remove some duplication in its current form. We propose restructuring the Model Bulletin into two parts: (i) a short bulletin that streamlines Sections 1 and 2, and (ii) an addendum of guidance of the state's regulatory expectations combining Sections 3 and 4.

A streamlined Model Bulletin would better emphasize its core message: a reminder to all insurers that "decisions impacting consumers that are made or supported by advanced analytical and computational technologies," including AI systems, "must comply with all applicable insurance laws and regulations."[5]

The first part of the streamlined Model Bulletin would emanate from the core message and be comprised of the background, legislative authority, and definitions sections.[6] It would end with a statement that what follows is an addendum which will be incorporated into the state's examination handbooks and provides notice and guidance to all insurers of the state's regulatory expectations with respect to the use of AI Systems. These expectations, found in the second part of the Model Bulletin, form the basis for the state's future examination of insurers using AI Systems.

Please do not hesitate to reach out with any questions.

Sincerely,

/s/ Scott A. White

Scott A. White
Commissioner of Insurance

[5] Model Bulletin at 1.

[6] Each state must be able to tailor the legislative authority and definitions sections to its specific circumstances or remove them altogether.