

CLIENT ALERT

AI in Insurance Update: NYDFS Releases Proposed Insurance Circular Letter on the Use of Artificial Intelligence in Insurance Underwriting and Pricing

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I. Introduction

On January 17, 2024, the New York Department of Financial Services (“DFS”) rejoined the race to regulate the use of artificial intelligence in insurance. DFS released for public comment a proposed circular letter titled *Use of Artificial Intelligence Systems and External Consumer Data and Information Sources in Insurance Underwriting and Pricing* (the “Draft Circular Letter”),¹ outlining its expectations for how insurers develop and manage their use of external consumer data and information sources (“ECDIS”) and artificial intelligence systems (“AIS”) to mitigate potential harm to consumers in underwriting and pricing. The comment period ends on March 17, 2024.

II. The Context

The Draft Circular Letter joins other recent regulatory activity focused on the use of artificial intelligence in insurance, including prior action taken by Colorado, the National Association of Insurance Commissioners (the “NAIC”) and DFS’s own Insurance Circular Letter No. 1 (2019) (the “2019 Circular Letter”).

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Colorado

In June 2021, Colorado passed a first-of-its-kind statute prohibiting insurers from using ECDIS, as well as algorithms or predictive models that use ECDIS, in a way that unfairly discriminates based on protected class.² As required by the statute, the Colorado Division of Insurance (“CO DOI”) has engaged in a stakeholder process to effectuate this law, and in August 2023 it adopted a regulation requiring life insurers authorized to do business in Colorado to establish a governance and risk management framework to oversee the use of ECDIS, as well as algorithms and predictive models that use ECDIS.³ In September 2023, CO DOI released for public comment a proposed quantitative testing regulation establishing a testing regime for life insurers authorized to do business in Colorado to ensure that use of ECDIS, algorithms and predictive models do not result in unfairly discriminatory outcomes.⁴ CO DOI is also currently engaging in a stakeholder process to enact regulations specific to the use of artificial intelligence in private passenger auto insurance.

NAIC

At its recent 2023 Fall National Meeting, the NAIC adopted a model bulletin, *Use of Artificial Intelligence Systems by Insurers* (the “Model Bulletin”), outlining how state regulators can use existing statutory authority to govern the development, acquisition and use of artificial intelligence technologies.⁵ The Model Bulletin lays out the types of information and documentation that regulators may request during an investigation or examination. It also requires insurers to develop, implement and maintain a written governance program to ensure that the use of AIS does not violate existing law.

New York

In 2019, DFS was a first mover among U.S. regulators to impose specific requirements on the use of artificial intelligence in insurance by releasing the 2019 Circular Letter. The 2019 Circular Letter, in short, provided guidance on the use of artificial intelligence in life insurance underwriting, by seeking (i) to mitigate unfair discrimination in life underwriting and (ii) to provide transparency and disclosure to consumers in the event of an adverse underwriting decision.

With the Draft Circular Letter, DFS reclaims its first-mover status. As highlighted in the following summary, in several areas the Draft Circular Letter’s requirements go beyond CO DOI’s adopted and proposed regulations and the NAIC’s Model Bulletin. It also goes well beyond the 2019 Circular Letter, sweeping in all lines of insurance and specifically requiring quantitative testing for disproportionate adverse effects.

III. The Draft Circular Letter

The Draft Circular Letter applies to all insurers authorized to write insurance in New York. Unlike CO DOI’s governance and risk management regulation and the NAIC’s Model Bulletin, the Draft Circular Letter only applies to the use of ECDIS⁶ and AIS⁷ in underwriting and pricing, not other phases of the insurance life cycle. It also emphasizes that DFS has the right to audit and examine an insurer’s use of ECDIS and AIS, within the scope of regular or targeted examinations pursuant to New York Insurance Law.⁸

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Fairness Principles

The Draft Circular Letter lays out several “fairness principles” which are meant to guide insurers’ use of ECDIS and AIS in underwriting and pricing.

Unfair Discrimination. Insurers should only use ECDIS or AIS that are established to be not unfairly discriminatory against protected classes.⁹ Similarly, insurers should be able to demonstrate that ECDIS does not serve as a proxy for protected classes in a way that results in unfair discrimination. Insurers should be able to demonstrate that the ECDIS used (i) are supported by accepted actuarial standards, (ii) are based on actual or reasonably anticipated experience and (iii) show a statistically significant, rational and not unfairly discriminatory relationship between the variables used and the relevant risk.

Insurers should use a comprehensive assessment to ensure that underwriting and pricing guidelines are not unfairly discriminatory. This comprehensive assessment should include, at a minimum:

- (i) An assessment of whether the use of ECDIS or AIS produces disproportionate adverse effects in underwriting and/or pricing on similarly situated insureds. If there is no prima facie showing of a disproportionate adverse effect, the insurer may conclude its evaluation;
- (ii) If there is a prima facie showing of disproportionate adverse effect, the insurer must further assess whether there is a legitimate rationale for the differential effect. If there is no legitimate rationale, the insurer must modify its use of such ECDIS or AIS; and
- (iii) If there is a legitimate rationale for the differential effect, insurers should conduct a documented search and analysis for a less discriminatory alternative methodology that would reasonably meet the insurer’s legitimate business needs. If such an alternative exists, the insurer should modify its use of ECDIS or AIS accordingly.

This requirement is notable compared to other regulators’ requirements, which prohibit the use of AIS or ECDIS that has an unfairly discriminatory outcome. By contrast, the Draft Circular Letter requires a pre-use assessment to establish that proposed AIS or ECDIS are not unfairly discriminatory and only then may the AIS or ECDIS be engaged.

Documentation. Insurers should document the processes and reasoning behind their testing methodologies and analysis for unfair discrimination, commensurate with the insurer’s use of ECDIS and the complexity and materiality of the ECDIS. Such documentation should be made available to DFS upon request.

Testing. Testing should be administered prior to putting AIS into production and on a regular cadence thereafter, as well as whenever material updates or changes are made to either ECDIS or AIS.

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Testing should include both quantitative and qualitative assessments. For the quantitative assessment, the Draft Circular Letter encourages insurers to use multiple statistical metrics in evaluating data and model outputs to ensure a comprehensive assessment.¹⁰ For the qualitative assessment, insurers must be able to explain how the AIS operates and the intuitive logical relationship between ECDIS and other model variables with an insured's or potential insured's individual risk.

Governance and Risk Management

The Draft Circular Letter requires existing corporate governance frameworks to be appropriately modified to encompass the insurer's use of ECDIS and AIS as is appropriate for the nature, scale and complexity of the insurer.¹¹

Board Responsibility. The ultimate oversight responsibility of ECDIS and AIS rests with the insurer's board of directors (or equivalent governing body). The board of directors may delegate its duties regarding management of ECDIS and AIS to a board committee or senior management. There must exist, however, adequate lines of reporting to meet the board's information needs.

Senior Management Responsibility. Senior management is responsible for the day-to-day implementation, development and management of ECDIS and AIS. This includes establishing adequate policies, procedures, staff and other actions to ensure proper implementation and use of the ECDIS and AIS. To this end, the Draft Circular Letter recommends creating a cross-functional management committee with representatives from key function areas.

Policies and Procedures. Insurers should formalize their development and management of ECDIS and AIS in written policies and procedures. The policies and procedures should include clearly defined roles and responsibilities, and monitoring, reporting and training requirements. The insurer's board or senior management (if so delegated) should review and approve these policies and procedures at least annually to ensure they are kept current with the insurer's use and industry best practices.

Training. Trainings should be in a manner that is appropriately tailored to the individual level of the trainee's responsibilities, and staff should be held accountable for completing trainings in a timely manner.

Documentation. Insurers should maintain comprehensive documentation for their use of all AIS and ECDIS, whether developed internally or by a third party.¹² This documentation should be made available to DFS upon request and should include:

- (i) a description of the process for identifying and assessing operational, financial, and compliance risks associated with an insurer's use of ECDIS and AIS and associated internal controls designed to mitigate such risks;
- (ii) an up-to-date inventory of all AIS implemented for use, under development or recently retired;

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- (iii) a description of how each AIS operates, including any ECDIS or other inputs and their sources, the purpose and products for which the AIS is designed, actual or expected usage, any restrictions on use and any potential risks and appropriate safeguards;
- (iv) a description of the process for tracking changes of an insurer's use of ECDIS and AIS over time, including documented explanation of any changes, associated rationale for such changes, and parties responsible for the approval of such changes;
- (v) a description of the process for monitoring ECDIS and AIS usage and performance, including a list of any previous exceptions to policy and reporting;
- (vi) a description of testing conducted to periodically assess the output of AIS models, including drift that may result from the use of machine learning or other automated updates;
- (vii) a description of data life cycle management process, including ECDIS acquisition, storage, usage and sharing, archiving and destruction; and
- (viii) records of consumer complaints in relation to the use of AIS and ECDIS.

Consumer Complaints. Insurers must prepare a system for responding to and addressing consumer complaints and inquiries about the use of AIS and ECDIS.

Risk Management. Insurers should include AIS within an enterprise risk management function to manage risks and formulate standards for each stage of the AIS life cycle. Insurers must consider risk from individual models as well as in the aggregate. Personnel must also be competent and qualified for their clearly defined roles and responsibilities with appropriate accountability.

Insurers should ensure that their internal audit function is appropriately engaged with the insurer's use of ECDIS and AIS, consistent with the relevant risks. The audit should assess the overall effectiveness of the AIS and ECDIS risk management framework, which includes:

- (i) verifying that acceptable policies and procedures are in place and are appropriately adhered to;
- (ii) verifying records of AIS use and validation to test whether validations are performed in a timely manner and AIS models are subject to controls that appropriately account for any weaknesses in validation activities;
- (iii) assessing the accuracy and completeness of AIS documentation and adherence to documentation standards, including risk reporting;

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- (iv) evaluating the processes for establishing and monitoring internal controls, such as limits on AIS usage;
- (v) assessing supporting operational systems and evaluating the accuracy, reliability and integrity of ECDIS and other data used by AIS;
- (vi) assessing potential biases in the ECDIS or other data that may result in unfair or unlawful discrimination against insureds or potential insureds; and
- (vii) assessing whether there is sufficient reporting to the board or other governing body and senior management to evaluate whether management is operating within the insurer's risk appetite and limits for model risk.

Third-Party Vendors

The Draft Circular Letter clarifies that compliance by insurers with anti-discrimination laws is irrespective of whether the insurer is itself collecting and using the underlying data or is contracting with external vendors of ECDIS and AIS. Insurers are responsible to understand any ECDIS or AIS used in underwriting and pricing even when developed or deployed by third-party vendors. To ensure appropriate oversight of such third-party vendors, insurers should develop written standards, policies, procedures and protocols for the acquisition, use of or reliance on third-party ECDIS and AIS. Insurers should implement procedures to report and remediate incorrect information from proprietary and third-party AIS. Insurers may not rely solely on the assurance of the third-party vendor or proprietary nature of the third party's products to determine compliance. This requirement is unique among existing regulations as it effectively places a responsibility on insurers to conduct diligence on AIS and ECDIS developed by third-party vendors.

Transparency

Insurers must provide specific reasons and explanations to insureds or potential insureds when they provide an adverse decision.¹³ When an adverse underwriting or pricing decision was the result of ECDIS or AIS, the reason provided to the insured or potential insured must include sufficient detail, specifically: (i) the specific source of the information upon which the insurer based its decision; (ii) whether the insurer uses AIS in its underwriting or pricing process; (iii) whether the insurer uses data obtained from external vendors; and (iv) that the person has the right to request information about the specific data that resulted in the decision. The Draft Circular Letter specifies that an insurer cannot rely on the proprietary nature of a third-party vendor's algorithm to justify a lack of specificity related to the adverse decision.

Clarification of the 2019 Circular Letter

The Draft Circular Letter provides certain clarifications regarding the 2019 Circular Letter:

- (i) Disclosures need to be made to life insurance applicants regarding their inability to utilize certain accelerated or algorithmic underwriting instead of traditional underwriting.

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- (ii) Objective threshold criteria for using accelerated processes should be disclosed prior to application. If the applicant does not meet the criteria to participate in such processes, they should be told which criteria were not met.
- (iii) If an applicant was never aware or expected that they would undergo anything other than a traditional underwriting process, there is no obligation to disclose the relevant underwriting guideline.
- (iv) Except for the instance above, if it is determined that an applicant can only be approved through a traditional underwriting process, the applicant has a right to know why. This notice should disclose that the accelerated underwriting process uses data obtained from external sources and that the applicant can request information about the specific data that resulted in their not qualifying for an accelerated process.
- (v) Limited requests for additional data that do not qualify as a traditional underwriting process do not trigger the notice requirement.
- (vi) If an applicant is moved to a traditional underwriting process for testing purposes, the notice should not give the impression that the applicant was moved due to the applicant's underwriting criteria.

IV. Conclusion

The Willkie insurance team continues to monitor these efforts to adopt legislation, regulation and guidance on the use of artificial intelligence and big data in the business of insurance and stands ready to advise on the development of risk management, governance and testing structures compliant with these initiatives. Please contact any of the attorneys listed on this client alert if you would like to discuss further.

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- ¹ The Draft Circular Letter is available at: https://www.dfs.ny.gov/industry_guidance/circular_letters/cl2024_nn_proposed#_ftn1.
- ² COLO. REV. STAT. § 10-3-1104.9.
- ³ 3 COLO. CODE REGS. § 702-10.
- ⁴ The quantitative testing regulation is available at: [https://communications.willkie.com/125/2263/uploads-\(icalendars-pdf-documents\)/draft-proposed-algorithm-and-predictive-model-quantitative-testing-regulation.pdf](https://communications.willkie.com/125/2263/uploads-(icalendars-pdf-documents)/draft-proposed-algorithm-and-predictive-model-quantitative-testing-regulation.pdf).
- ⁵ The Model Bulletin is available at: https://content.naic.org/sites/default/files/inline-files/2023-12-4%20Model%20Bulletin_Adopted_0.pdf.
- ⁶ ECDIS includes “data or information used – in whole or in part – to supplement traditional medical, property or casualty underwriting or pricing, as a proxy for traditional medical, property or casualty underwriting or pricing, or to establish ‘lifestyle indicators’ that may contribute to an underwriting or pricing assessment of an applicant for insurance coverage. For the purposes of this Circular Letter, ECDIS does not include an MIB Group, Inc. member information exchange service, a motor vehicle report, or a criminal history search.”
- ⁷ The Draft Circular Letter defines AIS as “any machine-based system designed to perform functions normally associated with human intelligence, such as reasoning, learning, and self-improvement, that is used – in whole or in part – to supplement traditional medical, property or casualty underwriting or pricing, as a proxy for traditional medical, property or casualty underwriting or pricing, or to establish ‘lifestyle indicators’ that may contribute to an underwriting or pricing assessment of an applicant for insurance coverage.”
- ⁸ See N.Y. Ins. LAW §§ 308; 309.
- ⁹ Protected classes are laid out in N.Y. Ins. Law Article 26 and include, in part, race, color, creed, national origin, disability, sex, marital status, mental disability, children, domestic abuse victims, past lawful travel and status as a living organ or tissue donor. See N.Y. INS. LAW §§ 2606; 2607; 2608; 2608-a; 2612; 2614; 2616.
- ¹⁰ The Draft Circular Letter provides examples of these metrics:
- (i) Adverse Impact Ratio: Analyzing the rates of favorable outcomes between protected classes and control groups to identify any disparities.
 - (ii) Denials Odds Ratios: Computing the odds of adverse decisions for protected classes 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.
 - (iv) Standardized Mean Differences: Measuring the difference in average outcomes between protected classes and control groups.
 - (v) Z-tests and T-tests: Conducting statistical tests to ascertain whether differences in outcomes between protected classes and control groups are statistically significant.
 - (vi) Drivers of Disparity: Identifying variables in AIS that cause differences in outcomes for protected classes relative to control groups. These drivers can be quantitatively computed or estimated using various methods, such as sensitivity analysis, Shapley values, regression coefficients, or other suitable explanatory techniques.
- ¹¹ See N.Y. COMP. CODES R. & REGS. tit. 11, § 90.2 *et seq.*
- ¹² Such documentation must be compliant with the record retention requirements of N.Y. COMP. CODES R. & REGS. tit. 11, § 243.0 *et seq.*
- ¹³ See N.Y. INS. LAW §§ 3425; 3426; 4224.