

January 18, 2024

NYDFS Draft Guidance on Use of AI in Insurance Underwriting and Pricing

Draft Guidance Includes Fairness Principles, Testing Requirements, Governance and Risk Management Standards, Requirements for Oversight of Third-Party Vendors, and Disclosure Requirements for Licensed Insurers that Use AI in Underwriting and Pricing Insurance

SUMMARY

On January 17, 2024, the New York State Department of Financial Services (“NYDFS”) released for public comment a draft circular letter, entitled “Use of Artificial Intelligence Systems and External Consumer Data and Information Sources in Insurance Underwriting and Pricing” (the “Draft Circular Letter”), setting forth proposed guidance for insurers licensed in New York that use artificial intelligence systems (“AIS”) and external consumer data and information sources (“ECDIS”) for underwriting and pricing purposes.¹ The Draft Circular Letter applies to all insurers licensed in New York (including both New York domestic insurers and insurers domiciled in other states that have New York licenses) and includes a variety of proposed requirements, including with respect to: (i) ensuring that use of AIS and ECDIS does not result in unfair discrimination or violate the New York Insurance Law (“NYIL”); (ii) conducting quantitative and qualitative testing for unfair or unlawful discrimination; (iii) governance, risk management, and internal controls standards; (iv) standards for oversight of AIS and ECDIS provided or deployed by third parties; and (v) disclosures to insureds and applicants. The comment deadline is March 17, 2024.

BACKGROUND

The use of artificial intelligence in the insurance industry in connection with activities that affect consumers—such as underwriting, pricing, marketing, and claims adjusting—has become an area of significant focus for state insurance regulators and the National Association of Insurance Commissioners

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("NAIC"). For example, in December 2023, the NAIC adopted a model bulletin (the "NAIC Model Bulletin") that sets forth principles-based governance standards for licensed insurers that use artificial intelligence in their operations and is intended to build upon existing requirements for such insurers under state insurance laws.² If and when this model bulletin is adopted by the various states, its requirements will become applicable to all insurers licensed in those states. Also in 2023, the Colorado Division of Insurance ("CO DOI") adopted a regulation setting forth governance and risk management framework requirements for life insurers' use of ECDIS, as well as algorithms and predictive models that use ECDIS, in underwriting, pricing, marketing, utilization management, reimbursement methodologies and claims management practices in the business of insurance; the CO DOI plans to issue a further regulation setting forth quantitative testing requirements for life insurers that use ECDIS and algorithms and predictive models that use ECDIS to make or support underwriting decisions and parallel regulations for other lines of business.³

The NYDFS became the first U.S. state insurance regulator to address the use of big data and other unconventional sources and types of external data by the insurance industry when it issued Circular Letter No. 2019-1 (Jan. 18, 2019) (the "2019 Circular Letter"), which sets forth requirements for life insurers licensed in New York pertaining to the use of ECDIS in the underwriting of life insurance.⁴ With the release of the Draft Circular Letter, the NYDFS reclaims its leadership role in setting regulatory standards for insurers that use artificial intelligence and external data sources in their operations, and also builds upon New York Governor Hochul's first-ever statewide policy governing AI and commitment to making New York a leader in cutting-edge technology development and use.⁵

The Draft Circular Letter would impose additional obligations on licensees as compared to existing guidance by other state insurance regulators, such as the NAIC Model Bulletin and the CO DOI regulations, in at least three important ways. First, the Draft Circular Letter not only states that an insurer's use of AIS and ECDIS may not be unfairly discriminatory (which is also a requirement in such other existing guidance), but also requires the insurer to conduct a comprehensive assessment of lack of unfair discrimination (and any other violations of the NYIL) before the insurer may use that AIS or ECDIS for underwriting or pricing purposes. Second, it requires that an insurer that uses AIS or ECDIS in underwriting or pricing conduct qualitative testing to enable it to explain how its AIS operates and to articulate the relationship between the ECDIS and the risk being insured. To date, such qualitative testing requirements have not generally been imposed by other insurance regulators. Third, the Draft Circular Letter not only requires insurers to establish policies and procedures for ensuring appropriate oversight of third-party AIS and ECDIS vendors (which is similar to requirements in other existing guidance), but also effectively requires insurers to conduct diligence to gain a significant level of understanding regarding how any AIS or ECDIS developed by a third party operates in order to comply with the Draft Circular Letter's requirements that: (i) the insurer may not rely on a third-party vendor's claim of non-discrimination or the fact that the third-party vendor's process is proprietary to determine the insurer's compliance with

anti-discrimination laws; and (ii) if the insurer's use of AIS or ECDIS in underwriting or pricing results in an adverse decision impacting a consumer, the insurer must provide a specific explanation of how this decision was reached to the consumer, and is, again, not permitted to rely on the proprietary nature of the third-party vendor's algorithmic process to justify the lack of specificity in such explanation.

KEY REQUIREMENTS IMPOSED BY THE DRAFT CIRCULAR LETTER

Applicability. The Draft Circular Letter applies to all insurers licensed in New York that use external consumer data and information sources, or ECDIS,⁶ or any artificial intelligence systems, or AIS,⁷ in underwriting or pricing insurance policies, in each case – in whole or in part – to supplement, or 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.

The requirements of the Draft Circular Letter apply only to those licensed insurers that use ECDIS and AIS in underwriting or pricing insurance policies—which is noteworthy because guidance issued to date by other insurance regulators has generally been more broadly applicable. For example, the CO DOI's regulations are, or once the full suite of them is adopted will be, applicable not only to underwriting and pricing, but also to marketing, utilization management, reimbursement methodologies and claims management practices in the business of insurance.⁸ In addition, the bulletin issued by the California Department of Insurance in 2022 relating to allegations of racial bias and unfair discrimination resulting from the use of artificial intelligence and big data by insurers applies not only to underwriting and pricing (rating), but also to marketing and claims practices.⁹

The Draft Circular Letter applies not only to New York domestic insurers, but also to insurers domiciled in other states and licensed in New York. Its requirements would not, however, be applicable to insurers eligible to write coverage in New York on an excess and surplus lines basis.

While the Draft Circular Letter prescribes a number of specific requirements (detailed immediately below), it also expressly acknowledges that there is no one-size-fits-all approach to managing data and “decisioning systems”, and that, accordingly, in developing and managing their use of ECDIS and AIS, licensed insurers should take an approach that is “reasonable and appropriate” in light of their business models and the overall complexity and materiality of the risks inherent in such use.

Fairness Principles. The Draft Circular Letter sets forth the following “fairness principles” intended to guide licensed insurers in their use of ECDIS and AIS in underwriting and pricing insurance policies:

1. **No Use of Protected Classes.** Insurer must establish that the data source or model being used does not use, and is not based in any way on, any class protected pursuant to Article 26 of the NYIL.¹⁰

2. **Comprehensive Assessment of Lack of Unfair Discrimination and Violations of the NYIL.** Insurer must establish, through a comprehensive assessment, that such use would not result in, permit, or collect or use criteria that would constitute, unfair discrimination or an unfair trade practice, or would otherwise violate the NYIL. At a minimum, this should include:
 - a. Assessing whether the use of ECDIS or AIS produces “disproportionate adverse effects” on similarly situated insureds, or insureds of a protected class. Importantly, if there is no *prima facie* showing of a disproportionate adverse effect, the insurer may conclude its evaluation.
 - b. If there is a *prima facie* showing of a disproportionate adverse effect, the insurer should assess whether there is a “legitimate, lawful and fair” explanation or rationale for the differential effect on similarly situated insureds. If there is not, the insurer should modify its use of the relevant ECDIS or AIS and evaluate such modified use.
 - c. If a legitimate, lawful and fair explanation or rationale can account for the differential effect, the insurer should conduct and document a search and analysis for a less discriminatory alternative variable(s) or methodology that would reasonably meet the insurer’s legitimate business needs. If such an alternative exists, the insurer should use it instead.
3. **Actuarial Support Requirements.** Insurer must be able to demonstrate that such use is supported by generally accepted actuarial standards of practice and is based on actual or reasonably anticipated experience (such as statistical studies, predictive modeling and risk assessments).
4. **Relationship between ECDIS and Risk of the Insured.** Insurer must establish that there is a “clear, empirical, statistically significant, rational and not unfairly discriminatory” relationship between the ECDIS variable(s) used and the relevant risk of the insured.
5. **Proxy Assessment.** Insurer must be able to demonstrate that the ECDIS: (i) is not prohibited under the NYIL, and (ii) does not serve as a proxy for any protected classes that may result in unfair discrimination.
6. **Documentation Requirements.** Insurer should document the processes and reasoning behind its testing methodologies and analysis for unfair or unlawful discrimination commensurate with its use of ECDIS and AIS and the complexity and materiality thereof; such documentation should be available to be produced to the NYDFS upon request.
7. **Testing Requirements.** Insurer should administer unfair or unlawful discrimination testing and analysis: (i) prior to putting AIS into production; (ii) on a “regular cadence” (undefined) thereafter; and (iii) whenever material updates or changes are made to either the ECDIS or AIS.
 - a. **Quantitative testing.** The Draft Circular Letter “encourage[s]” insurers to use multiple statistical metrics in evaluating data and model outputs to ensure a comprehensive understanding and assessment, and provides several examples of metrics that may be used for these purposes.¹¹
 - b. **Qualitative testing** is required (in addition to quantitative testing), and should enable the insurer to explain, at all times, how its AIS operates and to articulate the “intuitive logical relationship” between ECDIS and other model variables with an insured’s or potential insured’s individual risk.

Governance and Risk Management Requirements. The Draft Circular Letter states that, in order to ensure compliance with the NYIL, the corporate governance framework that is already required under the NYIL with respect to licensed insurers¹² should be modified if needed to include provisions that would allow for appropriate oversight of the insurer’s use of ECDIS and AIS in underwriting and pricing. The

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Draft Circular Letter includes the following governance and risk management requirements and standards:

1. **Role of Board of Directors.** The insurer's board of directors¹³ may delegate duties and authorities for overseeing an insurer's activities—such as development and managing of ECDIS and AIS—to board committees and senior management. If so, appropriate lines of reporting and requirements for regular quality reporting to the board should also be established, including reporting all timely and relevant facts to enable the board to understand the material activities and risks associated with the use of ECDIS and AIS.
2. **Role of Senior Management; Cross-Functional Management Committee.** Senior management's responsibility for day-to-day implementation of the insurer's development and management of ECDIS and AIS includes establishing adequate policies and procedures, assigning competent staff, overseeing model risk management, ensuring effective challenge and independent risk assessment, reviewing internal audit findings, and taking prompt remedial action when necessary. In carrying out these duties, senior management should ensure that all relevant operation areas are appropriately engaged, such as through a cross-functional management committee with representatives from key function areas (e.g., legal, compliance, risk management, product development, underwriting, actuarial and data science).
3. **Policies and Procedures.** The insurer should have written policies and procedures pertaining to ECDIS and AIS, including clearly defined roles and responsibilities, monitoring and reporting requirements to senior management, and training requirements (described below). These policies and procedures should be reviewed and approved by the insurer's board of directors, or senior management through delegated authority, on at least an annual basis.
4. **Training.** The insurer should require training for relevant personnel on the responsible and lawful use of ECDIS and AIS, appropriately tailored to staff responsibilities, including prompt training for new staff and a "regular cadence" for training thereafter, and accountability for timely completing the training.
5. **Documentation Requirements.** The insurer should maintain comprehensive documentation on its use of AIS and ECDIS, whether developed internally or supplied by third parties,¹⁴ and be prepared to produce it to the NYDFS upon request. Such documentation may include:
 - a. a description of the process for identifying and assessing operational, financial, and compliance risks associated with the insurer's use of ECDIS and AIS, and internal controls designed to mitigate such risks;
 - b. an up-to-date inventory of all AIS implemented for use, under development for implementation, or recently retired;
 - c. 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;
 - d. a description of the process for tracking changes to the insurer's use of ECDIS and AIS over time, as well as a documented explanation of, rationale for, and parties responsible for approval of, any such changes;
 - e. a description of the process for monitoring ECDIS and AIS usage and performance, including a list of any previous exceptions to policy and reporting;
 - f. 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;
 - g. a description of "data lifecycle management process," including ECDIS acquisition, storage, usage and sharing, archival and destruction; and

h. records of consumer complaints about the use of AIS and ECDIS.

6. **Consumer Complaints.** The insurer should implement procedures to receive and address consumer complaints and inquiries about its use of AIS and ECDIS.
7. **Risk Management and Internal Controls.** The insurer should manage the relevant risks at each stage of the AIS lifecycle and should consider risk both from each individual AIS model and from AIS models in the aggregate. Such risk management may occur within the insurer's existing enterprise risk management function, or separately as part of an independent program. The insurer's risk management should include: (i) standards for model development, implementation, use and validation relating to the insurer's ECDIS and AIS development and risk management; (ii) promotion of independent review and effective challenge to risk analysis, validation, testing, development and other processes; and (iii) competent and qualified personnel to execute and oversee AIS risk management with clearly defined roles and responsibilities and appropriate means of accountability.

The insurer's existing internal audit function should be appropriately engaged with its use of ECDIS and AIS consistent with the financial, operational and compliance risk such use presents. Internal audit should assess the overall effectiveness of the AIS and ECDIS risk management framework, such as: (i) verifying that acceptable policies and procedures are in place and adhered to; (ii) verifying records of AIS use and testing whether validations are performed in a timely manner and AIS models are subject to controls that appropriately account for any weakness in validation activities; (iii) assessing the accuracy and completeness of AIS documentation and adherence to documentation standards, such as risk reporting; (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 such other data that may result in unfair or unlawful discrimination; and (vii) assessing whether there is sufficient reporting to the board of directors and senior management to evaluate whether management is operating within the insurer's risk appetite and limits for model risk.

Requirements for ECDIS and AIS Developed by Third Parties. Insurers will be held responsible for complying with anti-discrimination laws even when they rely on ECDIS or AIS developed or deployed by third parties. Insurers may not rely solely on a vendor's claim of non-discrimination, or a proprietary third-party process, to determine compliance with anti-discrimination laws, and remain responsible for compliance of ECDIS and AIS developed by third parties with all applicable laws. Where an insurer is required to make disclosures to consumers regarding adverse underwriting or pricing decisions, the insurer likewise may not rely on the proprietary nature of a third-party vendor's algorithmic processes to justify the lack of specificity related to any such adverse decision.

Insurers should ensure appropriate oversight of third-party vendors by developing written standards, policies procedures and protocols for:

1. acquisition, use of, and reliance on ECDIS and AIS developed or deployed by third parties;
2. reporting any incorrect information to third-party vendors for further investigation; and
3. remediation and elimination of incorrect information from the AIS that the insurer has identified or that has been reported to the third-party vendor.

Transparency. If an insurer uses ECDIS or AIS, the explanation of the reason(s) provided to the insured, potential insured, or a medical professional designee, pertaining to any declination, limitation, rate

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differential or other adverse underwriting decision should describe all specific sources of information on which such decision was based.

Clarification of Guidance in Circular Letter 2019-1. The Draft Circular Letter also clarifies the guidance in the 2019 Circular Letter pertaining to disclosures required to be made to applicants for life insurance policies who are unable to utilize or are ineligible for an expedited, accelerated or algorithmic underwriting process in lieu of traditional medical underwriting. The Draft Circular Letter states that, as a general matter, such disclosures are not required to be provided to an applicant who was never aware of the existence of the insurer's internal standards for the accelerated underwriting process, and therefore had no expectation that he or she would undergo anything other than full traditional underwriting. However, in all other circumstances, a life insurer is required to:

1. disclose to the applicant, prior to the application process, any objective threshold criteria for using the accelerated underwriting process (e.g., that such process is available only for certain ages or coverage amounts); and
2. if the applicant is rejected from the accelerated underwriting process, disclose to the applicant, at the time when the applicant is notified that the application cannot be processed via accelerated underwriting: (i) which of these objective threshold criteria were not met; (ii) that the insurer's accelerated underwriting process uses data about the applicant obtained from external vendors; (iii) that the applicant has the right to receive, or designate a medical professional to receive, the details relating to the reasons for the adverse decision and the specific data that resulted in the applicant not qualifying for accelerated underwriting; and (iv) contact information that would enable the applicant to exercise this right.

The Draft Circular Letter also states that, if an applicant is randomly moved to the traditional underwriting process for purposes of testing the results of accelerated underwriting against the results of traditional underwriting, the disclosure should not give the impression to the applicant that removal from the process was due to the applicant's medical or other underwriting criteria.

KEY TAKEAWAYS

Like the NAIC Model Bulletin and the CO DOI regulations, the Draft Circular Letter applies to all insurers licensed – even if not domiciled – in the applicable state (in this case, New York). As a result, in practice, we expect that the standards set forth in the NAIC Model Bulletin, the CO DOI regulations and the Draft Circular Letter (subject to any revisions to be made by the NYDFS to the Draft Circular Letter following the public comment period) will form the basis of an eventual insurance regulatory framework governing the use of AIS and ECDIS by licensed insurers on a nationwide basis. Licensed insurers that currently use AIS or ECDIS in their operations, or that anticipate using AIS or ECDIS in the future, should review the Draft Circular Letter in detail and consider providing comments to the NYDFS by the March 17, 2024 deadline.

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ENDNOTES

- 1 The Draft Circular Letter is available at https://www.dfs.ny.gov/industry_guidance/circular_letters/cl2024_nn_proposed.
- 2 For our previous client memorandum regarding this model bulletin, see Sullivan & Cromwell LLP, “NAIC Model Bulletin on Use of AI by Insurers” (Dec. 15, 2023), available at <https://www.sullcrom.com/SullivanCromwell/Assets/PDFs/Memos/NAIC-Model-Bulletin-Use-AI-Insurers.pdf>.
- 3 See 3 CCR 702 Reg. 10-1-1, available at <https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=11153&fileName=3%20CCR%20702-10>.
- 4 The 2019 Circular Letter is available at https://www.dfs.ny.gov/industry_guidance/circular_letters/cl2019_01. For our previous client memorandum regarding the 2019 Circular Letter, see Sullivan & Cromwell LLP, “New York Department of Financial Services Addresses Use of External Consumer Data and Information Sources in Underwriting for Life Insurance” (Feb. 27, 2019), available at <https://www.sullcrom.com/SullivanCromwell/Assets/PDFs/Memos/SC-Publication-NYDFS-Addresses-Use-of-External-Consumer-Data-in-Life-Insurance-Underwriting.pdf>.
- 5 See “Governor Hochul Unveils Fifth Proposal of 2024 State of the State: Empire AI Consortium to Make New York the National Leader in AI Research and Innovation” (Jan. 8, 2024), available at <https://www.governor.ny.gov/news/governor-hochul-unveils-fifth-proposal-2024-state-state-empire-ai-consortium-make-new-york>.
- 6 ECDIS is defined in the Draft Circular Letter as including data or information used – in whole or in part – to supplement, or as a proxy for, 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. ECDIS does not include an MIB Group, Inc. member information exchange service (a membership corporation owned by a number of member U.S. and Canadian insurance companies), a motor vehicle report, or a criminal history search.
- 7 AIS is defined in the Draft Circular Letter 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, or 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 C.R.S. § 10-3-1104.9(8)(c).
- 9 See California Department of Insurance, Bulletin No. 2022-5 (Jun. 30, 2022).
- 10 Among other things, Article 26 of the NYIL prohibits discrimination because of: (i) race, color, creed, national origin or disability (NYIL § 2606); (ii) sex or marital status (NYIL § 2607); (iii) treatment for a mental disability (NYIL § 2608); (iv) status as a child born out of wedlock, not claimed as a dependent on parents’ federal income tax returns, or not residing with the parent or in the insurer’s service area (NYIL § 2608-a); (v) status as a victim of domestic violence (NYIL § 2612); (vi) an applicant’s or insured’s past lawful travel experiences (NYIL § 2614); (vii) status as a living organ or tissue donor (NYIL § 2616); and (viii) use of prescribed medication to block the effect of opioids (NYIL § 2617).
- 11 The Draft Circular Letter states that examples of such metrics include the following:
 - Adverse Impact Ratio: Analyzing the rates of favorable outcomes between protected classes and control groups to identify any disparities.
 - Denials Odds Ratios: Computing the odds of adverse decisions for protected classes compared to control groups.

ENDNOTES CONTINUED

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.

Standardized Mean Differences: Measuring the difference in average outcomes between protected classes and control groups.

Z-tests and T-tests: Conducting statistical tests to ascertain whether differences in outcomes between protected classes and control groups are statistically significant.

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.

¹² See 11 NYCRR 90.1 *et seq.*, which requires an insurer to have a corporate governance framework that is appropriate for the nature, scale and complexity of the insurer. These requirements may be satisfied by an insurer if it is a member of an insurance holding company system that has established a corporate governance framework. 11 NYCRR 90.2.

¹³ If the insurer has a governing body other than a board of directors, the requirements set forth in this paragraph would instead apply to such governing body.

¹⁴ This documentation should be maintained in accordance with the requirements of the NYDFS's regulation setting forth the standards for record retention by insurance companies, 11 NYCRR 243.0 *et seq.*

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