



Bias in Insurance – A Regulatory and Legislative Update

FINREP FL

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Bias in Insurance – A Regulatory and Legislative Update

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Introduction


Risk Based Pricing and Actuarial Fairness

- Principle 1: A rate is an estimate of the expected value of future costs.
- Principle 2: A rate provides for all costs associated with the transfer of risk.
- Principle 3: A rate provides for the costs associated with an individual risk transfer.
- Principle 4: A rate is reasonable and not excessive, inadequate, or unfairly discriminatory if it is an actuarially sound estimate of the **expected value** of all **future costs** associated with an **individual risk transfer**.

[Emphasis mine]

The Philosophy of Risk Based Pricing

Race	Actual Pure Prem	Model Pure Prem
WHITE	207.34	210.69
HISPANIC	336.88	315.97
BLACK	353.22	322.85



Policy/Legal Perspective

- Colorado Senate Bill (SB) 21-169, Section 1(1)(c):
 - The use of particular external consumer data and information sources, as well as algorithms and predictive models using external consumer data and information sources, by insurers may have a **significant negative impact** not only on the **availability** and **affordability** of insurance for protected classes of consumers, but also on the utilization of such instances.

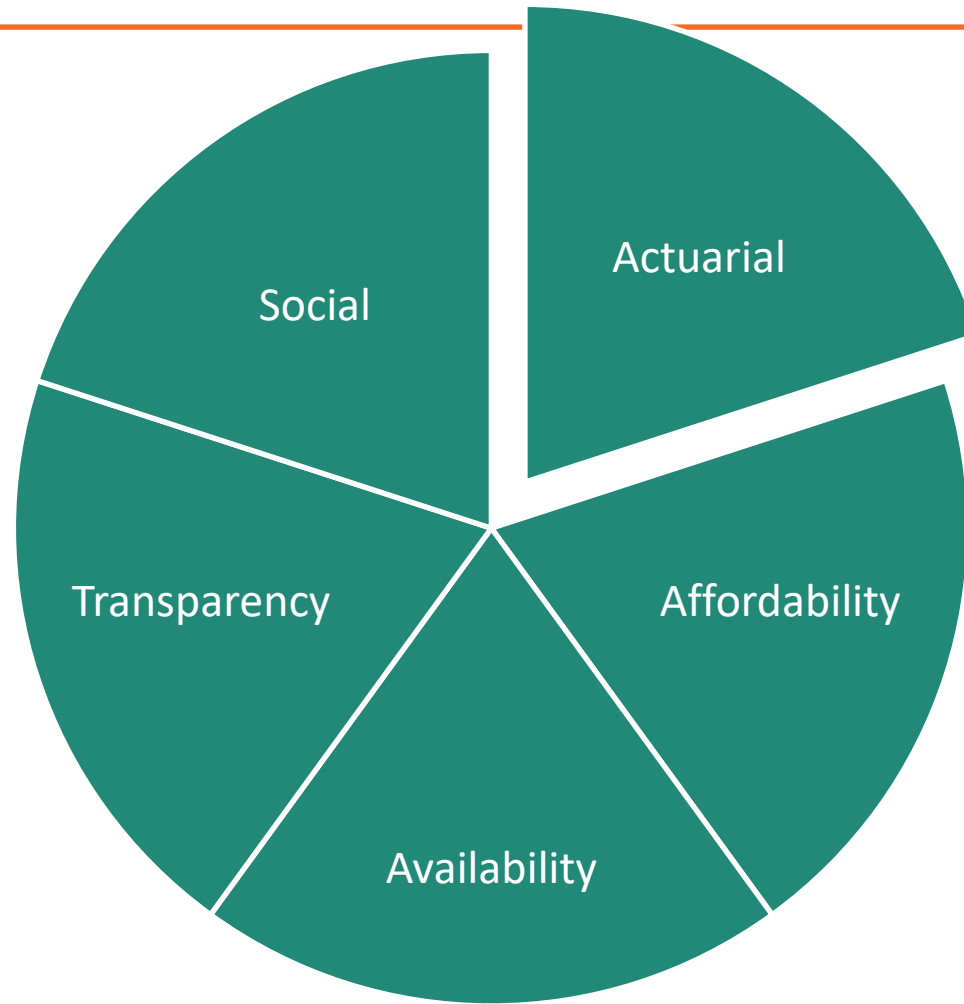
[Emphasis mine]

Policy/Legal Perspective

- Colorado Senate Bill (SB) 21-169, Section 1(8)(e):
 - “Unfairly discriminate” and “unfair discrimination” include the use of one or more external consumer data and information sources, as well as algorithms or predictive models using external consumer data and information sources, that have a correlation to race, color, national or ethnic origin, religion, sex, sexual orientation, disability, gender identity, or gender expression, and that **use results in a disproportionately negative outcome for such classification or classifications, which negative outcome exceeds the reasonable correlation to the underlying insurance practice, including losses and costs for underwriting.**

[Emphasis mine]

Part of a Larger Collection of Related Issues



Defining Bias – Discriminatory Effects

Prohibited from using protected characteristics in rating

- Even though protected characteristics may be predictive of loss, insurers are prohibited from using them in rating



What if I find something that is perfectly correlated to the protected characteristic?

- I am not using the protected characteristic, so technically I am not violating the law
- But I am ending up in the same place as if I used the protected characteristic, so I am violating the spirit of the law

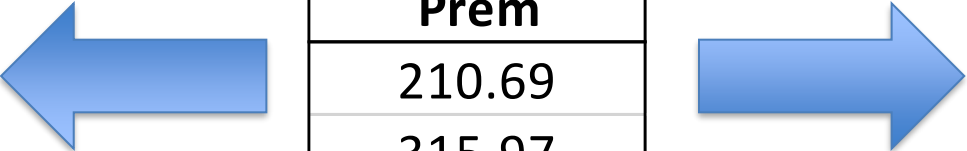


What if I am using something that is partially correlated to the protected characteristic?

- How much is too much?

The Pull Between Risk Based Pricing and Equitable Pricing

Race	Actual Pure Prem	Model Pure Prem	Equitable Pure Prem
WHITE	207.34	210.69	223.64
HISPANIC	336.88	315.97	223.64
BLACK	353.22	322.85	223.64



Colorado SB 21-169

Colorado Senate Bill 21-169 and Supporting Regulation

- SB 21-169 Signed July 6, 2021
- Life Insurance first line for regulation development
 - Governance Regulation
 - Adopted September 21, 2023
 - Effective November 14, 2023
 - Testing Regulation Draft
 - Proposed September 28, 2023
 - Comments by October 26, 2023

External Consumer Data and Information Source (ECDIS)

- From the Governance Regulation Section 4(C)
 - “External Consumer Data and Information Source” or “ECDIS” means, for the purposes of this regulation, a data or an information source that is used by a life insurer to supplement or supplant traditional underwriting factors or other insurance practices or to establish lifestyle indicators that are used in insurance practices. This term includes credit scores, social media habits, locations, purchasing habits, home ownership, educational attainment, licensures, civil judgments, court records, occupation that does not have a direct relationship to mortality, morbidity or longevity risk, consumer-generated Internet of Things data, biometric data, and any insurance risk scores derived by the insurer or third-party from the above listed or similar data and/or information sources.

[Emphasis mine]

Colorado Governance and Risk Management Framework

1. Governing principles
2. Board oversight
3. Senior management responsibility
4. Cross functional governance group
5. Policies for ECDIS testing and validation
6. Consumer complaint and inquiry process
7. Risk inventory
8. ECDIS inventory
9. Documentation of material changes
10. Unfair discrimination testing documentation
11. Ongoing monitoring of models that use ECDIS
12. Documentation of process used to select external resources
13. Regular reviews of framework

Proposed Model Testing Process

- Underwriting
 - Approval vs Rejection
 - Utilize logistic regression models
- Rating
 - Written Premium Charged (Rate per \$1,000)
 - Utilize linear regression models

Section 8(A)(4) and 8(B)(4)

- The models coefficients for each ECDIS variable shall be compared and any difference noted. **If any ECDIS variable exhibits a difference**, that ECDIS variable, and the algorithm or predicted model that uses that ECDIS variable, is deemed to have a direct relationship to a disproportionate negative outcome and is thus unfairly discriminatory requiring remediation.

[Emphasis mine]

NAIC

NAIC Model Bulletin

- *Use of Algorithms, Predictive Models and Artificial Intelligence Systems by Insurers*
- Released for comment on July 17, 2023
- Written comments were accepted through September 5, 2023
- Expect the next step will be a revised draft bulletin

NAIC Model Bulletin – Legislative Authority

- **Unfair Trade Practices Model Act (#880)**: 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)**: sets forth standards for the investigation and disposition of claims arising under policies or certificates of insurance issued.
- **Corporate Governance Annual Disclosure Model Act (#305)**: requires insurers to report on governance practices and to provide a summary of the insurer's corporate governance structure, policies, and practices.

NAIC Model Bulletin – Legislative Authority

- **Property and Casualty Model Rating Law (#1780)**: requires that property/casualty (P/C) insurance rates not be excessive, inadequate, or unfairly discriminatory.
- **Market Conduct Surveillance Model Law (#693)**: establishes the framework pursuant to which the Department conducts market conduct actions.

NAIC Model Bulletin – Additional Considerations

- Specifically includes testing for unfair discrimination and bias in the guidelines
 - Bias is defined, unfair discrimination is not
- Sets requirements for governance and controls of modeling cycle
- Requires insurer to assess third party data providers to ensure they meet the standards being required of insurers
- Documentation required as part of market conduct examination, potentially in other cases as well

NAIC Model Bulletin – Expectations

- 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)
- Assessment should consider
 - 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”
 - the extent and scope of the Insurer’s use or reliance on data, models, and AI Systems from third parties

NIST

National Institute for Standards and Technology

- Released AI Risk Management Framework on January 26, 2023
- Launched the Trustworthy and Responsible AI Resource Center on March 20, 2023, which provides practical tools for the implementation of the framework
- Framework is voluntary at this point
- Why is this important – Federal Insurance Office Charter
 - monitor all aspects of the insurance industry, including identifying issues or gaps in the regulation of insurers that could contribute to a systemic crisis in the insurance industry or the U.S. financial system
 - monitor the extent to which traditionally underserved communities and consumers, minorities, and low- and moderate-income persons have access to affordable non-health insurance products

PAID Act

Prohibit Auto Insurance Discrimination (PAID) Act

- Introduced in the United States House of Representatives by Representatives Rashida Tlaib (MI-12), Bonnie Watson Coleman (NJ-12), and Mark Takano (CA-39) on June 6, 2023
 - Last introduced in United States Senate and House of Representatives in 2020
- Would ban the use of:
- Education
 - Occupation
 - Employment status
 - Home ownership status
 - Credit score, consumer report
 - Gender
 - ZIP code or adjacent zip codes
 - Census tract
 - Marital status
 - Previous insurer
 - Prior purchase of insurance

Parting Thoughts

What Does All This Mean for Insurers?

- The insurance industry should be at the table and involved in the relevant discussions
- Insurers should endeavor to be influential in the ultimate solutions, and I believe we are at a point where if the industry simply defends the status quo, we will be left out completely
- Internally, companies should be exploring options for responding to potential model governance and testing requirements

Questions?

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