

December 14, 2021

Honorable Vicki Schmidt
Kansas Insurance Commissioner
Honorable Andrew N. Mais
Connecticut Insurance Commissioner
Co-Chairs, Special (EX) Committee on Race and Insurance
Workstream Three (Property-Casualty)
Via email to Aaron Brandenburg, abrandenburg@naic.org

Re: Workstream Three Dec. 1 meeting/proxy discrimination/artificial intelligence

Dear Commissioners Schmidt and Mais:

I write on behalf of State Farm Mutual Automobile Insurance Company. We greatly appreciate the property-casualty Workstream's efforts to date, including your methodical approach of identifying key terms and issues. Our comments pertain to the best example of this learning process from your December 1 meeting, Professor Schwarcz's testimony and subsequent colloquy with Arizona Deputy Director Savary.

Professor Schwarcz warned of a scenario where AI, tasked by a carrier with classifying risk, deduces that a protected class is more risky; seeks proxies for the protected class among social media, GPS, and other data; and then uses those proxies for the purpose of discriminating against the risky protected class.

We agree this would be problematic but we respectfully question whether insurers could utilize artificial intelligence this way. The component parts of insurance risk classification—factors contained in filed rating plans—are heavily regulated. Thus, as Deputy Director Savary's questions seemed to suggest, any machine involved in the process "has to be programmed with particular variables"—rather than given an open-ended warrant to design its own risk-predicting algorithms by "roaming the wild" of big data.

The Problematic Scenario: AI Making Its Own Rating Plans By Determining Race Is Predictive And Mining Big Data To Proxy For Race

Professor Schwarcz testified that, "If you program a machine learning AI to predict risk, and you have a factor that insurers are not allowed to use, but which is predictive of risk,¹...the AI will inevitably...figure out ways to proxy for the prohibited characteristic if it's predictive of claims....It will use social media data, it will use data about web browsing, magazine subscriptions, what have you, to proxy, to in fact...use a variable because that variable is correlated with the prohibited characteristic."

¹ He asserts without attribution that this is true. "We know that lots of prohibited characteristics are predictive of claims,...it should be pretty intuitive for race."

Commissioners Schmidt and Mais

December 14, 2021

Page 2

His proposed remedy: “Proxy discrimination needs to be defined in a way that recognizes that machine learning AIs can and in fact will proxy for prohibited characteristics to the extent that they are directly predictive of risk. This is exactly the opposite of the NCOIL definition for instance, because the NCOIL definition basically says, ‘Look, as long as there’s no intentional discrimination, we’re not even going to question the result.’”²

We agree that if risk is classified based on a GPS location at a domestic violence shelter³ or membership in a Black-oriented Facebook group, such conduct would be a substantial public policy concern—regardless of whether conceived by a human or a machine. But we believe that this is not happening—and cannot under current laws which prohibit such undesirable conduct.

Arizona Deputy Director Jon Savary’s question seemed to get at this: “You kind of imply that...or...I’m inferring, that this machine learning AI just kind of goes out and roams the wild, and chooses its variables to determine how it’s going to come up with whatever the output is of the program. Is that the case in the insurance industry, or is it, these have to be programmed with particular variables, right?”

Professor Schwarcz replied: “No....The way that a machine learning AI works is that...you just tell the program what you want its goal to be, predict claims, get the target variable, and then you feed it lots and lots of data, big data....You can remove...race [and] domestic violence history....The AI inductively comes up with its own algorithms...that help it to find correlations between the historic data that you’ve given it and the thing you want to predict....The machine learning AI is going to...eventually say, ‘Ah, the people who have XYZ Facebook account or...ABC browser searching history, or...ABC purchasing patterns, or XYZ GPS locations, they’re risky...because...they’re going to a domestic violence support group.’”

If an AI was in fact “programmed...to...predict claims” as the target variable and provided a broad enough mandate that it could “deductively come up with its own algorithms” using external big data to predict risk of future loss, resulting in rates determined by factors used for the purpose of correlating with a protected class, we would agree that such proxy discrimination against that protected class is nefarious—and we believe it is illegal under current laws or models.⁴

² We respectfully disagree, as discussed in footnote 4.

³ Professor Schwarcz’s slides explain: “Example: AIs used by homeowner insurers to price risk based on predicted claims will use training data...to proxy for domestic violence history and charge more to victims.”

⁴ The recent NCOIL amendments discussed by Professor Schwarcz tighten relevant legal prohibitions. The NCOIL Model Property/Casualty Insurance Modernization Model Act now prohibits “unfairly discriminatory...rates that can be actuarially justified but are based on proxy discrimination.” “Proxy discrimination” is defined as “the intentional substitution of a neutral factor for a factor based on [an enumerated prohibited characteristic, including race]...for the purpose of discriminating against a consumer to prevent that consumer from...obtaining a preferred ...rate...due to that consumer’s race [or other protected class].” The Model is violated if an AI determines that Blacks as a group are higher risk, and then mines data for membership in a Black-oriented Facebook group for the purpose of discriminating against that purportedly risky protected class. The neutral factor (Facebook group member) has been substituted

Commissioners Schmidt and Mais
December 14, 2021
Page 3

This does not happen at State Farm, nor do we believe it could happen with any property-casualty insurer under existing law. Insurers cannot give AI a broad warrant to predict claims. Deputy Director Savary's implication was correct when he questioned whether insurers task AI with "roaming the wild" to predict claims—and asked if, instead, AI "has to be programmed with particular variables."

Insurers, Unlike Other Industries, Only Use Filed Factors Subject To Audit

That AI "has to be programmed with particular variables" follows from legal requirements. Property-casualty risk must be classified according to factors in a rating plan filed with the regulator. Each insured's record at the carrier must document which factors were used in developing her rate, which is subject to audit by insurance department market conduct examiners for compliance with the approved rating plan.

Only filed and legal factors can be used to classify risk—usually such as age, driving history, credit based insurance score, territory, etc. Filed factors would not include a general delegation to machine learning artificial intelligence to determine risk, nor specific groupings such as membership in a Black students' Facebook group or GPS readings at a domestic violence support group location.

Machine learning AI which can construct its own algorithms in less heavily regulated activities⁵ may very well teach themselves to group consumers by protected classes. But with respect to insurance, AI cannot simply be given the "target variable" of predicting claims, and set loose to "roam the wild" of big data. The intermediate steps of insurance risk classification—designating factors to determine an insured's risk—are regulated. Unfiled factors cannot be used and are subject to review by DOI examination.

Regarding the hypothetical that AI will determine a protected class to be risky, and then use big data to determine, and discriminate against, its members, Professor Schwarcz concluded we should "ask the question of whether our AIs are doing that and try to attempt to scrutinize that." We respectfully offer that such review begins with an understanding of the state rating laws—under which AI can be properly tasked with evaluating risk within rating factors designated by a carrier, not given free rein to mine massive external big data sets for the purpose of designing their own rating plans.

AI In Insurance Cannot Roam The Wild Of Big Data And Make Its Own Algorithms Using Factors For The Purpose Of Replicating Protected Classes.

Returning to Professor Schwarcz's colloquy with the Arizona regulator, Deputy Director Savary followed up: "Just to be clear...it's...dependent on the variables, the massive amounts of data, the variables contained in that data, that will determine that, right?"

for the directly discriminatory factor (race) found to be actuarially determinative. The neutral factor is thus intentionally used for the purpose of "discriminating against a consumer...due to that consumer's race."

⁵ Such as law enforcement use of facial recognition software examined in the NAIC-screened film "Coded Bias." Such conduct (unlike insurance pricing) is not extensively regulated—the main point of the movie.

Commissioners Schmidt and Mais

December 14, 2021

Page 4

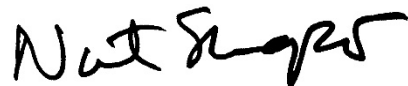
Professor Schwarcz replied: “Correct. If you’re restricting insurers...for instance, California for auto insurance says, ‘You can only use these specific approved variables,’ that limits the ability to use machine learning AIs. Machine learning AIs need massive amounts of big data, so usually they need external data sets... You can use machine learning AIs with more limited data, but that very much limits the power of the AI.”

Although California allows the smallest number of variables, every other state also restricts insurers to the use of variables filed with, reviewed, and not found unfairly discriminatory by, the insurance regulator. Thus State Farm would not in any jurisdiction feed AI “massive amounts of big data, usually...external data sets” and allow it to “roam the wild.” Mr. Savary originally queried whether “in the insurance industry...these have to be programmed with particular variables, right?” This is correct: Only filed “particular variables” can be used in any state, leaving no proper basis to input open-ended big data into an AI and task it with building its own rating algorithm.

Conclusion

We respect and are grateful that NAIC has prioritized the Special Committee’s work, and that you as co-chairs have taken on leadership responsibility in the property-casualty workstream. Your thoughtful, deliberative process allows for identifying—and openly discussing—the sort of issues raised by Professor Schwarcz. We appreciate the opportunity to participate in this important dialog, which we hope incorporates, and proceeds from, a full understanding of relevant rating laws and models.

Sincerely,



Nat Shapo

cc: Special Committee Co-Chairs, Commissioner Altmaier and Director Cameron
Special Committee Chair Emeritus, Director Farmer
Special Committee Co-Vice Chair, Director Lindley-Myers