CAS Talk: Bias, Risk and Regulation
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Examples + Related Reading

AI's growing abilities have caused both fascination and concern. While regulations have managed the impact of algorithms in the insurance industry for decades, their increased sophistication and wider application have brought model governance to a new stage. Below are examples of recent events that highlight the heightened societal interest and concern in algorithmic decision-making.

Allegations that black customers have a harder time getting claims paid

A study that surveyed 800+ homeowners insurance customers of a large personal lines carrier and alleges that Black customers have a harder time getting claims paid than their White counterparts. Now a class action lawsuit against the company, based on this study, alleges discrimination in claims handling. The article identifies external data and model vendors providing customer risk scores.

- "New Suit Uses Data to Back Racial Bias Claims" in The New York Times (December 14, 2022)
- Class action complaint (filed December 14, 2022)

Alleged inequity in help for complex medical conditions for black patients

Researchers studied a program of Optum health insurance that gave extra help to patients with complex medical conditions. With limited space in the program, Optum used an algorithm to identify patients for whom having the extra help would save the most in future healthcare costs. Cost was intended as a proxy for medical needs, but it's a poor proxy because of inequity in healthcare in the US: Black patients get less treatment than White patients across the board. So costs -- and cost savings -- are lower for Black patients, which meant the algorithm was less likely to identify them. The researchers showed that optimizing to medical needs, instead of cost, would dramatically increase the number of Black patients in the program.

- "Study finds racial bias in Optum algorithm" in Healthcare Finance (October 25, 2019)
- Original study: Dissecting racial bias in an algorithm used to manage the health of populations, by Obermeyer, et. al. (October 25, 2019)

Rating bands in the ACA

The Affordable Care Act imposed limits on how much health insurance premiums can vary by applicant characteristics. Specifically, the rate for the oldest customers could not be more than 3x the rate for the youngest customers. Similarly, the rate for tobacco users could not be more than 1.5x the rate for non-tobacco users.

- Guidance Regarding Age Curves and State Reporting from CMS (December 16, 2016)

New laws

- Colorado's SB169, regarding insurers' use of External Consumer Data
- NYC Local Law 144, and final rules, requiring bias audits of Automated Employment Decision Tools
- EU AI Act - full text and high-level summary - focus on "high risk applications"