



AMERICAN ACADEMY of ACTUARIES

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June 30, 2021

Office of the Comptroller of the Currency (OCC)
Board of Governors of the Federal Reserve System (Board)
Federal Deposit Insurance Corporation (FDIC)
Bureau of Consumer Financial Protection (Bureau)
National Credit Union Administration (NCUA)

Re: Request for Information and Comment on Financial Institutions' Use of Artificial Intelligence, including Machine Learning

To whom it may concern:

On behalf of the Data Science and Analytics Committee of the American Academy of Actuaries,¹ thank you for the opportunity to provide comments to the OCC, Board, FDIC, Bureau, and NCUA (“Agencies”) in response to the *Request for Information and Comment on Financial Institutions' Use of Artificial Intelligence*.

Artificial intelligence (AI) is used in many areas of insurance and certain benefit programs. AI includes machine learning technologies used in predictive analytics, as well as robotic processes and other decision algorithms powered by applied data science.

Specific areas and functionalities within the insurance sector where AI is applicable include:

- insurance pricing
- fraud detection
- customer segmentation for marketing
- claim verification and claim automation procedures
- automated underwriting

AI has led to underwriting processes that are quicker and shorter (with appropriate consumer protections) and helps inform insurer decisions regarding better fit of coverage for consumers and accelerates claims resolutions, all of which result in an improved consumer experience. AI has also increased the competitive environment within the insurance sector and has led to more options for consumers.

¹ The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

A major challenge for consumer protection with respect to data analytics is a lack of transparency—trying to understand how personal consumer data is being used to determine the eligibility for specific insurance products and the “fairness” of the price that consumers are being charged. Consumers need to trust that they are being underwritten fairly, and if there are behaviors they can modify or steps they can take to get better insurance protection or a better rate. One challenging issue with insurance pricing based on AI is that it can lead to more granular pricing (e.g., by adding variables to price segmentation), which may be inconsistent with certain societal views about equitable treatment. This issue is of concern when there are favorable terms of coverage available to some consumers but not others, and where there is unequal treatment in the process used to determine the eligibility or the price of insurance.

Privacy and verification of personal data is also a concern for consumers. Consumers may object to the use of some their personal data being used because they do not believe it is related to the cost of providing insurance; does not fairly consider their individual risks; or because they do not believe the data, or its use, is fair and accurate. For example, the use of credit-related data to determine the rates for private passenger auto insurance is an example of data which has garnered some consumer objection. The treatment by state insurance regulators with respect to credit-related data has ranged from complete prohibition in some states to allowing certain uses of specific credit-related data in rating and underwriting in other states.

The Academy and its members have been working closely with insurance regulators to improve the transparency of algorithms which underlie the use of AI by insurers, to explain how the algorithms can be used to achieve equitable treatment, and to identify the issues and tradeoffs related to ensuring consumer protections. In our view, AI technology can be used to support innovations in insurance products, and in the customer experience, without jeopardizing fair and equitable treatment of individual consumers.

The American Academy of Actuaries’ Data Science and Analytics Committee would be glad to expand a dialog and discuss some of the committee’s current work with the agencies if you wish to further discuss how AI technologies are being deployed in insurance.

Thank you for the opportunity to provide comments to the Agencies on the *Request for Information and Comment on Financial Institutions’ Use of Artificial Intelligence, including Machine Learning*. If you have any questions or would like to discuss these comments in more detail, please contact Shera Niemirowski, the Academy’s risk management and financial reporting analyst, at niemirowski@actuary.org.

Sincerely,

Dorothy Andrews, MAAA, ASA, CSPA
Chairperson, Data Science and Analytics Committee
Risk Management and Financial Reporting Council
American Academy of Actuaries