



Innovation, Cybersecurity, and Technology (H) Committee

August 15, 2024

1. Consider Adoption of its June 28 Minutes

Attachment One

–Commissioner Kevin Gaffney (VT)

Draft: 8/11/24

Innovation, Cybersecurity, and Technology (H) Committee
Virtual Meeting
June 28, 2024

The Innovation, Cybersecurity, and Technology (H) Committee met June 28, 2024. The following Committee members participated: Kathleen A. Birrane, Chair (MD); Chlora Lindley-Myers, Co-Vice Chair, represented by Cynthia Amann (MO); Kevin Gaffney, Co-Vice Chair (VT); Ricardo Lara represented by Ken Allen (CA); Michael Conway (CO); [Michael Yaworsky represented by Anoush Brangaccio \(FL\)](#); Gordon I. Ito represented by Kathleen Nakasone (HI); Ann Gillespie represented by C.J. Metcalf (IL); Doug Ommen and Daniel Mathis (IA); Jon Godfread represented by Colton Schulz (ND); Judith L. French, Matt Walsh, and Rodney Beetch (OH); and Michael Humphreys (PA). Also participating were: Kris Hathaway (AR); Wanchin Chou (CT); and Jake Martin (MI).

1. Heard Opening Remarks

Commissioner Birrane provided opening remarks noting that this meeting was part of an ongoing commitment to engage with consumer representatives, allowing them to offer perspective on the important policy discussions taking place under the Innovation, Cybersecurity, and Technology (H) Committee.

Commissioner Birrane also announced that she would retire July 1 from the Maryland Insurance Administration (MIA) and return to private practice. She then announced the following leadership changes: 1) Commissioner Gaffney will move into the chair role for the Committee, and Commissioner Conway will return to the vice chair role; and 2) Commissioner Humphreys will move into the chair role, and Commissioner Gaffney will move into the vice chair role for the Big Data and Artificial Intelligence (H) Working Group.

Commissioner Birrane also shared that Karrol Kitt (Consumer Representative) passed away June 27. Peter Kochenburger (Southern University Law School) provided further comments to acknowledge Kitt's passing and expressed gratitude for her work and support.

2. Adopted its Spring National Meeting Minutes

Commissioner Gaffney made a motion, seconded by Commissioner Conway, to adopt the Committee's March 18 minutes (*see NAIC Proceedings – Spring 2024, Innovation, Cybersecurity, and Technology (H) Committee*). The motion passed unanimously.

3. Received an Update on its Workstreams

Miguel Romero (NAIC) provided an update on the Committee's initiatives, which included progress and developments on the following workstreams:

- A. AI Systems Evaluation and Training Collaboration Forum, where charges are in development anticipating the evaluation work proceeding under a new working group. This Collaboration Forum will broadly examine how state insurance regulators update market conduct processes for artificial intelligence (AI) systems.
- B. Third-Party Data and Models (H) Task Force will have its next meeting July 10, with Commissioner Conway also acknowledging a meeting scheduled for July 30.

- C. Big Data and Artificial Intelligence (H) Working Group is in the process of developing the health AI/machine learning (ML) survey and AI training content for state insurance regulators and is actively monitoring and supporting the adoption of the NAIC Model Bulletin by the states. This Working Group will consider the next steps after bulletin adoption.
- D. Privacy Protections (H) Working Group will hold its next meeting July 10 to continue discussion on the drafting direction and engage with stakeholders and consumer representatives to solicit input.

4. Heard Presentations from Consumer Representatives

A. Consumer Protection Proposals

Brendan Bridgeland (Center for Insurance Research—CIR) noted the importance of establishing testing and monitoring programs to mitigate the potential negative impact of unfair discrimination on protected classes. He addressed additional consumer concerns about broader risks of unfair discrimination that can be created by using multiple datasets to make underwriting or rating decisions that impact consumers, as the datasets may not have had sufficient testing. He raised a concern that risk factors might be applied more than once from the combination of the datasets. He highlighted the potential concern that just because data appears to correlate with the predicted risk of loss does not guarantee that a risk classification accurately and fairly measures a risk distinction between consumers. Bridgeland noted that risk classifications can overlap or prove to be duplicative proxies of another risk factor already incorporated elsewhere; the more data elements being used, the higher the likelihood there will be potentially duplicative or overlapping data. Bridgeland cited a historical case where individuals who were either very heavy or very lean in relation to their height were charged a higher risk premium when, in fact, it was subsequently determined by actuarial analysis that smoking was the contributing factor to higher mortality, not necessarily weight. However, factors for smoking and extreme weight deviations were both being applied, in effect twice for the same risk.

Bridgeland recommended that outcomes should be tested to ensure actuarial soundness and recommended a robust spot-check of the impact of outcomes on consumers. He emphasized the importance of transparency and noted that the criminal record history of consumers can be problematic. Bridgeland said that just because a data set appears to be correlated with predictions of loss does not guarantee that a particular risk classification accurately and fairly measures a distinction between two consumers. He further noted that the more disparate factors are used without considering the causation element, in particular, how those factors might interact and lead to a result or even interfere with each other in a manner that might lead to unfair discrimination.

Bridgeland highlighted the importance of transparency for consumers to trust the insurance industry. He noted that every time a consumer learns about a new industry practice affecting them, and they learn about it for the first time through a cancellation notice or a salacious media article, it harms the reputation of insurers and state insurance regulators.

Kochenburger added that consumers cannot evaluate this issue for themselves and that it is almost impossible to access their own information and how it is being used. These evaluations require an analysis of the pooled data on a systematic basis to identify bias. He noted that this could be done through litigation class action suits eventually but is not the preferred method.

B. Privacy Protections

Brenda Cude (Consumer Advocate) stated that the primary goal of privacy protections regulation is to control personal consumer data collection, processing, and transfer (i.e., the goal should be to strengthen existing protections regarding this information). She expressed concern that it is impractical for consumers to be counted

on to protect themselves due to the constant monitoring of multiple organizations that constantly change their policies. Cude said most consumers lack the time and expertise required to exercise their privacy rights and do not have the ability to assess the risk from organizations that have access to their data. She noted that one academic study estimated that it would take a typical person 200 hours a year to read all the privacy notices relevant to them, assuming the notices were even readable. She noted the additional difficulty in assessing the increasing risk of data privacy in light of advancements in AI, which could cause a collective social problem. Cude said she expects regulation that emphasizes data minimization, clear expectations about the policies and procedures required to dispose of personal information when it no longer serves a business purpose, timely and transparent consumer notices, prohibitions on insurers discriminating against consumers who opt out of disclosing personal information, and an opt-in rather than opt-out approach. She concluded by stating that a privacy rights-based approach simply puts too much responsibility on individuals to solve a problem that is not an individual problem but rather one shared by all consumers.

Harry Ting (Health Care Consumer Advocate) stated that the passage of a new privacy model should be a priority of the NAIC. He brought to light that expecting consumers to read privacy policies, which are difficult to understand, in order to provide the consumer's choice to opt out of sharing personal information is not effective protection. He noted that the *Insurance Consumer Privacy Protection Model Act* (#674) states that "No licensee shall collect, process, or share a consumer's personal information in connection with any additional activity without first providing the consumer a clear and conspicuous notice that such information will not be collected, processed or shared unless the consumer opts in to such collection and use their personal information," and that such a provision must be included in the new privacy protection model. Additionally, Dr. Ting said that protected consumers must include not just current customers but also insurance applicants and past customers. He added that currently, many privacy policies claim to protect consumer privacy but use dark pattern techniques that make it difficult for consumers to do so, which is why the Working Group should create a template privacy policy for licensees. Dr. Ting said the U.S. Department of Health and Human Services (HSS) has used this approach for years to communicate with Medicare Advantage and Part D drug plan customers. He said the template should use the informational categories that California requires.

Dr. Ting, speaking for Erica Eversman (Automotive Education & Policy Institute—AEPI), continued by stating that third-party service providers must follow privacy policies when they are provided data and that without this requirement, personal information is not protected. He said providing undefined blanket statements about privacy protection policies that third-party service providers must follow is useless. Further, he stated that the model that the Privacy Protections (H) Working Group develops must require licensees to explicitly explain what privacy practices the third-party service providers must follow and should define those provisions accurately and with proper limitations. The new privacy protection model needs provisions requiring data minimization and deletion of information that is no longer needed.

Lucy Culp (Leukemia & Lymphoma Society—LLS) stated that the use of AI systems poses significant risks to consumers by reinforcing long-standing biases to consumers, and there is a need to ensure that the health AI/ML survey addresses the ways that AI is used in health insurance by including more granular questions than those included in the life AI/ML survey. She recommends questions focused on the benefits and usage of AI and noted that the role of third parties is more pronounced than in life insurance. She further stated that there is a greater need to understand how underlying datasets are used, and more granular questions are needed to better understand how insurers are monitoring the quality of datasets aggregated by third-party providers because the way they are integrated could be problematic. Culp stated that consumer representatives should have the opportunity to review the survey in a testing/pilot phase. She said that a unique feature of health insurance is the interaction within the medical system and that insurers are increasingly relying on AI to supplement or supplant individual decision-making and the judgment of medical professionals and prior authorization or even levels of care assessment or other coverage determinations. She recommended following a similar procedure that the

federal Centers for Medicare & Medicaid Services (CMS) has implemented, which is to prohibit Medicare Advantage plans from solely relying on the use of AI to make coverage determinations or terminate service. She recommended that the Committee and individual states consider this policy. Culp additionally noted that the HHS Office of Civil Rights (OCR) recognizes the important role of AI in health programs and activities in its recently finalized regulations, implementing Section 1557. In that new rule, the HHS OCR is requiring covered entities to make reasonable efforts to identify the use of AI tools and to mitigate the risk of discrimination resulting from how those tools are used.

Adam Fox (Colorado Consumer Health Initiative—CCHI) reiterated that there is a need to critically approach the issue of using AI. He expressed concerns regarding whether there are clear benefits to patient outcomes and whether privacy and concerns of potential bias and discrimination are adequately addressed. He noted that women and people of color may be biased against due to limited representation in data sets and that AI systems must be designed from the ground up in order to mitigate perpetuating and reinforcing inequalities to prevent unintended consequences and bias. Appropriate quality and representative data must be used, and the design of the algorithms and models must be suitable for intended use to prevent bias and discriminatory assumptions. He continued by stating that it is important to ensure the same level of governance and accountability applies to third-party vendor models that may be used in insurance practice. Fox said that carriers who effectively manage both coverage and providers or hospital systems through integrated health maintenance organizations (HMOs) may leverage additional applications of AI and algorithms in the provision of healthcare services and management of claims or utilization, which adds a layer of complexity to the already significant risks for discrimination and inappropriate denials of care.

Commissioner Birrane then solicited questions from members of the Committee and its Working Groups, to which Commissioner Gaffney expressed appreciation for the adoption of the Model Bulletin and looked forward to continuing to work with the consumer groups to ensure a good outcome to protect consumers. Commissioner Birrane pointed out that during the Committee's session at the Summer National Meeting in Chicago, there will be a panel presentation on the use of AI in health care.

Having no further business, the Innovation, Cybersecurity, and Technology (H) Committee adjourned.

SharePoint/NAIC Support Staff Hub/Member Meetings/H Cmte/2024_Summer/H-Interim-Meeting062824/Materials-H-Cmte_0628Interim-Minutes.docx

2. Consider Adoption of its Task Force and Working Group Reports

Attachment Two

–Commissioner Kevin Gaffney (VT)

Draft: 7/29/24

Big Data and Artificial Intelligence (H) Working Group
Virtual Meeting
July 29, 2024

The Big Data and Artificial Intelligence (H) Working Group met July 29, 2024. The following Working Group members participated: Michael Humphreys, Chair and Shannen Logue (PA); Kevin Gaffney, Vice Chair and Mary Block (VT); Jimmy Gunn (AL); Alex Romero and Molly Nollette (AK); Tom Zuppan represented by Lori Munn (AZ); Ken Allen (CA); Michael Conway represented by Jason Lapham (CO); Andrew N. Mais represented by George Bradner (CT); Karima M. Woods (DC); Rebecca Smid (FL); Weston Trexler (ID); Erica Weyhenmeyer (IL); Amy L. Beard represented by Victoria Hastings (IN); Doug Ommen represented by Jared Kirby (IA); Tom Travis (LA); Sandra Darby (ME); Raymond Guzman (MD); Caleb Huntington (MA); Jeff Hayden and Jake Martin (MI); Jacqueline Olson and Phil Vigliaturo (MN); Cynthia Amann (MO); Connie Van Slyke (NE); Scott Kipper represented by Nick Stosic (NV); Christian Citarella (NH); Adrienne A. Harris represented by Kaitlin Asrow (NY); John Harrison represented by Tracy Biehn (NC); Jon Godfried represented by Colton Schulz (ND); Judith L. French represented by Matt Walsh (OH); Elizabeth Kelleher Dwyer (RI); Michael Wise (SC); Carter Lawrence represented by Emily Marsh (TN); J'ne Byckovski and Rachel Cloyd (TX); Scott A. White represented by Dan Bumpus (VA); Nathan Houdek represented by Lauren Van Buren (WI); and Bryan Stevens represented by Lela Ladd (WY).

1. Adopted its Spring National Meeting Minutes

Commissioner Gaffney made a motion, seconded by Superintendent Dwyer, to adopt the Committee's March 16, 2024 minutes (*see NAIC Proceedings – Spring 2024, Big Data and Artificial Intelligence (H) Working Group*). The motion passed unanimously.

2. Received an Update on the Working Group's Health Insurance AI Survey Work

Commissioner Humphreys provided an update on the status in the development of the health insurance AI/ML surveys, which included tailoring the prior surveys' questions to health insurance, proceed with a pilot study, and issue the survey later this year. He reiterated that the purposes of the health AI/ML surveys are to understand how industry is using AI, how the use of AI is governed, and how the products and systems are being developed to guide future discussions on next steps. Humphreys stated that the group has had some conversations with consumer representatives and are currently finalizing conversations with a handful of large major medical carriers that will participate in the pilot program to give feedback on the survey questions. By the Spring National Meeting the group will have the analysis and report complete for discussion at the group level and publicly.

Birny Birnbaum (CEJ) asked what the plan was for reissuing the surveys to receive updated responses. Commissioner Humphreys deferred this question to Shannen Logue (PA) to answer.

Josh Goldberg (HCSC) asked to confirm that the launch of the survey is planned for November 11 with a due date of January 15. Commissioner Humphreys confirmed.

Shannen Logue (PA) stated the group met with consumer representatives on May 13 to receive feedback and stated that the survey will be issued for public access on October 4. She stated that the health surveys will include questions relating to data usage, arrangements with third parties, coordination of governance with existing health provider governance standards, and will be tailored to the use of AI in operational functions of health insurers. She explained the group's intentions are to ensure that the questions align with the NAIC Model Bulletin. Regarding the auto surveys, the group will conduct regulator-only follow up discussions with selected personal

auto carriers. Among those carriers, for those that initially responded that they do not currently use AI/ML in their operations, the group will follow up to ask whether they have begun to use AI or ML in which operations and in which capacity. For the selected carriers that originally responded they are currently using AI/ML, follow up questions will be asked about any changes in their use of AI/ML, whether they have begun to use generative AI, their degree of human involvement, efforts to identify and mitigate model drift, and their uses of third-party systems. The group anticipates completing the first round of follow up interviews by October 31 and anticipates repeating the surveys every two to three years.

Birnbaum asked whether the plan consists of following up with selected companies who provided anomalous responses between auto and home who indicated that they have certain uses or that they were engaged in using AI/ML. Logue confirmed that is correct. Birnbaum expressed that repeating the surveys on a regular schedule would result in more consistent responses.

Lucy Culp (Leukemia & Lymphoma Society) asked whether Other Health, like Short Term Plans Accepted Benefits, will be included in the surveys. Logue responded that the surveys will start with comprehensive major medical plans (individual, the small group, large group as well as student health), but then there could be a second round of surveys.

3. Received a Presentation on the Society of Actuaries' Research on Inference Methods

Dorothy Andrews (NAIC) covered several aspects of the Society of Actuaries (SOA) paper on inference methods, explained the theory of the BIFSG method, and included examples of the results of the method. Andrews discussed the underlying data used by the BIFSG method, its limitations, and concerns regarding its accuracy. She showed how the BIFSG method has been applied to a variety of studies and applications, including health care decision making, mortgage and non-mortgage lending patterns, academic research, taxation, and financial credit access issues. She explained a few of the performance metrics used, and introduced the concepts of the probabilistic and statistical types of inference methods. She clarified that the BIFSG method is a Bayesian probabilistic approach. She explained that the BISG only uses surnames, geo-location, and census bureau demographics data to estimate race, while the BIFSG additionally uses first names to estimate probabilities of race and ethnicity. The BIFSG method has been applied on data from mortgage applications and voter registration rolls and has shown improvement over the BISG method in accuracy and coverage. The BIFSG method was used to find that the incidence of missing race and ethnicity data is higher among non-Hispanic and Hispanic blacks than other groups.

Andrews then walked through the mechanics of how the probabilities are calculated in the BIFSG method using Bayesian theory, and provided the results of estimated probabilities of race for Miguel Romero (NAIC), Scott Sobel (NAIC), and herself. She explained why her estimated race was incorrect considering her first and last names and her location of residence. In that example, she provided insights into how bias can be embedded in reference/training data. She provided another example that referenced a study where the researchers found the BIFSG method overestimated the earned income tax credits take-up rate for whites, and underestimated the rate for blacks; it underestimated average tax rates for whites but was fairly accurate for blacks, Hispanics, and other groups; and it predicted higher audit rates for whites than non-whites, which is in conflict with actual audit rates. She clarified that the BIFSG method was designed to perform inference on a large group of people, not to infer the race at an individual level.

Sylvia Yee (DREDF) asked about whether the method would work well on people of mixed race. Andrews responded that the method may not be as accurate on people of mixed race, and for people who live in very diverse communities.

Birnbaum commented that perfect is the enemy of good, in that there is a technology that has been used in regulatory applications that, while may not be perfect, may be fit for purpose to assess bias in AI applications and insurance applications. Further he stated that while there is always room for improvement, there is no reason for the NAIC not to endorse testing for racial bias using the BIFSG method.

Having no further business, Humphreys adjourned the Big Data and Artificial Intelligence (H) Working Group meeting.

SharePoint/NAIC Support Staff Hub/Member Meetings//H CMTE/2024_Interim Meetings/2024-07-29 BDAIWG - Open Virtual Mtg Minutes.docx

E-COMMERCE (H) WORKING GROUP**Interim Meeting Summary Report**

The Working Group met on April 4, in open session where the Working Group discussed its 2024 work plan and adopted the E-Commerce Modernization Guide. The Working Group met on July 18, to hear a presentation from Tolga Tezel and Norman Tan from Canopy Connect on open insurance. There was robust discussion during this meeting regarding adding language to NAIC model laws to protect a consumer's right to control the usage of their information in relation to the work of the Privacy Protections (H) Working Group. The Working Group will hold another open meeting to hear a presentation from Pennsylvania to educate the Working Group on its Key Smart Launch Program.

3. Hear a Presentation on Federal Regulatory Actions Related to the Use of Artificial Intelligence (AI)

Attachment Three

–Paige Waters (Locke Lord LLP)

NAIC H COMMITTEE UPDATE: FEDERAL REGULATORY TOOLS FOR ARTIFICIAL INTELLIGENCE (AI)

AUGUST 15, 2024

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OBJECTIVE

- To identify those regulatory tools that federal agencies are using to regulate AI
- Compare those federal agency tools with those of insurance regulators
- Identify additional regulatory tools that insurance regulators may want to explore



OBSERVATIONS

- Based upon current AI federal initiatives, it appears that state insurance regulators are utilizing most of the available AI regulatory concepts.
- Given the rapid development of AI, insurance regulators likely will benefit from monitoring federal AI initiatives.



BACKGROUND

- **Currently, there is no comprehensive federal law in the US that universally regulates the development of AI or specifically prohibit or restrict their use.**
- However, in the interim, state and federal regulators are leveraging existing law to regulate AI.
- In October 2023, President Biden issued an Executive Order designed to manage AI risks of the Federal government while also promoting innovation by including standards for testing and best practices. (<https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/>)
- U.S. Department of Commerce, National Institute of Standards and Technology (NIST) has released four draft publications intended to help improve the safety, security and trustworthiness of AIS. (<https://www.nist.gov/>)



NAIC & OTHER STATE INSURANCE AI REGULATORY TOOLS

- Written Guidance – NAIC AI Model Bulletin
- Corporate Governance – Policies, Practices, Procedures, and Controls
- Random Sample Testing and Reviews
- Examination Authority – Market Conduct Exams
- Outsourcing & Vendor Management – Insurer Oversight & Contracting
- Prohibit Unlawful Bias
- Enforcement, Penalties & Fines





FEDERAL AGENCIES ENGAGED IN AI INITIATIVES

- U.S. Patent and Trademark Office (USPTO)
- Office of the Comptroller of the Currency (OCC)
- Federal Deposit Insurance Corporation (FDIC)
- Consumer Financial Protection Bureau (CFPB)
- Securities Exchange Commission (SEC)
- Financial Industry Regulatory Authority (FINRA)
- US Treasury/Banking Regulators
- Department of Labor (DOL)



EXAMPLES OF FEDERAL AI REGULATORY TOOLS

- Written Guidance & FAQs
- Corporate Governance - Policies, practices, procedures, and control systems
- Random sample testing and reviews
- Examination Authority
 - Audits & Requests for Information
- Outsourcing & Vendor Management
- Compliance with Non-Discrimination Laws
- Model forms and disclosures to incorporate disclosure of AI usage
- Avoid Conflict of Interest
- Fines and Penalties



WHICH AGENCIES ARE USING WRITTEN GUIDANCE & CORPORATE GOVERNANCE

- **Written Guidance & FAQs**
 - USPTO
 - OCC, FDIC, & CFPB
 - SEC
 - FINRA
 - US Treasury/Banking Regulators
 - CFPB
 - DOL
- **Corporate Governance - Policies, practices, procedures, and control systems**
 - OCC, FDIC, & CFPB
 - US Treasury/Banking Regulators
 - FINRA
 - SEC



WHICH AGENCIES ARE USING TESTING & EXAMS

■ **Testing**

- OCC, FDIC, & CFPB
- SEC (AI red-teaming is defined as “a structured testing effort to find flaws and vulnerabilities in an AI system, often in a controlled environment and in collaboration with developers of AI.”)
- FINRA
- SEC

■ **Examinations & Audits**

- USPTO
- SEC (Sweeps)
- US Treasury/Banking Regulators
- CFPB
- FTC

WHICH AGENCIES ARE USING THESE TOOLS

- **Outsourcing and Vendor management**
 - FINRA
- **Comply with Non-Discrimination Laws**
 - OCC, FDIC, & CFPB
 - DOL
 - FINRA
 - SEC
- **Enforcement, Penalties & Fines**
 - CFPB
 - FTC



ADDITIONAL FEDERAL AI REGULATORY TOOLS

- **Requirements To Avoid Conflicts of Interest**

- OCC, FDIC, & CFPB
- SEC
- DOL

- **Disclosures of AI Use & Model Forms**

- USPTO
- SEC
- CFPB
- DOL
- SEC

APPENDIX – FEDERAL AGENCY AI GOVERNANCE INITIATIVES



U.S. PATENT AND TRADEMARK OFFICE

- On July 17, 2024, the USPTO released its 2024 guidance update on patent subject matter eligibility, making significant revisions to its prior guidance on subject matter eligibility determinations. The update aims to provide clearer guidelines and foster innovation for AI inventions while maintaining robust standards for patentability.
- The guidelines were developed by soliciting input from stakeholders and monitoring patent subject matter eligibility developments in the courts. These initiatives should provide assurance to Applicants that AI-related or AI-assisted inventions will not be unequivocally patent ineligible solely due to the use or implementation of AI.
- **Key Changes in the 2024 Guidance**
 - **Clarified Interpretations and Examples** - The update provides more detailed interpretations of key terms related to AI and other emerging technologies.
 - **Focus on Practical Application** - The update emphasizes the practical application of AI technologies. Applicants should clearly outline how their AI invention applies in a real-world scenario, ensuring that the invention goes beyond theoretical concepts.
 - **Enhanced Examination Procedures** - The update introduces a structured approach for determining whether AI inventions meet the criteria for patent eligibility under the revised guidelines.
 - **Interdisciplinary Collaboration** - This approach aims to ensure that examiners have access to the necessary expertise when assessing the patentability of AI-related inventions.
- **Implications for Patent Applicants**
 - **Detailed Disclosures** - Applicants should provide comprehensive disclosures that clearly describe the practical application of their AI inventions. It is crucial to include specific examples and use examples/scenarios demonstrating how the invention operates in real-world scenarios.
 - **Focus on Technical Improvements** - The update provides favor to inventions that offer technical improvements or solve technical problems using AI technology.

[Locke Lord QuickStudy: U.S. Patent Office Provides Guidance for Patenting Artificial Intelligence Inventions | News, blogs & events | Locke Lord](#)



U.S. OFFICE OF THE COMPTROLLER OF THE CURRENCY

- On June 20, 2024, the OCC approved a final rule to implement quality control standards for automated valuation models (AVMs) used by mortgage originators and secondary market issuers in valuing residential real estate collateral securing mortgage loans.
- The OCC, Board, FDIC, NCUA, CFPB, and FHFA (collectively, the Agencies) are adopting a final rule to implement the quality control standards mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) for the use of AVMS by mortgage originators and secondary market issuers in determining the collateral worth of a mortgage secured by a consumer's principal dwelling.
- Under the final rule, institutions that engage in certain credit decisions or securitization determinations must:
 - adopt policies, practices, procedures, and control systems to ensure that AVMs used in these 3 transactions to determine the value of mortgage collateral adhere to quality control standards designed to ensure a high level of confidence in the estimates produced by AVMs;
 - protect against the manipulation of data;
 - seek to avoid conflicts of interest;
 - require random sample testing and reviews; and
 - comply with applicable nondiscrimination laws.
- [Final Rule: Quality Control Standards for Automated Valuation Models \(fdic.gov\)](#)





U.S. SECURITIES EXCHANGE COMMISSION

- Strategic Hub for Innovation and Financial Technology (FinHub) that focuses, in part, on AI generally in the securities markets.
- The SEC proposed a rule to address risks posed to investors from conflicts of interest associated with using predictive data analytics.
- With regard to investment advisers, the SEC's examinations division has begun soliciting information about advisers' uses of AI.
- SEC staff have issued guidance and a risk alert addressing robo-advisers that use algorithms to make investment recommendations.
 - https://www.sec.gov/resources-for-investors/investor-alerts-bulletins/ib_robo-advisers
 - <https://www.sec.gov/files/exams-eia-risk-alert.pdf>



U.S. SECURITIES EXCHANGE COMMISSION

- The Division of Examinations has initiated a sweep of investment advisers on how AI-based tools are being used by the firms. The SEC has requested information on how firms are managing AI-related conflicts of interest, copies of marketing materials that mention AI, continuity plans around AI system failures, and other documents related to AI.
- Firms should be prepared to supply the SEC with documentation around the firm's management of AI risk, including:
 - An inventory of where and how AI-based tools are used within the firm.
 - Policies and procedures that govern the use of AI within the firm, and in investor interactions.
 - Security controls that are in place to protect client data that is used by AI systems.
 - Information on who developed and manages the AI software being used.
 - The sources and providers of data included in AI tools and models.
 - Reports or results of the validation and testing that has been performed on the firms AI-based tools.
 - Internal reports of any incidents where AI use created regulatory, ethical, or legal issues.
 - Marketing materials and disclosures that reference the use of AI.
 - A list of governance committees with specific AI-related responsibilities and associated documentation.
 - Business continuity plans in case of AI system failures or errors.

<https://www.acaglobal.com/insights/sec-conducts-sweep-ai-use-investment-advisers>



FINANCIAL INDUSTRY REGULATORY AUTHORITY

- FINRA formed an Office of Financial Innovation to coordinate fintech efforts that include AI and published a white paper on AI in the securities industry.
- To the extent member firms find ambiguity in the application of FINRA rules based on their specific use of Gen AI or other technology, they may seek interpretive guidance from FINRA by following [FINRA's process for interpretive requests](#).
- Member firms also are encouraged to have ongoing discussions with their Risk Monitoring Analyst as AI-related issues or other changes in their business arise.
- FINRA welcomes general feedback on how its rules might be modernized in light of the use of Gen AI tools or other emerging technologies, consistent with investor protection and market integrity. FINRA will consider providing further guidance or proposing amendments to its rules as appropriate.
- FINRA will continue engaging with its members, regulators, policymakers and other interested parties on the use of Gen AI, LLMs and other emerging technology. Any parties interested in discussing these matters further with FINRA are welcome to contact our [Office of General Counsel](#) for policy and rules-related discussion, and [REMA/Office of Financial Innovation](#) for all other Gen AI engagement.

FINANCIAL INDUSTRY REGULATORY AUTHORITY

- Model risk management programs to reflect the use of AI models:
 - Update model validation processes to account for complexities of an ML model. This includes reviewing the input data (e.g., review for potential bias), the algorithms (e.g., review for errors), any parameters (e.g., verify risk thresholds), and the output (e.g., determine explainability of the output).
 - Conduct upfront as well as ongoing testing, including tests that experiment with different and stressed scenarios (e.g., unprecedented market conditions) and new datasets.
 - Employ current and new models in parallel and retire current models only after the new ones are thoroughly validated.
 - Maintain a detailed inventory of all AI models, along with any assigned risk ratings such that the models can be appropriately monitored and managed based on their risk levels.
 - Develop model performance benchmarks (e.g., number of false negatives) and an ongoing monitoring and reporting process to ensure that the models perform as intended, particularly when the models involved are self-training and evolve over time.

<https://www.finra.org/rules-guidance/key-topics/fintech/report/artificial-intelligence-in-the-securities-industry/key-challenges>

U.S. TREASURY/BANKING REGULATORS

Federal Reserve, OCC, FDIC, SEC, and CFTC could consider the following actions:

- **Regulate how institutions' customer identification and suspicious activity reporting programs use AI.** Regulators must be cognizant of the harms of offloading such an important law enforcement task to AI systems and should outline best practices for implementing AI systems and require institutions to develop standards for how they use AI to automate anti-money laundering tasks.
- **Require banks to periodically review their BSA systems to ensure accuracy and explainability.** Regulators should require institutions to periodically review their AI—perhaps by hiring outside reviewers—to ensure continued accuracy and explainability to expert and lay audiences. Examiners must be able to review source code and dataset acquisition protocols.
- **Require banks to indicate whether they use AI to comply with CRA regulations and, if so, require those systems to be explainable.** Regulators should require banks to disclose if they use AI to comply with the CRA or with regulations promulgated thereunder. Examiners must be able to review source code and dataset acquisition protocols.

<https://www.americanprogress.org/article/fact-sheet-recommendations-for-financial-regulatory-agencies-to-take-further-action-on-ai/>

- The Financial Stability Oversight Council (FSOC) has identified AI as a potential risk to the financial system and has issued recommendations to the other regulators to monitor AI's development in their respective jurisdictions.
- In March 2024, the Department of the Treasury's Office of Cybersecurity and Critical Infrastructure Protection issued a report in response to requirements from the 2023 executive order on AI, entitled "Managing Artificial Intelligence-Specific Cybersecurity Risks in the Financial Services Sector."

FEDERAL BANKING AGENCIES

- The OCC formed an Office of Financial Technology.
- The FDIC created FDITech, a tech lab, though it recently reduced its public-facing role.
- Four federal reserve banks—San Francisco, New York, Atlanta, and Boston—have also set up offices to study financial innovation and AI. These efforts are intended to focus, in part, on how regulators can use AI to assist in regulating financial institutions as well as to better understand how banks are using AI in their activities.
- These agencies have also jointly issued a request for information on financial institutions' uses of AI and have proposed a rule to impose heightened standards for the use of home appraisals conducted using algorithms.

<https://www.americanprogress.org/article/taking-further-agency-action-on-ai/financial-regulatory-agencies-chapter/>

CONSUMER FINANCIAL PROTECTION BUREAU

- CFPB has provided market participants with various guidance about how AI may and may not be used.
- CFPB explained that federal law does "not permit creditors to use complex algorithms when doing so means they cannot provide the specific and accurate reasons for adverse actions." It has also warned that creditors may not "rely on overly broad or vague reasons to the extent that they obscure the specific and accurate reasons relied upon."
- CFPB has also penalized firms for relying on faulty automated compliance systems. The bureau ordered Wells Fargo to pay \$3.7 billion for compliance failures that resulted in wrongful home foreclosures, car repossession, and lost benefit payments and ordered Hello Digit to pay a \$2.7 million fine for causing users to be charged overdraft fees.
- CFPB is reportedly increasing examinations of AI systems.

<https://www.americanprogress.org/article/taking-further-agency-action-on-ai/financial-regulatory-agencies-chapter/>

- **Require credit reporting agencies to describe whether and to what extent AI was involved in formulating reports and scores.**
- **Require credit reporting agencies to periodically review their AI systems to ensure explainability and that no new discriminatory activity applies.** Beyond simply requiring credit reporting agencies' AI systems to be explainable to expert and lay audiences, the CFPB should also require the agencies to periodically review their systems to ensure continued explainability as new data are introduced. CFPB examiners must be able to review source code and dataset acquisition protocols.
- **Require credit reporting agencies to provide for human review of information that consumers contest as inaccurate.**
- **Require users of credit reports to inform consumers of their right to human review of inaccuracies in AI-generated reports in adverse action notices**, per 15 U.S.C. § 1681(m)(4)(B).
- **Update model forms and disclosures to incorporate disclosure of AI usage.** Given the CFPB's mandate that credit reporting agencies and users of credit reports use model forms and disclosures, the CFPB should update those forms to include spaces for model form users to describe their AI usage.

<https://www.consumerfinance.gov/about-us/blog/cfpb-approves-rule-to-ensure-accuracy-and-accountability-in-the-use-of-ai-and-algorithms-in-home-appraisals/>

U.S. DEPARTMENT OF LABOR

- DOL has published a [guide for federal contractors and subcontractors](#) on avoiding discrimination in “hiring involving AI and other technology-based hiring systems.”
- The report warns that “the use of AI systems also has the potential to perpetuate unlawful bias and automate unlawful discrimination, among other harmful outcomes.”
- To mitigate these potential harms, the guidance provides answers to common questions that employers may have about the use of AI in hiring decisions. These include:
 - Maintaining records and ensuring the confidentiality of records consistent with all Office of Federal Contract Compliance Programs (OFCCP) regulatory requirements.
 - Cooperating with the OFCCP by providing requested information on AI systems being deployed.
- The guidance covers best practices that contractors can adopt “to help avoid potential harm to workers and promote trustworthy development and use of AI.” These include:
 - Providing advance notice and due disclosure to applicants, employees, and their representatives if the contractor intends to deploy AI tools in the hiring process.
 - Engaging with employees in the design and deployment of AI systems used in employment-related decisions.
 - Not relying solely on AI systems in making employment-related decisions.
 - Ensuring that AI systems used to make hiring decisions are generally accessible to people with disabilities.

U.S. DEPARTMENT OF ENERGY

- The Department of Energy's AI Risk Management Playbook (AI RMP) is a comprehensive reference guide for AI risk identification and recommended mitigations for responsible and trustworthy AI use and development.
- Ensure that AI systems are specifically evaluated for their potential impact on civil rights, civil liberties, equal access to opportunities, and access to vital services and entitlements. If an AI system is part of a process by which individuals gain rights, opportunities or access to critical needs or services:
 - Proactively conduct an equity assessment, which should focus on identifying and mitigating potential negative equity impacts of introducing the AI system in the specific context.
 - Test the AI system, using a broad range of measures, to assess whether the system produces disparities for different groups; if varied performance levels are detected, investigate whether this differential is inconsistent with applicable civil rights law, caselaw, and constitutional law.
 - Ensure the AI system seek use-specific, brief, and direct consent requests to use data in specific contexts, for specific time duration, and by specific entities. Ensure that anyone impacted by the AI system can access data and metadata about themselves, view who has access, correct the data, and retroactively withdraw data access consent (with deletion of data and metadata).
 - Ensure that regular monitoring, third-party auditors, and transparency processes – as outlined later in this document – include a focus on assessing and mitigating inequitable impacts that might arise from a real-world deployment context. This should include the publication of an algorithmic impact assessment.
 - If the AI system is used for surveillance, subject it to even higher scrutiny, including toward both their actual and perceived threats of harassment.

<https://www.energy.gov/ai/doe-ai-risk-management-playbook-airmp#:~:text=The%20Department%20of%20Energy%20AI%20Risk%20Management%20Playbook,responsible%20and%20trustworthy%20%28R%26T%29%20AI%20use%20and%20development.>

FEDERAL TRADE COMMISSION

- On November 21, 2023, FTC authorized the **Compulsory Process for AI-Related Products and Services** enhancing FTC's ability to issue civil investigative demands relating to AI.
- On December 19, 2023, FTC issued its **first enforcement order** against a company for using AI in an allegedly biased and unfair manner (Rite Aid is prohibited from using facial recognition technology for surveillance purposes for 5 years to settle FTC charges that it failed to implement reasonable procedures and prevent harm to consumers in its use of facial recognition technology.)
- On January 25, 2024, FTC issued **Orders to File Special Report** under Section 6(b) of the FTC Act, which authorizes it to conduct studies that allow enforcers to gain a deeper understanding of market trends and business practices, to Alphabet, Inc., Amazon.com, Inc., Anthropic PBC, Microsoft Corp., and OpenAI, Inc. requiring them to provide information regarding recent investments and partnerships involving generative AI companies and major cloud service providers.
 - 45 days from the date they receive the order to respond.



DISCLAIMER

The information provided in this presentation does not, and is not intended to, constitute legal advice; instead, all information, content, and materials provided are for legal educational purposes only.

4. Hear a Presentation on the NIST AI Safety Institute Consortium (AISC) Efforts to Develop a Framework for Governing AI

Attachment Four

–Dale Hall (Society of Actuaries–SOA)



NAIC INNOVATION, CYBERSECURITY, AND TECHNOLOGY (H) COMMITTEE

Thursday, August 15, 2024

R. Dale Hall, FSA, MAAA, CERA, CFA
Managing Director of Research
Society of Actuaries Research Institute

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Society of Actuaries Research Institute

- SOA focus on education, research and professional development of the actuarial profession
- Wide variety of research including experience studies, actuarial practice research and global research partnerships
- Strategic Research Programs include a strong focus on technology, artificial intelligence, and responsible use of data



Actuarial Innovation and Technology

Highlights the evolution of technology as it applies to the actuarial profession and industry.

<https://www.soa.org/programs/strategic-research-program/>

U.S. AI Safety Institute Consortium

- SOA Research Institute selected in February 2024 to be part of the U.S. AI Safety Institute Consortium (AISIC)
 - Organized by Department of Commerce's National Institute of Standards and Technology (NIST)
 - Consortium consists of 200 leading AI stakeholders including technology companies, technology research organizations, and research universities
- Important to keep focus of AI safety across all industries including insurance and financial services



Key AISIC Initiatives and Working Groups

- Risk Management for Generative AI
 - Creation of a Generative AI Risk Management Framework
 - Governance, Transparency, and Disclosure
- Synthetic Content Detection and Authentication
- Capability Evaluation of Safe AI Testing and Auditing
 - Testing environments; Evaluation of risks; Avoidance of Harm
- Red-Teaming Guidelines for Safe Deployment of AI
- Safety & Security
 - Model Safety: Minimize unexpected or unintended model behavior
 - Model Security: Explore techniques and produce guidance on existing methods for ensuring security practices into AI design, development, and deployment

Recent SOA Activities in AISIC

- Ongoing interaction with AISIC Working Groups
- Comment letter on implementation of Gen AI Risk Management Framework in June 2024
 - Focus on uniqueness of insurance and financial services industries
 - Ensure that AI-driven algorithms do not inadvertently create bias or disparate impact based on protected class variables
 - Risk Management and Governance concepts from NAIC Model Bulleting from December 2023
- Request For Information from U.S. Treasury on use of AI within the financial sector



Forward Opportunities

- U.S. actuarial profession strongly engaged with the rapid evolution of AI
- Risk Management and governance expertise of the actuarial profession with a wide variety of models
- Professional development and education opportunities on responsible use building and implementing AI models
- U.S. Actuarial Standards of Practice and Code of Conduct provide additional professional guidance



5. Hear a Presentation on the International Actuarial Association (IAA) Efforts to Survey Global AI Governance Frameworks

Attachment Five

–Dorothy Andrews (NAIC)

AI Governance

A Global Update

Dorothy L. Andrews
Senior Behavioral Data Scientist & Actuary
Research and Actuarial Service Department

Thursday, August 15, 2024
11:00 - 12:30 Central



**International Actuarial Association
Association Actuarielle Internationale**

AI Task Force (AITF) - Governance Workstream

- Monitor and evaluate governance frameworks, policies, and regulations.
- Identify gaps and areas where actuarial expertise can contribute.
- Participate in policy discussions, consultations, and industry forums
- Emphasize the actuarial perspective, advocating for fair and transparent AI practices.
- Engage with regulators, standard-setting bodies, and policymakers
- Contribute actuarial insights to the development of AI governance frameworks.





International Actuarial Association
Association Actuarielle Internationale

Australia
Canada
China
Europe
Singapore
United
Kingdom
United States

Country Comparison

GOVERNANCE ELEMENTS	US	EUROPE	SINGAPORE	CHINA
AI Principles	✓	✓	✓	✓
Identified Risks	✓	✓	✓	✓
Data Provenance	✓	✓	✓	✓
Third-Party	✓	✓		✓
Risk Model		✓	✓	✓
Bias	✓	✓	✓	



International Actuarial Association
Association Actuarielle Internationale

AI System Risk Levels Under EU AI Act



AI for Good Global Summit

Accelerating the United Nations
Sustainable Development Goals

Geneva, Switzerland, CICG
30-31 May 2024

The goal of AI for Good is to identify practical applications of AI to advance the United Nations Sustainable Development Goals and scale those solutions for global impact. It's the leading action-oriented, global & inclusive United Nations platform on AI.





183

Countries

47

UN partners

+5K

In-person Participants



Geoffrey Hinton

Advisor for the Learning in
Machines & Brains

*presenting remotely

W X

<https://youtu.be/dNjClDI6zT4>



Sam Altman

CEO
OpenAI

*presenting remotely

🔗 W

<https://youtu.be/dNjClDI6zT4>



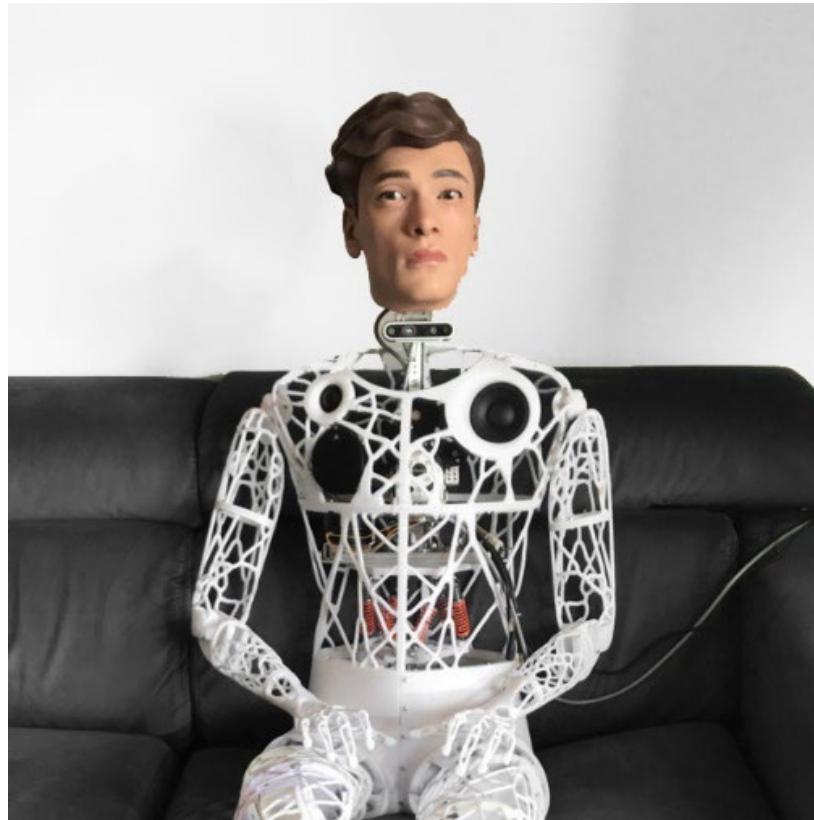
Stuart Russell

Professor of Computer
Science at University of
California, Berkeley, Author
'Human Compatible:
Artificial Intelligence and the
Problem of Control'
UC-Berkeley

in

Meet CAPTCHA!

Completely Automated Public Turing Test To Tell Computers and Humans Apart



Source: <https://hidoba.com/>

Who's Captcha the Robot?

- Speaks 5+ languages, primarily in English
- Customizable personality
- Natural speech flow
- Realistic gaze and face-tracking
- Operates as a tele-present avatar





NIST Launches ARIA, a New Program to Advance Sociotechnical Testing and Evaluation for AI

- The Assessing Risks and Impacts of AI (ARIA) program will assess the societal risks and impacts of artificial intelligence systems.
- The program will help develop ways to quantify how a system functions within societal contexts once it is deployed.
- ARIA's results will support the U.S. AI Safety Institute's testing to help build the foundation for trustworthy AI systems.

<https://www.nist.gov/news-events/news/2024/05/nist-launches-aria-new-program-advance-sociotechnical-testing-and>



NIST Launches ARIA, a New Program to Advance Sociotechnical Testing and Evaluation for AI

May 28, 2024

“In order to fully understand the impacts AI is having and will have on our society, we need to test how AI functions in realistic scenarios — and that’s exactly what we’re doing with this program... NIST and the U.S. AI Safety Institute are pulling every lever when it comes to mitigating the risks and maximizing the benefits of AI.”

<https://www.nist.gov/news-events/news/2024/05/nist-launches-aria-new-program-advance-sociotechnical-testing-and>



Treasury issues request for information on use of AI in financial services

By **Peter D. Hardy & Nathaniel Botwinick** on June 17, 2024

POSTED IN ARTIFICIAL INTELLIGENCE, REGULATORY AND ENFORCEMENT

The U.S. Department of the Treasury (“Treasury”) has released a [Request for Information on the Uses, Opportunities, and Risks of Artificial Intelligence \(“AI”\) in the Financial Services Sector \(“RFI”\)](#). Written comments are due by August 12, 2024.

The NAIC Model Bulletin is Mentioned 2Xs in the RFI



RELEASE: REP. HILL INTRODUCES BIPARTISAN, BICAMERAL LEGISLATION FOR AI INNOVATION IN FINANCIAL SERVICES

WASHINGTON, D.C., August 5, 2024



Source: <https://plus.cq.com/shareExternal/doc/news-8067165/G2mX52lDY7ZCP1e30SDLPPeh9KI?0>

CQ NEWS

Aug. 5, 2024

Bipartisan bill would create 'sandbox' for financial AI products

Aug. 5, 2024 – 3:27 p.m. By Mark Schoeff Jr., CQ

A bipartisan group of lawmakers announced legislation in the House and Senate that would encourage financial firms to experiment with artificial intelligence to develop products and services by providing some protection from regulation.

The bill unveiled Monday would establish a “regulatory sandbox” at several agencies that gives firms leeway to “experiment with AI test projects” without having to worry about “unnecessary or unduly burdensome” regulations or to look over their shoulder for enforcement actions, according to bill language.

The sandboxes would be set up at the Federal Reserve, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Securities and Exchange Commission, the Consumer Financial Protection Bureau, the National Credit Union Administration and the Federal Housing Finance Agency.