Artificial Intelligence Overview
NAIC and State Initiatives

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Agenda

NAIC AI Activities Timeline

State Adoption of AI Bulletin

Health Insurance AI Survey

Personal Passenger Auto Follow Up Conversations

AI Systems Regulatory Roadmap

AI Systems Evaluation Development

"Three Pillars" to AI Regulatory Oversight

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Artificial Intelligence NAIC Activities Timeline

Aug. 14, 2020
Principles of Artificial
Intelligence Adopted
by NAIC

Nov. 1, 2022
Homeowners (HO)
Insurance Use of AI
Survey Issued

May 2, 2023
Life Insurance
Use of AI
Survey Issued

Dec. 1, 2023
Life AI Survey
Report Published
179 Responses

Nov. 11, 2024
Health Insurance
Use of AI Survey
Issued

March 11, 2025
PPA Follow Up
Report Issued

Sept. 28, 2021
Private Passenger
Auto (PPA)
Insurance Use of AI
Survey Issued

Dec. 8, 2022
PPA AI Survey
Report Published
193 Responses

Aug. 10, 2023
HO AI Survey
Report Published
194 Responses

Dec. 2, 2023
NAIC Adopts AI
Model Bulletin

Oct. 8, 2024
PPA Follow Up AI
Survey Issued

May 2025
Health Insurance
Report Issued

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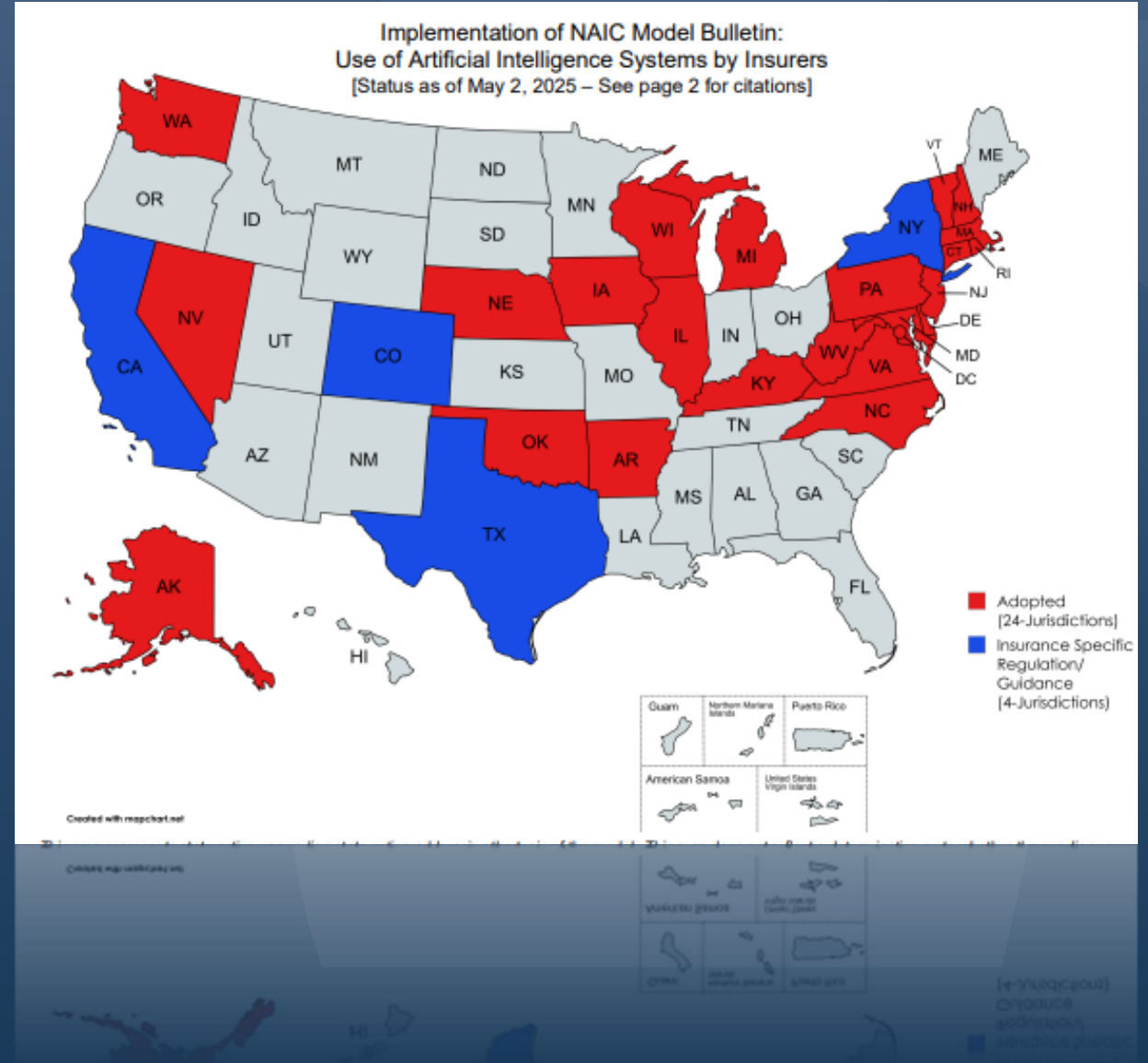
State Adoption of NAIC AI Model Bulletin

- Establishes guidelines and expectations to ensure responsible use of AI by insurers
- Aligned with the NAIC Principles of AI
- Reminds insurers that decisions or actions made or supported by AI must comply with all applicable insurance laws and regulations; specifically unfair trade practice and unfair discrimination laws
- Sets expectations as to how insurers may govern the use of AI
- Advises insurers of the type of information the Department may request during an investigation or examination

As of May 2, 2025

- 24 States Adopted AI Bulletin
- 4 States Issued Guidance or Regulation

Implementation of NAIC Model Bulletin: Use of Artificial Intelligence Systems by Insurers [Status as of May 2, 2025 – See page 2 for citations]

Legend:
- Adopted (24-Jurisdictions)
- Insurance Specific Regulation/Guidance (4-Jurisdictions)

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Colorado Dept of Insurance AI Initiatives

- SB21-169
- Adopted regulations apply to Life Insurers
- Requires annual compliance attestations (Dec. 1, 2024)
- Requires insurers to create a risk-based governance and risk management framework that determine whether its use of external consumer data and information sources ECDIS might result in unfair race-based discrimination, if detected, must immediately remediate the unfair discrimination

- <u>Framework must include:</u>
- Governing principles
- Board-level or committee oversight
- Senior management is responsible and accountable
- Governance committee structure (cross dept, business reps)
- Models and data must be documented, inventoried, with version control, tested, and validated
- Relevant staff get appropriate training
- Documented processes and protocols for addressing complaints or inquiries
- Consumer disclosures when using ECDIS allowing consumer to take meaningful action on adverse decisions
- A rubric for addressing and prioritizing risk,
- Model description and purpose of data and models, documented material changes and rational for changes
- Documented testing to detect unfair discrimination, which include the methodology, assumptions, result, and steps to address unfair discrimination
- Documented description of ongoing performance and drift monitoring, documented process for selecting external data or vendors that use or intend to use external data or models, documented comprehensive annual reviews of governance structure and risk management framework

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Other State DOI AI Initiatives

Texas	Connecticut & District of Columbia	California	New York
• **Bulletin B-0036-20** • Reminds insurers that they are responsible for the accuracy of data used in rating, uw'ing, and claims even if that data is from a third party • May pursue enforcement if an insurer's use of inaccurate data harms policyholders • Insurers are encouraged to provide policyholders with a way to review and correct data being used by the insurer	• "Notice Concerning the Usage of Big Data and Avoidance of Discriminatory Practices" • Insurers must submit an annual AI Certification • Requires licensed insurers to maintain a written AIS Program designed to mitigate risks of adverse consumer outcomes • AIS Program should address development and use of verification and testing methods to identify unfair discrimination, errors, and bias in predictive models and AI systems • DC Bulletin BULLETIN 24-IB-002-05/21 does NOT require annual attestation	• Bulletin 2022-5 reminds insurers to conduct due diligence before using data or tools for compliance with laws, must use data that is nexis to the risk of loss to prevent unfair discrimination. • SB 1120 - Human Oversight in Decision Making – AI systems cannot deny, delay, or alter services deemed medically necessary by licensed doctors • Insurers or any entity doing utilization review has to limit the decision based on clinical history, info., circumstances or records • AI cannot discriminate, it is fairly and equitably applied • Software is open to audits and inspection • Disclosures pertaining to the use of AI is in policies and procedures	• Ins. Circular No. 7 Use of AI and ECDIS in UW'ing and Pricing • Develop a proper governance and risk management framework to mitigate harm to consumers and comply with relevant legal obligations • Includes requirements that consider Actuarial Validity, Unfair or Unlawful Discrimination, Qualitative Assessments, Governance and Risk Management, Board and Senior Management Oversight, Policies, Procedures, and Documentation, Risk Management & Internal Controls, Third Party Vendors, Transparency (Disclosures on marketing, apps, and advertising about uw'ing threshold criteria – If not approved for uw'ing based on ECDIS, must inform consumer of data used)

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High-Level AI State Comparisons

State	Transparency	Governance	Attestations	*Accountability
NAIC Model Bulletin	Encouraged	Encouraged		
California	Disclose use of AI in polices & procedures	Encouraged		Human in loop for medically necessary services
Connecticut	Encouraged	Specific Rqts	Annual Certification	
Colorado	When using ECDIS	Specific Rqts	Annual Attestation	
District of Columbia	Encouraged	Specific Rqts		
New York	Uw'ing criteria disclosures	Specific Rqts		Use of Data/Proxy for Protected Class Reqts
Texas	Encouraged			Clarified accountability of third party data accuracy

*Outside of existing laws, such as Unfair Trade Practices, Unfair Insurance Practices Act, Rate Requirements, and corporate governance annual disclosure report (CGAD)

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Health Insurance AI Survey

Operational Area	In Production	0-1 Year	1-3 Years	3+ Years
Strategic Operations	79%	8	6	0
Utilization/Severity/Quality Mgmt	70%	10	6	2
Fraud Detection	70%	10	6	2
Sales & Marketing	70%	12	4	0
Claims Adjudication	62%	10	7	2
Data Processing	60%	9	12	2
Risk Adjustment	50%	10	17	2
Risk Management	41%	16	13	1
Product Pricing and Plan Design	37%	15	16	6
Prior Authorization	29%	16	25	3

Third-Party Data Usage Do you develop Artificial Intelligence (AI)/Machine Learning (ML) systems internally, use vendors, or both internally with input from vendors?

- N/A 6%
- Develop Internally 10%
- Develop by a Third-Party 15%
- Develop Internally with a Third-Party 13%
- Develop Internally with Third-Party Components 55%

Health Insurance AI Survey

Disclosures Survey Questions	Yes
Do you have AI/ML Governance Principles in place that model the NAIC AI Principles?	92%
Do you have a process for applicants for health insurance to contest an adverse underwriting decision?	29%
Do you keep a log of the number of contested underwriting decisions?	23%
Do you disclose to providers, or physicians how and when AI/ML is used by the insurer or a third-party vendor?	23%

**Coming Soon!
Full Report on
NAIC Website**

Does your company…	Yes
▪ Document accuracy of AI/ML model outcomes?	82%
▪ Document reliability of AI/ML model outcomes?	80%
▪ Test for model drift?	76%
▪ Test for bias in algorithmic outcomes?	75%
▪ Test for bias in modeling data?	70%
▪ Conduct audits on its AI/ML models?	70%
▪ Document unfair discrimination on its AI/ML models?	63%
▪ Apply statistical methods to infer protected class characteristics?	38%

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PPA Follow Up Survey - Conversations with Companies Showed They Were at Different Points of the AI Systems Governance Spectrum

- Implemented AI/Risk Governance Framework
- Complete inventory of data & models
- Frequency of testing established by model type
- Established Risk Ranking Criteria
- Uses sophisticated drift detection
- Tests for adverse consumer outcomes
- Transparent with consumers about AI use
- Assesses risk during vendor procurement
- Avoids vendors who lack AI governance practices
- Uses human in the loop for consumer decisions
- AI use case documentation and evaluation
- Required employee AI training

- Governance Framework was Conceptual
- No inventory of data or models
- No set frequency to evaluate model drift
- Wanted guidance on risk ranking criteria
- Drift testing focused on intended results or performance
- Wanted guidance on testing for adverse outcomes
- No transparency to consumers about AI use
- No testing of vendor models or data (proprietary limitations)
- Low threshold for vendor credibility
- Difficulty validating model outputs treat cohorts similarly
- No use case documentation or evaluation
- Limited or no employee AI training

Modeled Best Practices

Not Able to Demonstrate

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AI Systems Regulatory Framework Roadmap

STEP 1:
Define Principles and Assess Insurer's AI Use

2020
- ✓ Principles of AI

2021 – 2025
Survey Insurers
- ✓ Private Passenger Auto
- ✓ Homeowners
- ✓ Life Insurance
- ✓ Health Insurance
- ✓ Follow Ups

STEP 2:
Develop AI Risk Evaluation Tools

2023
- ✓ AI Model Bulletin

2025
Develop Evaluation Tools To Identify Risks:
- • Market Exams
- • Financial Exams
- • MCAS Data
- • Self-Assessment
- • Evaluation Metrics

STEP 3:
Regulatory Oversight and Accountability

2025
In Coordination with Other Committees and Working Groups...

Refine AI Expectations:
- • AI Governance
- • AI Transparency
- • Adverse Outcomes Accountability
- • Prohibited Practices

STEP 4:
Identify and Address Gaps in AI Evaluation

2026+
In Coordination with Other Committees and Working Groups…

- • Identify New AI Risks or Issues
- • Develop Solutions to Address New Risks

Encourage Innovation By Ensuring AI Systems are Fair, Secure, Safe, and Robust

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STEP 2: Develop AI Risk Evaluation Tools

AI Systems Evaluation:

- Several states already exploring AI evaluations, working under the Big Data AI Working Group, are exploring how states can assess market and financial risk associated with a company's use of AI

Goals:

- Provide regulators with an efficient, standardized data collection tool(s) to use in an investigation or examination that helps identify and assess financial and market risk associated with AI use.

- Provide insurance companies with guidance and/or tool(s) that align with regulator expectations on AI use to ensure development, implementation, and monitoring follow safe and fair practices.

Tasks for 2025:

- Develop new regulatory tool(s), guidance, and identify if additional Market Conduct Annual Statement blanks (MCAS) additional fields needed

- Coordinate the development of review and enforcement tools, resources, guidelines, and training

- Create a self-audit questionnaire for insurers that aligns to regulator evaluation tools and guidance

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STEP 3: Regulatory Oversight and Accountability

Governance

Best Practices, Guidance, Templates

AI Testing

Model Training

Drift Detection

Identifying Adverse Consumer Outcomes

Risk Classification

Transparency

AI Use Disclosure

Data Use Disclosure

Degree of Human In the Loop Disclosure

Basis, Source of Data, Reason for Decision

Provide Recourse to Appeal and/or Fix Inaccurate Data

AI Complaint Tracking

Accountability

Clarify Accountability When Using Third Party Data/Models

Adverse Consumer Outcome Reporting to Consumers and Regulators

Identify AI Use Cases that Require Human in the Loop (Prohibited Uses)

Holistic Approach – Collaboration Across Committees and Working Groups

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