NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

Health Insurance Artificial Intelligence/Machine Learning Survey Results

NAIC Staff Report

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EXECUTIVE SUMMARY

The Health Insurance Artificial Intelligence/Machine Learning Survey Results report aims to provide a comprehensive understanding of the use of AI/ML by health insurers, the role of third-party components, AI governance frameworks, and the alignment with NAIC AI Principles. The survey, conducted by 16 states, gathered responses from 93 companies, indicating that 84% of health insurers use AI/ML across various product lines, including Individual Major Medical, Group Major Medical, and Student Health Plans.

Companies selling individual major medical health insurance are currently using or exploring the use of AI/ML primarily for utilization management practices (71%), disease management programs (61%), prior authorization for approval processes (68%), claims fraud detection (50%), for medical provider fraud detection (51%), and sales and marketing solutions (45%) for enhancing online sales, quoting, or shopping experiences. Only about 4% of health insurers are using AI/ML to detect smoking and even fewer insurers use facial recognition or behavior models to detect fraud. 12% of companies use AI for denying prior authorizations and 14% of companies use AI to infer sensitive data, such as race or other data values. 55% of health insurers use third-party components in their AI/ML Systems, 15% rely entirely on third-party AI/ML solutions, 13% use a combination of internal and third-party data and/or AI/ML components, and 10% develop AI/ML solutions internally.

Many companies have adopted principles focusing on accountability, transparency, security, and privacy. The survey shows that many companies employ various methods to test for drift, bias, and unfair discrimination in AI to include cross validation for accuracy, exploratory data analysis (EDA), to analyze data for completeness and consistency, tracking performance metrics such as AUC, F-score, confusion matrix, conducting equity audits, compliance audits, performance audits, and human intervention in AI-driven decisions. Overall, while health insurers are taking steps to govern AI usage, further analysis of this survey may provide insight into the next steps for regulatory frameworks and industry practices to ensure that AI/ML technologies are used responsibly and ethically.

INTRODUCTION

Purpose of the Health AI/ML Survey

At the outset of the Artificial Intelligence (AI)/Machine Learning (ML) surveys, the predecessor to the Big Data and Artificial Intelligence (H) Working Group defined five key objectives. Regulators wanted to: 1) learn directly from the industry about what is happening in this space; 2) get a sense of the current level of risk and exposure and whether or how the industry is managing or mitigating that risk; 3) develop information for trending, such as how the risk is evolving over time, and the industry's responsive actions; 4) inform a meaningful and useful regulatory approach, framework, and/or strategy for overseeing and monitoring this activity; and 5) learn from prior surveys to inform and improve future surveys.

Goals of the Health Survey

1. Understand the current status of AI/ML use by comprehensive major medical and student health insurers.
2. Gain insight into the role third-parties play in the development and use of AI.
3. Gain an understanding of health insurers AI governance frameworks.
4. Gather background for regulatory approach/framework.
5. Review alignment of health insurers' AI governance frameworks with NAIC AI Principles and Model Bulletin

This Health survey is also expected to help regulators understand 1) consumer protection concerns and 2) insurers' governance around processes and procedures established to meet, or at least consider, the expectations laid out in the NAIC's AI Principles.

The requesting states agreed the collected data will not be used to evaluate or determine the company's compliance with applicable laws and regulations.

Purpose of This NAIC Staff Report

With the large volume of data submitted for this survey, the subject matter expert (SME) group asked NAIC technical staff to assist in conducting a thorough analysis. NAIC staff were asked to evaluate the results, provide data analysis, and investigate potential inaccuracies in the data. The team was specifically asked to investigate what types of data are being used by companies in their AI/ML models; evaluate third-party AI/ML model and data use; explore levels of governance; and evaluate transparency, consumer disclosures, and potential consumer actions to correct data.

BACKGROUND

The Health AI/ML survey was conducted under market conduct authority of sixteen states: Colorado, Connecticut, Illinois, Iowa, Louisiana, Maryland, Minnesota, Nebraska, North Dakota, Oklahoma, Oregon, Pennsylvania, Vermont, Virginia, West Virginia, and Wisconsin ("Requesting States"). The Requesting States conducted the survey to:

- Gain a better understanding of the health insurance industry's use and governance of big data and AI/ML.
- Seek information that could aid in the development of guidance or a potential regulatory framework to support the health insurance industry's use of big data and AI/ML.
- Inform regulators of current and planned AI/ML related company business practices.

The survey call letter from the Requesting States was distributed on October 31, 2024, with survey responses requested by January 22, 2025. The Health insurance companies required to respond to the survey were those that 1) have more than $250,000,000 of earned premium on a countrywide basis in 2023 which write business in one of the 16 participating states, or 2) represent a significant portion of the market share in one or more of the lines of business for one of the 16 states participating in the survey.

A total of 93 companies participated in the survey. Eighty-four percent (84%) of those companies indicated they are applying AI/ML techniques to health insurance operations.

Survey Web Page

The survey template, filing documentation, frequently asked questions (FAQ), definitions, and other information can be found on the Health AI/ML Survey web page (https://content.naic.org/industry/data-call/health-artificial-intelligence-machine-learning).

Surveyed Product Lines

The product line definitions in scope for the purpose of this survey come from the National Association of Insurance Commissioners' (NAIC) 2023 Annual Statement Instructions for completing the Accident and Health Policy Experience Exhibit:

- COMPREHENSIVE MAJOR MEDICAL
    - Individual Business (Line A. 1.)
    - Group Business – Single Employer – Small Employer (Line B. 1.1.)
    - Group Business – Single Employer – Other Employer (Line B. 1.2.)
- STUDENT
    - Individual Business (Line A. 6.)
    - Group Business – Other Medical (Non-Comprehensive) (Line B. 8.)

Comprehensive/Major Medical: Policies that provide fully insured indemnity, HMO, PPO, or Fee for Service coverage for hospital, medical, and surgical expenses. This category excludes Short-Term Medical

Insurance, the Federal Employees Health Benefit Program and non-comprehensive coverage such as basic hospital only, medical only, hospital confinement indemnity, surgical, outpatient indemnity, specified disease, intensive care, and organ and tissue transplant coverage as well as any other coverage described in the other categories of this exhibit. Group business is further segmented under this category as follows (please note there is a separate category for Administrative Services Only/Administrative Services Contract business).

Single Employer: Group policies issued to one employer for the benefit of its employees. This would include affiliated companies that have common ownership.

Small Employer: Group policies issued to single employers that are subject to the definition of Small Employer business, when so defined, in the group's state of situs.

Other Employer: Group policies issued to single employers that are not defined as Small Employer business.

Individual Business: Health insurance where the policy is issued to an individual covering the individual and/or their dependents in the individual market. This includes conversions from group policies.

Student: Policies that cover students for both accident and health benefits while they are enrolled and attending school or college. These can be either individual policies or group policies sponsored by the school or college.

Regulatory Subject Matter Experts

The following SMEs in the requesting states created the survey and communicated the survey responses to the Big Data and Artificial Intelligence (H) Working Group.

CO: Jason Lapham
CT: Paul Lombardo
IL: C. J. Metcalf
IA: Jared Kirby
LA: Nichole Torblaa
MD: Mary Kwei
MN: Fred Andersen
NE: Megan VanAusdall
ND: Colton Schulz
OK: Andy Schallhorn
OR: Brian Fjeldheim
PA: Commissioner Michael Humphreys and Shannen Logue
VT: Former Commissioner Kevin Gaffney and Mary Block
VA: Melissa Gerachis
WV: Joylynn Fix
WI: Lauren Van Buren

The following NAIC staff assisted the SMEs with survey development, survey distribution, data collection, and data processing: Kris DeFrain, Dorothy Andrews, Scott Sobel, Nancy Beydler, and Eric King.

Artificial Intelligence/Machine Learning Definition

For purposes of this survey, AI is defined as models that can simulate learning in performing tasks. ML is a subset of AI that facilitates learning without being explicitly programmed to achieve a predetermined result. Models that are considered AI and built using ML include robotics, natural language processing, and sentiment analysis.

AI/ML describes automated processes in which a system begins recognizing patterns without being specifically programmed to achieve a pre-determined result. This is different from a standard algorithm in that an algorithm is a process or set of rules executed to solve an equation or problem in a pre-determined fashion.

Standard features of AI systems adopted for purposes of this survey include:

- Systems that adapt and adjust to new data and experiences without manual human intervention.
- Systems that arrive at results for which the outcomes and the stepwise approach toward the outcomes were not configured in advance by a human programmer.
- Systems that dynamically respond to conditions in the external environment without the specific nature of such responses being known in advance to the designers of the systems.
- Systems that use deep-learning neural network algorithms.
- Systems that learn under a supervised, semi-supervised, unsupervised, or reinforcement learning style.
- Systems that engage in automatic speech recognition, facial recognition, image recognition, text recognition, natural language processing, generation of customer-specific recommendations, automated customer communications (e.g., chatbots with non-preprogrammed prompts), or any other approach that does not require either preprogramming or human intervention in every instance of an action or decision.
- Systems that automatically generate adaptive responses based on interactions with a consumer or third party.
- Systems that determine which data elements to rely upon, in a non-preprogrammed fashion, among various possible alternatives.
- Generalized linear modeling (GLM) or generalized additive modeling (GAM) are considered ML. See the Appendix for an expanded list of ML techniques.

For purposes of this survey, the following AI systems are excluded:

- Scorecards that deterministically map consumer or other risk characteristics to treatments or decisions.
- Tables of point or factor assignments in risk classes.
- Deterministic “phone trees” that navigate consumers through prerecorded voice prompts.

Confidentiality

The individual company results are confidential under state market conduct authority. Some combined results were publicly presented at Big Data and Artificial Intelligence (H) Working Group meetings and are presented in this report.

INITIAL QUESTIONS OF THE SURVEY

Table 1: Companies Using, Planning or Exploring the Use of AI/ML

Initial Questions	Total Number of Surveys	% of Total
Company uses AI/ML	78	84%
Company does NOT currently use AI/ML:		
And has no plans to explore or use	7	8%
But is exploring to use in the future	5	5%
And plans to in the future	3	3%
Total Surveys Issued	93	100%

For the 78 companies that are currently using AI/ML the table below summarizes whether they will develop it internally, use third-party vendors, or both.

Table 2: How Companies Develop AI/ML That Are Currently Using AI/ML

Development Type	Count	%
Develop Internally with Third-Party Components	43	55%
Develop by a Third-Party	12	15%
Develop Internally with a Third-Party	10	13%
Develop Internally	8	10%
N/A	5	6%
Total	78	100%

The 15 companies that are not currently using AI/ML indicated why they have yet to adopt AI/ML processes. Companies were able to select more than one reason. Most companies indicate there was “no compelling business reason” to adopt AI/ML at this time.

Table 3: Reasons Companies Cited for Not Using AI/ML

If not using AI/ML and not planning to use in the future, why (select all)?	Count	%
No compelling business reason at this time	8	20%
Lack of resources and expertise	5	13%
Reliance on legacy systems requiring IT, data and technology system upgrades	5	13%
Risk is not commensurate with current strategy or appetite	5	13%
Other	5	13%
Waiting for regulatory guidance	3	8%
Lack of reliable data	3	8%
Lack of associated security risk	3	8%
Waiting on the availability of a third-party vendor product/service	3	8%
Total	40	100%

Other write-in responses were:

- The company is practicing strategic patience and preparing its data environment to leverage AI/ML once proven solutions are identified that can enhance payer business outcomes and customer experience.
- Our Company contracts with certain vendors who use AI/ML, but we have not contracted with vendors to develop AI/ML for our Company. Our Company does not use or plan to use AI/ML, and we are not exploring the use of AI/ML at this time.
- We have projects in the research, prototype, and proof of concept (POC) phases, but those projects have not entered a production phase
- Investment is required to do it compliant and safely.
- Other, the company has evaluated current AI/ML tools and strategies to assess risk vs. value proposition to the business. At this time there are no plans to use AI/ML.
- More thought needs to go into how it might be utilized before engaging in a process to implement.
- We are focusing on Data Optimization Strategy, creating AI/ML Strategy and policies at this time.

For the eight companies previously identified in Table 1 that are not currently using AI/ML but are planning or exploring the use of AI/ML, the table below summarizes how they plan to develop their AI/ML capabilities.

Table 4: How Companies Plan to Develop AI/ML That Are Not Currently Using AI/ML

Development Type	Count	%
N/A	2	25%
Develop Internally	0	0%
Develop by a Third-Party	3	38%
Develop Internally with a Third-Party	1	13%
Develop Internally with Third-Party Components	2	25%
Total	8	100%

Companies using or planning to use AI/ML (81 companies) were asked to indicate the AI/ML current and future implementation status for each of the operational areas (Product Pricing and Plan Design, Claims Adjudication, Prior Authorization, Utilization/Severity/Quality Management, Risk Management, Risk Adjustment, Fraud Detection, Data Processing, Sales & Marketing, and Strategic Operations). The questions were to be answered in the context of whether currently implementing or planning to implement and indicating "N/A" if AI/ML is not used for the area and there is no plan to use AI/ML for the area.

Table 5: Implementation Status by Operational Area*

Operational Area	N/A	Already in Production	0-1 Year	1-3 Years	3+ Years
Product Pricing and Plan Design	34	22	15	16	6
Claims Adjudication	43	31	10	7	2
Prior Authorization	31	18	16	25	3

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Operational Area	N/A	Already in Production	0-1 Year	1-3 Years	3+ Years
Utilization/Severity/ Quality Management	33	42	10	6	2
Risk Management	42	21	16	13	1
Risk Adjustment	35	29	10	17	2
Fraud Detection	33	42	10	6	2
Data Processing	35	35	9	12	2
Sales & Marketing	40	37	12	4	0
Strategic Operations	27	52	8	6	0

*Companies were allowed to select more than one category, so totals will be greater than the 78 respondents.

MARKET PARTICIPATION

Question 6.1 Asked the company which of the following markets it writes business in:

1) Individual Major Medical
2) Group Major Medical – Single Employer (Small Group)
3) Group Major Medical – Other Employer (Large Group)
4) Student Plans

Table 6: Count of Companies Writing Business by Market

Market the Insurer Writes Business In	Count
Individual Major Medical	76
Group Major Medical - Single Employer - Small Employer	67
Group Major Medical - Single Employer - Other Employer	66
Student Plans	18

For each of the markets, questions were asked related to the following operational areas/insurer functions:

1) Product Pricing and Plan Design
2) Claims Adjudication
3) Prior Authorization
4) Utilization/Severity/Quality Management
5) Risk Management
6) Risk Adjustment
7) Fraud Detection
8) Data Processing
9) Sales & Marketing
10) Strategic Operations

There are many similarities between questions asked for the four markets, but some questions are not asked for all markets due to product differences. Hence, the report will present the results for each of the four markets separately. Therefore, the question numbers will not appear in numerical order for this reason.

Sections 7, 8, 9, and 10 provide the survey questions asked and company responses to the questions for the four markets.

INDIVIDUAL MAJOR MEDICAL

Product Pricing and Plan Design Questions

Question 7.2

1. Does your company currently use, plan to use, or is exploring the use of AI/ML to calculate rates or any component of a rate? Company responses were: Yes: 38 (44%), No: 48 (56%).
If yes, which of the following rating factors are developed using AI?

Table 7: Company Use, Plan, or Exploring of AI/ML to Calculate Rates or Any Component of a Rate

Rating Variable	Yes	No
Geography	3	73
Tobacco - do you screen for tobacco usage and price accordingly?	1	75
Age	2	74
Risk Adjustment Analysis	13	63
Social Determinants of Health	3	73
Claims History	11	65
PBM Rebates	1	75
Trend - utilization, cost, and severity	17	59
Benefit relativity - Actuarial Value, cost-sharing, etc.	5	71
Network factors	1	75
Morbidity	9	67
Projected enrollment	7	69
State-sponsored subsidized programs	1	75
Other: Please list, i.e. biometrics, wearables, etc.	3	73

For those companies answering 'Y' to question 1:
2. What is the current level of AI/ML Deployment?

Table 8: Current Level of AI/ML Deployment

Rating Variables	Research	Proof of Concept	Prototype	Implemented in Production
Geography	1	1	1	0
Tobacco - do you screen for tobacco usage and price accordingly?	1	0	0	0
Age	1	0	1	0
Risk Adjustment Analysis	3	0	1	0
Social Determinants of Health	3	0	0	0
Claims History	4	0	0	0

Rating Variables	Research	Proof of Concept	Prototype	Implemented in Production
PBM Rebates	1	0	0	0
Trend - utilization, cost, and severity	3	0	0	0
Benefit relativity - Actuarial Value, cost-sharing, etc.	1	0	0	0
Network factors	1	0	0	0
Morbidity	2	0	0	0
Projected enrollment	3	0	1	0
State-sponsored subsidized programs	1	0	0	0
Other: Please list, i.e. biometrics, wearables, etc.	1	1	1	0
Total	26	2	5	0

Question 7.3
List (i.e. biometrics, wearables, etc.) for "Other" category:

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The company's AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Biometrics through third party sponsorship.
- This is a partnership with another company producing a mobile application to detect health based on biometric data.

Question 7.4
Does your company currently use, plan to use, or is exploring the use of AI/ML to design or develop plans for specific cohorts, member populations, conditions etc.?
Yes: 13 (17%), No: 63 (83%).

Question 7.5
If so, please explain. For example, do you use AI/ML to design products that consider changes to copay, deductibles, benefits, wellness features, services, or programs for a specific population of consumers?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The company's AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- We are currently exploring the use of AI/ML to enhance data-driven decision making for new markets.
- The company utilizes techniques like dimensionality reduction to help design benefits that will appeal to and meet the needs of a given population or consumer segment. Ultimately, this

approach assists with analysis and pre-work; models are not making autonomous decisions in this arena.

- We currently use AI/ML when developing models to predict which members will have specific conditions or health events occur (attempted suicide, uncontrolled diabetes, loneliness, etc.). Once the model identifies the members as high risk, our team of care managers will reach out to the member to provide support.
- In the exploratory phases of these capabilities.
- We utilize ML techniques as an additional tool to identify member cohorts that help clinical staff efficiently design care management interventions. Workforce members retain ultimate decision-making authority in all clinical matters that would result in the denial, reduction, or modification of services to a member.

Question 7.6
For those companies answering 'Y' to Q7.4: If yes, what is the current level of AI/ML Deployment?
Research: 4 (31%), Proof of Concept: 0 (0%), Prototype: 1 (8%), Implemented in Production: 8 (62%).

Claims Adjudication Questions

Question 7.17
Does your company currently use, plan to use, or is exploring the use of AI/ML to analyze any of the following coding areas?

Table 9: Company Use, Plan, or Exploring Of AI/ML to Analyze Coding Areas*

Coding Area	Yes	No
Rx inpatient	23	53
Rx outpatient	24	52
Behavioral Health inpatient	21	55
Behavioral Health outpatient	23	53
Medical Health inpatient	27	49
Medical Health outpatient	27	49

*Companies were allowed to select more than one response.

Question 7.18
What is the current level of AI/ML Deployment?
Research: 29 (20%), Proof of Concept: 0 (0%), Prototype: 24 (17%), Implemented in Production: 92 (63%).

Question 7.19
Does your company currently use, plan to use, or is exploring the use of AI/ML for benefit eligibility determination?
Yes: 20 (26%), No: 56 (74%).

Question 7.20
For those companies answering 'Y' to Q7.19: What is the current level of AI/ML Deployment?
Research: 4 (20%), Proof of Concept: 6 (30%), Prototype: 0 (0%), Implemented in Production: 10 (50%)

Question 7.21
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect first-party liability (potential for recovering compensation from an accident/injury)?
Yes: 13 (17%), No: 63 (83%).

Question 7.22
For those companies answering 'Y' to Q7.21: What is the current level of AI/ML Deployment?
Research: 1 (8%), Proof of Concept: 0 (0%), Prototype: 3 (23%), Implemented in Production: 9 (69%).

Question 7.23
Does your company or a contracted vendor currently use, plan to use, or is exploring the use of AI/ML to negotiate out of network claims with providers?
Yes: 9 (12%), No: 67 (88%).

Question 7.24
For those companies answering 'Y' to Q7.23: If yes, is human intervention required?
Yes: 9 (100%), No: 0 (0%).

Question 7.25
Does the reimbursement amount change based on the negotiation results? Yes: 8 (89%), No: 1 (11%).

Question 7.26
Does your company currently use, plan to use, or is exploring the use of AI/ML for any other claims adjudication functions?
Yes: 33 (43%), No: 43 (57%).

Question 7.27
If yes to Question 7.26, please explain.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Pre-authorization fraud detection.
- Duplicate providers, duplicate billing, claims suspension
- Where we are exploring the use of AI/ML for various claims adjudication functions, the following are in use today: AI driven claims automation, insights, and recommendations for claims approval, resolving issues (edits), assessing high dollar claim risk, and optimizing routing for manual examiners when needed.

- Currently investigating and piloting third party solutions , including SHIFT technologies, for claims repricing, adjudication, and risk. However, this is not currently planned to be put into production.
- Where we are exploring the use of AI/ML for various claims adjudication functions, the following are in use today: AI driven claims automation, insights, and recommendations for claims approval, resolving issues (edits), assessing high dollar claim risk, and optimizing routing for manual examiners when needed.
- The company is currently evaluating vendors that have AI claims adjudication capabilities.
- Detecting Fraud, Waste and Abuse using signals on the claim and or medical record (already in production); Checking the correctness of the allowed amount for a claim against the original PDF contract or other documents that influence the claim's price (in research phase).
- ML modeling is being explored to identify claims (at risk of being overpaid or underpaid) for further review by a human being.
- Machine learning modeling is being explored to identify claims (at risk of being overpaid or underpaid) for further review by a human being.
- Exploring the usage of agents to help in our current automations with human in the loop.
- We are exploring options for efficiencies in processing claims approvals.
- We are exploring options for operational efficiencies in processing claims approvals.
- Multiplan, a third-party vendor contracted for payment integrity purposes, utilizes AI.
- We have several use cases on our 2025 roadmap relating to claims processing, claims adjustments, and claims information requests.
- Where we are exploring the use of AI/ML for various claims adjudication functions, the following are in use today: AI driven claims automation, insights, and recommendations for claims approval, resolving issues (edits), assessing high dollar claim risk, and optimizing routing for manual examiners when needed.
- We are exploring the use of AI models to assist claims examiners so they can process claims more efficiently and accurately.
- Augmentation to robotic process automation to improve quality of manual automation.

Prior Authorization Questions

Question 7.28

Does your company currently use, plan to use, or is exploring the use of AI/ML to determine whether prior authorization is required?

Yes: 26 (34%), No: 50 (66%).

Question 7.29

For those companies answering 'Y' to Q7.28: What is the current level of AI/ML Deployment? Research: 19 (73%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 7 (27%).

Question 7.30

Does your company currently use, plan to use, or is exploring the use of AI/ML to review prior authorizations for approval?

Yes: 52 (68%), No: 24 (32%).

Question 7.31
For those companies answering 'Y' to Q7.30: What is the current level of AI/ML Deployment?
Research: 15 (29%), Proof of Concept: 6 (12%), Prototype: 2 (4%), Implemented in Production: 29 (56%).

Question 7.32
For those companies answering 'Y' to Q7.30, please check all that apply.
Table 10: Company Use, Plan, or Exploring of AI/ML to Review Prior Authorizations For Approval

Coding Area	Yes	No
Rx inpatient	21	31
Rx outpatient	25	27
Behavioral Health inpatient	23	29
Behavioral Health outpatient	24	28
Medical Health inpatient	39	13
Medical Health outpatient	49	3

Question 7.33
Does your company currently use, plan to use, or is exploring the use of AI/ML to review prior authorizations for denial?
Yes: 9 (12%), No: 67 (88%).

Question 7.34
For those companies answering 'Y' to Q7.33: What is the current level of AI/ML Deployment?
Research: 5 (56%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 4 (44%).

Question 7.35
For those companies answering 'Y' to Q7.33, please check all that apply.

Table 11: Company Use, Plan, or Exploring of AI/ML to Review Prior Authorizations for Denial

Coding Area	Yes	No
Rx inpatient	6	3
Rx outpatient	6	3
Behavioral Health inpatient	6	3
Behavioral Health outpatient	6	3
Medical Health inpatient	7	2
Medical Health outpatient	6	3

Question 7.36

Does your company currently use, plan to use, or is exploring the use of AI/ML for any other prior authorization functions?

Yes: 20 (26%), No: 56 (74%).

Question 7.37

If yes to Question 7.36, please explain.

- We are exploring the use of AI tools to identify completeness of medical records for PA. Our PBM vendor uses prior authorization process involves the use of AI where Machine Learning models are utilized to assesses all requests. There is human involvement in all stages of this process. Any potential denials determinations are made by a human.
- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Pre-auth fraud detection.
- The intent of this model was to automatically approve the auth or send it to be normally reviewed by a human and NOT to deny authorizations.
- Clinical record review
- Currently investigating and piloting third party solutions, including SHIFT technologies, for claims repricing, adjudication, and prior-auth risk detection. However, this is not currently planned to be put into production.
- We have only explored using NLP to do automated data entry for prior authorizations.
- Scan medical records to determine if they have met clinical criteria. Scan claims for chronic conditions.
- We are considering using AI to speed up the intake process for a prior authorization request. This includes reviewing a medical record, extracting basic patient information from the chart, and matching it to the corresponding authorization request and internal member data.
- Clinical Decision Support Tool may be used to extract and display information from scanned clinical documents for a clinician to review a case in a more efficient manner. Clinicians are still required to review and edit the AI outputs.
- We use AI/ML for prior authorization intake automation.
- We do not use AI to make utilization management decisions. Workforce members oversee the use and output of AI and remain responsible and accountable for its use and output. Workforce members retain ultimate decision-making authority in all clinical matters that would result in the denial, reduction, or modification of services to a member. We utilize AI-enabled solutions for Prior Authorization Case Intake to enhance process consistency and efficiency. Additionally, we are exploring the application of AI models to summarize clinical notes, aiming to increase operational efficiency.

Question 7.38

For those companies answering 'Y' to Q7.36: What is the current level of AI/ML Deployment?

Research: 10 (50%), Proof of Concept: 0 (0%), Prototype: 1 (5%), Implemented in Production: 9 (45%).

Utilization/Severity/Quality Management Questions

Question 7.14
Does your company currently use, plan to use, or is exploring the use of AI/ML to determine if step therapy protocols have been adhered to?
Yes: 16 (21%), No: 60 (79%).

Question 7.15
For those companies answering 'Y' to Q7.14: What is the current level of AI/ML Deployment?
Research: 6 (38%), Proof of Concept: 1 (6%), Prototype: 0 (0%), Implemented in Production: 9 (56%).

Question 7.16
For those companies answering 'Y' to Q7.14: If yes, provide details to include how AI is used to monitor adherence by the health plan, provider, and/or consumer.

- Only with regard to medication protocols our contracted PBM uses Models and algorithms, including Artificial Intelligence (AI), predictive models, and machine learning solutions to increase the ability to positively impact member health and affordability for prescription drug issues.
- The company uses AI technologies to analyze data and uncover patterns and insights to help improve outcomes, increase connectivity between the patient and the healthcare system, speed up administrative processes, and improve the member experience. Their algorithms provide insights regarding its customer population, which they use to enhance healthcare access and quality of care. For example, algorithms assist them in predicting which customers are most likely to stand to benefit from using certain of its products (e.g., a telehealth option), a specific health intervention (e.g., a wellness check), or reminders (e.g., to continue taking necessary medications).
- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- AI is used to assist clinicians with identifying relevant clinical information in medical records during prior authorization medical record review. This functionality has been deployed for prior authorizations requiring step therapy review.
- The company is still evaluating AI capabilities in this space and does not have a specific timeline to advance this initiative beyond the Research stage.
- Not currently being used; in the research phase.
- We are currently exploring this area.

Question 7.39
Does your company currently use, plan to use, or is exploring the use of AI/ML in developing or administering disease management programs?

Yes: 46 (61%), No: 30 (39%).

Question 7.40

For those companies answering 'Y' to Q7.39: What is the current level of AI/ML Deployment?
Research: 4 (9%), Proof of Concept: 3 (7%), Prototype: 10 (22%), Implemented in Production: 29 (63%).

Question 7.41

Does your company currently use, plan to use, or is exploring the use of AI/ML in your utilization management practices?
Yes: 54 (71%), No: 22 (29%).

Question 7.42

If answered yes to Question 7.41, please check all that apply.

Table 12: Company Use, Plan, or Exploring of AI/ML in Utilization Management Practices

Utilization Management Practice	Yes	No
Activities for improving health outcomes	41	13
Activities to prevent hospital readmissions	42	12
Activities to improve patient safety	27	27
Activities to reduce medical errors	21	33
Activities for wellness	39	15
Activities for health promotions	38	16
Activities to reduce health disparities	34	20
Activities to reduce healthcare disparities	23	31
Formulary management	2	52
Concurrent review	14	40
Downcoding	18	36
Prepayment review	17	37
Clinical standards review	15	39
Prospective review	24	30
Retrospective review	24	30

Question 7.43

For those companies answering 'Y' to Q7.41: What is the current level of AI/ML Deployment?
Research: 11 (20%), Proof of Concept: 3 (6%), Prototype: 0 (22%), Implemented in Production: 40 (74%).

Question 7.44

Does your company currently use, plan to use, or is exploring the use of AI/ML to determine which prescription drugs are subject to step therapy?
Yes: 5 (7%), No: 71 (93%).

Question 7.45
For those companies answering 'Y' to Q7.44: What is the current level of AI/ML Deployment?
Research: 4 (80%), Proof of Concept: 1 (20%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 7.46
Does your company currently use, plan to use, or is exploring the use of AI/ML to design or develop step therapy requirements?
Yes: 2 (3%), No: 74 (97%).

Question 7.47
For those companies answering 'Y' to Q7.46: What is the current level of AI/ML Deployment?
Research: 2 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 7.48
Does your company currently use, plan to use, or is exploring the use of AI/ML to administer step therapy programs?
Yes: 3 (4%), No: 73 (96%).

Question 7.49
For those companies answering 'Y' to Q7.48: What is the current level of AI/ML Deployment?
Research: 3 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 7.59
Does your company directly contract, plan to directly contract, or is exploring directly contracting with utilization management vendors (prior authorization, diagnostic tools, prescription assessments, etc.) that use AI/ML?
Yes: 34 (45%), No: 42 (55%).

Question 7.60
For those companies answering yes, what automated decisions are made by the vendors?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The company's AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Used for certain claims re-pricing.
- Cohere uses AI for the following functionality:
    - Document processing: Conversion of physical documents into digitized, structured data
    - HOW: Fax intake, inputs for rules-based approvals, manual clinical review
    - Document segmentation: Identification of blocks of text that are semantically related, and separation from semantically different blocks
    - HOW: Manual clinical review, inputs for rules-based approvals

  - Named entity recognition: Extraction of information from unstructured text into predefined categories (e.g,. clinical indications)
  - HOW: Inputs for rules-based approvals, manual clinical review
  - Information retrieval: Identification and return of information from available resources (e.g., a segmented document)
  - HOW: Inputs for rules-based approvals, manual clinical review
  - Predictive decisioning: Looks for patterns between clinician-reviewed historical authorizations and patient attributes to determine the probability that medical necessity has been met
  - HOW: Approvals when a predetermined threshold has been met
- Evaluate authorization and make a determination of approval
- Certain affiliated vendors provide automated approvals for prior authorizations in situations where any regulatory approval to deploy this AI solution has been obtained if required, and where all applicable clinical guidelines are met.
- We have only researched with the vendor their capabilities to use AI/ML in terms of Utilization and Quality Management.
- Vendors use AI to simplify the prior authorization process
- Provider claims are retroactively reviewed to determine whether claims edits should be applied.
- EviCore Intellipath reviews Prior Authorization applicants and decides if the PA is automatically approved or not.
- Prior authorization approvals.
- We use a vendor for some of our prior authorization reviews that uses AI to approve select prior authorizations that meet certain criteria.
- N/A. Company is still evaluating AI capabilities in this space and has no specific timeline to move beyond the Research stage.
- Vendors may only automate prior authorization approvals. We do not allow vendors to use AI to automate prior authorization denials.
- Vendor may only automate prior authorization approval decisions.
- While some vendors may approve certain service requests, all denial decisions are made by a human, ensuring that AI is not used to automate these determinations.
- Certain affiliated vendors provide automated approvals for prior authorizations in situations where any regulatory approval to deploy this AI solution has been obtained if required, and where all applicable clinical guidelines are met.

Question 7.61

For those companies answering 'Y' to Q7.59: What is the current level of AI/ML Deployment?
Research: 6 (18%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 28 (82%).

Question 7.62

Does your company currently use, plan to use, or is exploring use AI/ML for other utilization/severity/ quality management related functions?
Yes: 31 (41%), No: 45 (59%).

Question 7.63

If yes to Question 7.62, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- We utilize predictive modeling to identify potential care gaps based on STARS measures.
- Machine Learning algorithm to predict likelihood of hospital readmission.
- AI/ML is used for chart abstraction in the quality management space.
- Currently use a combination of open source models to transcribe call logs and perform sentiment analysis in order to better measure and improve customer service quality.
- AI is used to predict risk/severity of a member to prioritize outreach or other activities. AI is also used to predict quality gaps to proactively outreach and mitigate potential quality issues.
- AI/ML is used to identify members at risk for specific health conditions to provide targeted interventions and improve health outcomes.
- Exploring ML usage to improve Quality outcome.
- The company is currently evaluating vendors that have AI capabilities.
- Early identification of upcoming medical events (surgery, imaging, labs) for proactive member education around potential options and reminders on provided tools for provider selection.
- Third-party vendor uses AI/ML in software development process related to vendor management practices; all content created by AI includes manual review and approval. Nothing is solely created through AI use.
- In Quality Management, the company uses an AI tool to help identify credible evidence of gap closure within the medical record, which eliminates unnecessary outreach/prompting for both patients and providers.
- In Care Management, AI helps our care managers identify individuals that are likely in need of focused care support to help manage their care/condition and enable better health outcomes.
- We are exploring internal and external (various vendors) AI solutions to further automate the UM processes and workflows.
- We do not use AI to make utilization management decisions. Workforce members oversee the use and output of AI and remain responsible and accountable for its use and output. Workforce members retain ultimate decision-making authority in all clinical matters that would result in the denial, reduction, or modification of services to a member. We use AI-enabled solutions and third-party AI products in utilization/quality management, including identifying clinical risks, pharmacy services and improving member experience.

Question 7.64

For those companies answering 'Y' to Q7.62: What is the current level of AI/ML Deployment?
Research: 6 (19%), Proof of Concept: 2 (6%), Prototype: 0 (0%), Implemented in Production: 23 (74%).

Risk Management Questions

Question 7.65
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wearable Devices?
Yes: 22 (29%), No: 54 (71%).

Question 7.66
For those companies answering 'Y' to Q7.65: What is the current level of AI/ML Deployment?
Research: 12 (55%), Proof of Concept: 10 (45%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 7.67
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wellness Initiatives?
Yes: 28 (37%), No: 48 (63%).

Question 7.68
For those companies answering 'Y' to Q7.67: What is the current level of AI/ML Deployment?
Research: 7 (25%), Proof of Concept: 8 (29%), Prototype: 0 (0%), Implemented in Production: 13 (46%).

Question 7.69
Does your company currently use, plan to use, or is exploring the use of AI/ML for Discount Medical Programs?
Yes: 5 (7%), No: 71 (93%).

Question 7.70
For those companies answering 'Y' to Q7.69: What is the current level of AI/ML Deployment?
Research: 1 (20%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 4 (80%).

Question 7.71
Does your company currently use, plan to use, or is exploring the use of AI/ML for Technology to Detect Smoking?
Yes: 3 (4%), No: 73 (96%).

Question 7.72
For those companies answering 'Y' to Q7.71: What is the current level of AI/ML Deployment? Research: 1 (33%), Proof of Concept: 2 (67%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 7.73
Does your company currently use, plan to use, or is exploring the use of AI/ML for Disease Detection?
Yes: 21 (28%), No: 55 (72%).

Question 7.74
For those companies answering 'Y' to Q7.73: What is the current level of AI/ML Deployment?

Research: 3 (14%), Proof of Concept: 1 (5%), Prototype: 1 (5%), Implemented in Production: 16 (76%).

Question 7.75
Does your company currently use, plan to use, or is exploring the use of AI/ML for Other Risk Management Functions?
Yes: 18 (24%), No: 58 (76%).

Question 7.76
For those answering yes to Question 7.75, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Vantage Analytics: Analytics that helps payers improve member care quality and network performance, manage population risk, and optimize revenue while decreasing administrative waste and reducing health claim expenditures
- Gradient AI offers AI software solutions for underwriting and claims management in group health, P&C, and workers' comp insurance. Their solutions leverage rich data, AI expertise, and industry insights to improve risk assessment, pricing, and profitability
- ImpactPro is a health risk analytics tool that helps identify individuals who will benefit most from population health management programs. It leverages the analytical foundation of Optum Symmetry to profile and stratify populations by predicting future risk.
- Hinge Health is a 3rd party app that learns from members interactions with the program to optimize the member experience and adjust as needed to support the member’s health journey. The company receives analytics on the data.
- Omada leverages AI for some of our coaching capabilities (such as analyzing photos of meals), as well as for member pathways to help with weight management.
- Currently investigating and piloting third party solutions, including SHIFT technologies, for claims repricing, adjudication, and prior-auth risk detection. However, this is not currently planned to be put into production.
- AI/ML is used for predictive risk models to manage and mitigate risks associated with chronic conditions.
- The company currently uses AI for risk modeling.
- We are exploring AI/ML tools to support allocation of resources, automation of communications and assurance of machine directed accuracy.

Question 7.77
For those companies answering 'Y' to Q7.75: What is the current level of AI/ML Deployment?
Research: 8 (44%), Proof of Concept: 0 (0%), Prototype: 1 (6%), Implemented in Production: 9 (50%).

Risk Adjustment Questions

Question 7.78
Does your company currently use, plan to use, or is exploring the use of AI/ML to inform methodologies around risk adjustment?
Yes: 43 (57%), No: 33 (43%).

Question 7.79
For those companies answering 'Y' to Q7.78: What is the current level of AI/ML Deployment?
Research: 10 (23%), Proof of Concept: 2 (5%), Prototype: 0 (0%), Implemented in Production: 31 (72%).

Question 7.80
Does your company currently use, plan to use, or is exploring the use of AI/ML to model risk adjustment factors?
Yes: 42 (55%), No: 34 (45%).

Question 7.81
For those companies answering 'Y' to Q7.80: What is the current level of AI/ML Deployment?
Research: 19 (45%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 23 (55%).

Fraud Detection Questions

Question 7.82
Does your company currently use, plan to use, or is exploring the use of AI/ML for auto-decision on non-fraudulent claims (i.e. fast-tracking claim processing of non-fraudulent claims)?
Yes: 29 (38%), No: 47 (62%).

Question 7.83
For those companies answering 'Y' to Q7.82: What is the current level of AI/ML Deployment?
Research: 11 (38%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 18 (62%).

Question 7.84
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect and refer claims for potential fraud?
Yes: 38 (50%), No: 38 (50%).

Question 7.85
For those companies answering 'Y' to Q7.84: What is the current level of AI/ML Deployment?
Research: 14 (37%), Proof of Concept: 0 (0%), Prototype: 2 (5%), Implemented in Production: 22 (58%).

Question 7.86
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect medical provider fraud?
Yes: 39 (51%), No: 37 (49%).

Question 7.87
For those companies answering 'Y' to Q7.86: What is the current level of AI/ML Deployment?
Research: 12 (31%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 27 (69%).

Question 7.88
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect criminal fraud ring activity (stolen provider/member IDs, impersonated providers, inflated treatments common to homecare and DME providers)?
Yes: 18 (24%), No: 58 (76%).

Question 7.89
For those companies answering 'Y' to Q7.88: What is the current level of AI/ML Deployment?
Research: 7 (39%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 11 (61%).

Question 7.90
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect social network fraud (less sophisticated than criminal fraud ring activity, but similar issues)?
Yes: 9 (12%), No: 67 (88%).

Question 7.91
For those companies answering 'Y' to Q7.90: What is the current level of AI/ML Deployment?
Research: 4 (44%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 5 (56%).

Question 7.92
Does your company currently use, plan to use, or is exploring the use of AI/ML indirectly for facial recognition/behavior models to detect fraud (e.g. through providers, telemedicine, etc.)?
Yes: 1 (1%), No: 75 (99%).

Question 7.93
For those companies answering 'Y' to Q7.92: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 7.94
Does your company currently use, plan to use, or is exploring the use of AI/ML directly for facial recognition/behavior models to detect fraud?
Yes: 3 (4%), No: 73 (96%).

Question 7.95
For those companies answering 'Y' to Q7.94: What is the current level of AI/ML Deployment?
Research: 3 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 7.96
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect prescription drug misuse?
Yes: 32 (42%), No: 44 (58%).

Question 7.97
For those companies answering 'Y' to Q7.96: What is the current level of AI/ML Deployment?
Research: 8 (25%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 24 (75%).

Question 7.98
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect fraud other than those mentioned above?
Yes: 11 (14%), No: 65 (86%).

Question 7.99
If yes to Question 7.98, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Overbilling
- Currently investigating and piloting third party solutions , including SHIFT technologies, for claims repricing, adjudication, and prior-auth risk detection. However, this is not currently planned to be put into production.
- AI/ML is used to detect unusual billing patterns and potential duplicate claims, enhancing fraud detection capabilities.
- The company currently uses a vendor to efficiently detect complex potential fraud schemes by leveraging various machine learning modeling techniques through associate interaction and feedback.
- Third-party vendor uses AI to review company email for potential phishing attempts.
- We intend to build AI/ML fraud detection capabilities that can identify arbitrary deviations from legitimate provider behavior and label them, for example: phantom billing, upcoding, ping-ponging, referral fraud/possibly kickback arrangements, etc.

Question 7.100
For those companies answering 'Y' to Q7.98: What is the current level of AI/ML Deployment?
Research: 6 (55%), Proof of Concept: 0 (0%), Prototype: 1 (9%), Implemented in Production: 4 (36%).

Data Processing Questions

Question 7.101
Does your company currently use, plan to use, or is exploring the use of AI/ML to impute race or any other data values? If yes, please explain.
Yes: 11 (14%), No: 65 (86%).

- The only protected class characteristics that we infer are Race/Ethnicity; however, the vast majority of protected class characteristics that we store do not rise from inference at all. Thus, there is an ensemble approach to identify Race/Ethnicity of which the final piece utilizes statistical inference.
- Our current logic to identify Race/Ethnicity in our population leverages data from several different sources. We use a 3-phase approach to identify a person's race/ethnicity.
    - Phase 1, we source race information from different administrative and clinical datasets.
    - Phase 2, for members that may not have available information or may have multiple inconsistent sources of information, we derive race/ethnicity using a person-level or family level imputation processes.
    - Phase 3, we leverage the Bayesian Improved First Name Surname Geocoding
- Methodology to determine race/ethnicity information for members that have not been identified in first two phases. When using BIFSG, we only use results that have a confidence probability of .9 and above.

Question 7.102
For those companies answering 'Y' to Q7.101: What is the current level of AI/ML Deployment?
Research: 5 (45%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 6 (55%).

Question 7.103
How does your company ensure that data used to train your AI/ML model is representative of the population for which it will be used?

- At the moment, our model training is limited to discrete data sets and kept in isolation. Otherwise, we make use of a RAG architecture to augment existing models.
- The company does not utilize population generically. The population would consist of our consumers, patients, and members.
- Each AI production Use Case is evaluated and confirmed that the target population for application is consistent with the cohort used for training and evaluation.
- This is maintained by keeping a human in the loop and through population segmentation.
- Our company ensures its AI/ML training data is representative of the target population through our Responsible AI program, based on the NIST AI Risk Management Framework. We implement demographic alignment by assessing and documenting the demographic composition of training datasets to minimize bias. Comprehensive evaluations align the data with the target population,

while monitoring post-deployment ensures models remain aligned with their intended purposes, allowing us to make adjustments as needed.

- We use curated data sets trained on the specific desired points used to contribute to a decision, and constrain use and availability by business justification.
- We have policies and procedures in place to mandate how AI is developed, tested and monitored. This prescribes how we ensure that bias is mitigated and that populations are representative.
- Random sampling using a percentage method.
- Data is carefully selected and validated to ensure it reflects the diversity and characteristics of the target population, with ongoing monitoring and adjustments as needed governed by a robust corporate AI Governance structure.
- We do population analysis before any cohort is used for AI/ML model.
- Our company ensures the data used to train our AI/ML models is appropriate for the intended purpose through a hands-on and evolving approach. We build our datasets to directly control and review the scope of the data, allowing us to verify which demographics or regions are included or excluded. Before training, we perform data quality checks, such as identifying outliers and reviewing or imputing missing data, to ensure the dataset is clean and reliable as needed in the specific use case. While we have not historically evaluated model performance across specific groups or documented assumptions and biases formally, we recognize the importance of these practices and are actively working toward incorporating them into our processes. These future enhancements will help ensure our models better reflect the diversity of the populations they serve and identify potential disparities in performance.
- Train on full population set. We do stratified sampling.
- We don't train our own generative models; we use third party vendors. In cases where we build traditional ML models in-house, we ensure that the training datasets are stratified to look similar to historical claims or other utilization data.
- We do not directly train any AI models. All software used is managed by the vendor.
- This is being done by a third party and our data is included with a larger sample properly representing the statistical norms for this population.
- We use standard industry approaches
- Where possible, the same data pipelines are used for both the training population and the deployment population, and the distribution of the data are directly compared prior to fitting the AI/ML model.
- We have implemented validation checks to ensure that the distribution of the data our models are trained on are similar to the distribution the model is being applied to.
- Each development team is expected to source appropriately representative, broad, and diverse data sets. Teams are directed to ensure that the training and testing data is representative of the population on which the model would be deployed. For example, a disease prediction system will need to train and test using a wide variety of patient data that represent different races, genders, and age. Voice bots should test with real voices. Teams determine how to collect data representing select population groups. First, teams should use self-reported forms of this data wherever possible. Teams should also consider if there is a standard dataset for the population of

interest for their AI solution. Then, consult with relevant data privacy contacts and analytics leadership to confirm the appropriate data to use.

- Looking to help internal caregivers using AI to identify and bring knowledge articles and other data components.
- The company has established Responsible AI practices for all AI use cases to ensure population representation in circumstances where there could be bias. We evaluate each use case throughout the development maturity lifecycle to ensure the model is representative and mitigate any identified risks.
- It is not being used. If it was used for this purpose data quality, checks, and regular sample testing would be applied.
- If used, data quality checks and auditing of data.
- Data is carefully selected and validated to ensure it reflects the diversity and characteristics of the target population, with ongoing monitoring and adjustments as needed governed by a robust corporate AI Governance structure.
- We utilize subject matter experts as well as various statistical and sampling techniques to understand data distribution to ensure the training data used for AI / ML models is representative of the population for which the model is used.

Question 7.104

Does your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for accuracy?

Table 13: Company Testing of Data (Internal, External, Algorithmic Outcomes) Used in Modeling or Resulting from Modeling for Accuracy

Data Type	Yes	No
Internal	60	16
External (i.e., 3rd Party)	46	30
Algorithmic Outcomes	50	26

Question 7.105

1. Internal – (Explain how internal data is tested)
2. External (i.e., third-party) – (Explain how external data is tested)
3. Algorithmic outcomes – (Explain how algorithmic outcomes are tested)

This question appears if you answered "Yes" to the previous question. Enter N/A where applicable.

No responses

Question 7.106

Does your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for validity?

Table 14: Company Testing of Types of Data (Internal, External, Algorithmic Outcomes) Used in Modeling or Resulting from Modeling for Validity

Data Type	Yes	No
Internal	60	16
External	45	31
Algorithmic Outcomes	50	26

Question 7.107

1. Internal – (Explain how internal data is tested)
2. External (i.e., third-party) – (Explain how external data is tested)
3. Algorithmic outcomes – (Explain how algorithmic outcomes are tested) This question appears if you answered "Yes" to the previous question. Enter N/A where applicable.

No responses

Question 7.122

What percentage of your business reflects Generalized Linear Model?
0 to 25%: 68 (92%), More than 25% to 50%: 6 (8%), More than 50% to 75%: 0 (0%), More than 75% to 100%: 0 (0%).

Question 7.123

Indicate by checking the boxes below for the machine-learning techniques that are used in each of the listed functional areas for Individual Major Medical. Check N/A if none of the techniques apply.

Table 15: Count of Machine Learning Techniques Used in Functional Areas for Individual Major Medical

	Machine Learning Technique												
Function	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	Other	Total
Sales & Marketing	5	13	5	9	4	0	5	9	7	7	8	10	82
Utilization/Severity/ Quality Management	6	18	3	9	4	0	7	8	6	3	8	9	81
Prior Authorization	4	12	3	7	5	0	2	4	2	2	2	8	51
Product Pricing and Plan Design	3	9	3	0	4	0	3	7	2	0	5	8	44
Strategic Operations	1	8	3	9	4	0	0	6	6	0	2	5	44
Fraud Detection	3	7	5	3	3	0	2	0	2	4	2	8	39
Risk Adjustment	0	14	0	5	0	0	2	2	4	0	0	9	36
Risk Management	6	8	4	3	1	0	0	0	4	0	5	2	34

Machine Learning Technique													
Function	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	Other	Total
Claims Adjudication	0	5	0	2	4	0	0	2	0	0	0	7	20
Data Processing	1	2	1	2	0	0	2	0	0	0	0	3	11
Total	29	96	27	49	29	0	23	38	33	16	32	69	442
% Excl N/A	7%	22%	6%	11%	7%	0%	5%	9%	7%	4%	7%	16%	100%

Note: Total column excludes N/As

Key:

1. Deep Learning (DL)
2. Ensemble (ENS)
3. Neural Networks (NN)
4. Regularization (REG)
5. Rule System (RS)
6. Large Language Models (LLM)
7. Bayesian (BAY)
8. Decision Tree (DT)
9. Dimensionality Reduction (DR)
10. Instance-Based (IB)
11. Clustering (CLU)
12. Cox Regression (COX)

Question 7.124

List the Names of AI/ML Model in Use for Each Functional Areas.

Table 16: Names of AI/ML Model in Use for Each Functional Area

Product Pricing and Plan Design	
CMS Benefits + Enrollment Growth, MA Plan Life Cycle, Product Recommendation, MA Member Segmentation, Prospective Risk Score, High-Cost Claimant Model, Company New Business Models, Company Renewal Model, Cotiviti Variability Bins	2
DR, CLU	2
Company uses various machine-learning techniques in its AI Solutions.	2
Gradient Boosted Regression Trees	2
Morbidity Model, Trend Model	3
N/A	14
None	44

Claims Adjudication	
Claims Adjudication AWS Textract, Tree-based classifiers (catboost)	1
ACE	4
AI DupCheck, Kairos Prompt Pay	2
CART, Conditional Decision Trees	2
Company uses various machine-learning techniques in its AI Solutions.	3
GPT 4o Turbo	1
Linear Regression, GPT Models	1

Prior Authorization	
Automated Approvals	4
Auto Authorization Model	4
AWS Textract	1
CART, Conditional Decision Trees	2
Commercial AI Auto-Approvals, GPD AI Auto-Approval	2
Decline to share model names, and names would be meaningless	2
Company uses various machine-learning techniques in its AI Solutions.	3
GPT 4o Turbo, Compound AI - Tolstoy ++	1
GPT Models	1
GPT Models	1
intelliPath AI	1
NLP, LLM	2
N/A	11
none	34

Write In: We partner with EviCore Intellipath to use AI in our PA process. We have reached out to them to get the exact type of model used in their program and they have not provided us with that information.

Utilization/Severity/Quality Management	
CART, Conditional Decision Trees, Cohere	2
Chronic ER Model, Cardiovascular Deterioration Risk Model	2
Decline to share model names, and names would be meaningless	1
Elastic Net, Principal Component Analysis, Clustering, k-Nearest Neighbor, Classification and Regression Tree, GPT 4o Turbo	1
Company uses various machine-learning techniques in its AI Solutions.	3
intelliPath AI	1
LLM	2
NLP LLM Gradient Boosting Machine	1
Quality Improvement	2
Readmission prevention, Suicide prevention, Fall prevention, Quality Forecasting	4
Sentence-BERT, AWS Textract, Logit, Tree-based classifiers (catboost)	1
SNF Episodic, Readmissions 7 Day, Excess Cost - Forward, Excess Cost - Inpatient, Excess Cost - Post Discharge	4
N/A	10
None	31

Write In: xgBoost, Random Forest, and Linear Regression

Fraud Detection	
Decline to share model names, and names would be meaningless	2
Company uses various machine-learning techniques in its AI Solutions.	3
Linear Regression, GPT Models	2
Overutilizer Suite	3
Post Pay Duplicates & Date Duplicates	2
RGS, BAY	2
Still in research	1
The names of the AI/ML models used are proprietary business information.	1
Unknown - via SHIFT	1
We partner with Healthcare Fraud Shield to detect fraud, they use AI and ML algorithms to identify fraud as part of their work. We do not have the exact types of models that they use in their program.	1
N/A	11
None	42

Risk Management	
Breast Cancer Screening Compliance Likelihood, Colorectal Cancer Screening Compliance Likelihood, Cervical Cancer Screening Compliance Likelihood, Annual Wellness Exam Completion Likelihood, Prediabetes, Falls, Hypertension in Pregnancy, Cancer model(s), Well 360 model(s), Excess Cost - Forward, Excess Cost - Inpatient, Excess Cost - Post Discharge, Prospective Risk Score, High Cost Claimant Models, Inpatient Auth Model, Pended Claims Model	2

Risk Management	
Breast Cancer Screening Compliance Likelihood, Colorectal Cancer Screening Compliance Likelihood, Cervical Cancer Screening Compliance Likelihood, Annual Wellness Exam Completion Likelihood, Prediabetes, Falls, Hypertension in Pregnancy, Cancer model(s), Well 360 model(s), Excess Cost - Forward, Excess Cost - Inpatient, Excess Cost - Post Discharge, Prospective Risk Score, High-Cost Claimant Models, Inpatient Auth Model, Pended Claims Model	2
Cardiac Event Prediction Model	2
CNN, LLM	2
Decline to share model names, and names would be meaningless	1
Gradient Boosting	1
N/A	19
None	45

Risk Adjustment	
*Specific AI Model Used Unknown	1
Advancement of VBC Payment Model Portfolio	2
AWS Textract	1
CART, Conditional Decision Trees, Cohere	2
Decline to share model names, and names would be meaningless	1
Company uses various machine-learning techniques in its AI Solutions.	2
Gradient Boosting Machine (GBM), GPT Models	2
Company uses LLM and RS.	1
Medicare - CMS HCC, Marketplace - HHS HCC, Medicaid - CDPS	2
NLP	1
NLP LLM Gradient Boosting Machine	1
Prospective Risk Score, High Cost Claimant Model, Company New Business Model, Company Renewal Model, Cotiviti Variability Bins, NLP	2
Prospective Risk Score, High-Cost Claimant Model, Company New Business Model, Company Renewal Model, Cotiviti Variability Bins, NLP	2
RGS, BAY	2
xgBoost, generalized linear models	1
N/A	12
none	33

Data Processing	
BART, WHISPER	1
ENS, LOLM, RGS, BAY	2
See 7.123	1
Snowflake Cortex	1
N/A	21
none	47

Sales & Marketing	
ChatGPT, Claude, Gemini	1
*Specific AI Model Used Unknown	1
BART, WHISPER, GPT-4	1
BAY	2
ChatGPT, Claude, Gemini	3
Decline to share model names, and names would be meaningless	1
Company uses various machine-learning techniques in its AI Solutions.	1
Google AI, Chat GPT	1
GPT 4.0 LLM	1
GPT-3.5/4	1
IMF OEP Retention Model	2
Likely-to-Buy ACA OEP, True Prospects, Likely-to-Churn UCD FEDVIP, Likely-to-Buy MA N2M, Late Retiree True Prospects, Likely-to-Buy MA AEP, True Prospects, Likely-to-Respond MA, True Prospects, Likely-to-Churn AHN, Likely-to-Churn ACA, MA Churn Model, Health Archetype Predictions, Living Health Enrollment - Spring, Likely-to-Buy MA, B2B Prospects, Medicaid Churn, Lung Cancer, Colorectal Cancer, Breast Cancer, Cervical Cancer, ED Utilization, Avoidable ED, Orthopedic Care Alignment	2
Member Retention	2
New member acquisition, member retention, membership forecasting	2
Prospective Risk Score, High Cost Claimant Model, Company New Business Model, Company Renewal Model, Cotiviti Variability Bins, NLP	1
Random Forest, AIChi-Square Automatic Interaction Detection (CHAID), Principal Component Analysis (PCA), k-Means, Hierarchical Clustering	1
See 7.123	1
TBD	1
N/A	9
none	30

Write in: We partner with Social Media companies who leverage AI/ML to deliver targeted ad content, and they have a multitude of models that they use.

Strategic Operations	
*Specific AI Model Used Unknown	1
Accenture Proprietary Model	3
Adherence to process and procedures	1
Anthropic Claude, Meta Llama	1
BAY	1
Decline to share model names, and names would be meaningless	1
Directory Search	2

Strategic Operations	
Company uses various machine-learning techniques in its AI Solutions.	1
ENS, DT	1
GPT 4.o Mini, GPT 4.o, GPT 4.o Turbo, RGS, XGBoost, LightGBM, CatBoost, Random Forests, Decision Trees, Logistic Regression	1
GPT Models	2
GPT-4 turbo, GPT-O1 mini, custom language model	1
Likely-to-Respond to Respond by Email MA Members, HEDIS framework/chart work, AHN No Show, Engagement	4
MSFT Co-Pilot	1

Write in: We partner with Social Media companies who leverage AI/ML to deliver targeted ad content, and they have a multitude of models that they use.

Question 7.125
Please provide any additional comments related to the use of AI/ML in Individual Major Medical.

- In the interest of clarity, the company has no AI/ML in production as defined by this survey. Our business reflects zero use of Generalized Linear Modeling.
- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Our approach is to keep a human in the loop. That means we focus our efforts on using AI to augment human judgment but not displace it. We use AI to augment the expertise of our employees that can increase productivity, reduce potential errors, and provide employees more time to focus on higher-level tasks.
- Our governance framework reflects our corporate values and is consistent with our Company Code of Ethics. It provides a lens to evaluate the ethical validity of an AI application and helps meet federal and state regulations, The Association rules, and other corporate policies related to data use.

Sales & Marketing Questions

Question 7.108
Does your company currently use, plan to use, or is exploring the use of AI/ML for online advertising targeted towards consumers?
Yes: 33 (43%), No: 43 (57%).

Question 7.109
For those companies answering 'Y' to Q7.108: What is the current level of AI/ML Deployment?
Research: 12 (36%), Proof of Concept: 3 (9%), Prototype: 0 (0%), Implemented in Production: 18 (55%).

Question 7.110

Does your company currently use, plan to use, or is exploring the use of AI/ML for Identification of Recipients of Mail or Phone Advertising?
Yes: 30 (39%), No: 46 (61%).

Question 7.111
For those companies answering 'Y' to Q7.110: What is the current level of AI/ML Deployment?
Research: 8 (27%), Proof of Concept: 8 (27%), Prototype: 0 (0%), Implemented in Production: 14 (47%).

Question 7.112
Does your company currently use, plan to use, or is exploring the use of AI/ML to develop products, programs, or services for existing customers?
Yes: 32 (42%), No: 44 (58%).

Question 7.113
For those companies answering 'Y' to Q7.112: What is the current level of AI/ML Deployment?
Research: 11 (34%), Proof of Concept: 0 (0%), Prototype: 2 (6%), Implemented in Production: 19 (59%).

Question 7.114
Does your company currently use, plan to use, or is exploring the use of AI/ML for Identification of Potential Customer Groups?
Yes: 31 (41%), No: 45 (59%).

Question 7.115
For those companies answering 'Y' to Q7.114: What is the current level of AI/ML Deployment?
Research: 5 (16%), Proof of Concept: 0 (0%), Prototype: 2 (6%), Implemented in Production: 24 (77%).

Question 7.116
Does your company currently use, plan to use, or is exploring the use of AI/ML for Demand Modeling?
Yes: 24 (32%), No: 52 (68%).

Question 7.117
For those companies answering 'Y' to Q7.116: What is the current level of AI/ML Deployment?
Research: 14 (58%), Proof of Concept: 0 (0%), Prototype: 2 (8%), Implemented in Production: 8 (33%).

Question 7.118
Does your company currently use, plan to use, or is exploring the use of AI/ML for online sales, quoting, or shopping experience?
Yes: 34 (45%), No: 42 (55%).

Question 7.119
For those companies answering 'Y' to Q7.118: What is the current level of AI/ML Deployment?
Research: 12 (35%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 22 (65%).

Question 7.120
Does your company currently use, plan to use, or is exploring the use of AI/ML for other sales & marketing-related solutions?
Yes: 20 (26%), No: 56 (74%).

Question 7.121
Please list up to 10 other sales & marketing-related solutions where you are using or may potentially use AI/ML and indicate their highest level of deployment.

Table 17: Sales & Marketing-Related Solutions Where Using, or May Potentially Use, AI/ML and Highest Level of Deployment

Sales & Marketing-Related Solution	Research	Proof of Concept	Prototype	Implemented in Production
Adobe Image creation	0	2	0	0
Hootsuite	1	0	0	0
Open Enrollment Retention	0	0	0	2
Marketing material generation	1	0	0	0
Member Support	0	0	0	0
Content generation and optimization	1	0	0	0
Identify sales opportunities	0	0	0	1
Generative AI use in content development	0	3	0	0
Generative AI Content Development	0	0	0	3
We are exploring the use of AI to help us respond to RFPs, using our historical RFP responses as guidelines	1	0	0	0
Circle.so	0	0	0	2
Meta	1	0	0	0
Lead Scoring	0	0	0	0
Content automation tool in digital content management	0	0	0	3
Online Discussion Monitoring & Analysis	0	0	0	4
A/B testing	0	0	0	2
Google	1	0	0	0
Market research leveraging external partner's social listening / AI capabilities to surface insights	0	0	0	3
Analysis of Member Feedback	0	0	0	4
Marketing Channel Performance Analysis	0	0	0	4
Data Visualization	0	0	2	0

Strategic Operations Questions

Question 7.7
Does your company own provider groups?
Yes: 14 (18%), No: 62 (82%).

Question 7.8
If yes, for the areas in your business where AI/ML is in use, does that AI/ML process use data from these providers? Yes: 5 (36%), No: 9 (64%).

Question 7.9
If yes to Question 7.8, how is it being used?

- To identify high risk members for population health interventions; Factors include members with high clinical impact, risk adjustment coding opportunities, or members that haven't had an annual wellness checkup. Change will be made in 2025.
- Cohere provides:
  - Conversion of physical documents into digitized structured data
  - IDs blocks of text that are semantically relation and separation from semantically different blocks
  - Extraction of information from unstructured text into predefined categories
  - Identification and return of information from valuable resources
  - Looks for patterns between clinician reviewed historical authorizations and patient attributes to determine the probably that medical necessity has been met.
- We are using data from encounters and patient labs to produce after-visit summaries and other clinical documentation.

Question 7.10
For those companies answering 'Y' to Q7.8: What is the current level of AI/ML Deployment?
Research: 0 (0%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 5 (100%).

Question 7.11
Is your company owned by a provider group?
Yes: 12 (16%), No: 64 (84%).

Question 7.12
If answered yes to Question 7.11, for the areas in your business where AI/ML is in use, does that AI process use data from these providers? If so, how is it being used?

- No
- Not at this time.
- N/A

- Yes, the EHR record is the source and destination for alerting providers to member health conditions.
- No, the insurer does not use data from these providers with AI/ML for product pricing or plan design.
- No AI/ML used in conjunction with our parent company.
- Looking to use Data Bricks in the future as an analytics tool.
- We only have awareness of this use case we have taken no active steps towards implementation.

Question 7.13
For those companies answering 'Y' to Q7.12: What is the current level of AI/ML Deployment?
Research: 10 (83%), Proof of Concept: 1 (8%), Prototype: 0 (0%), Implemented in Production: 1 (8%).

Question 7.50
Does your company currently use, plan to use, or is exploring the use of AI/ML in any way in your provider contracting process?
Yes: 21 (28%), No: 55 (72%).

Question 7.51
If answered yes to Question 7.50, please explain the types of contracts and how they are used (e.g. value-based, fee for service, or defined contributions).

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Company is currently in research phase. No contract types have been determined.
- We are currently exploring the use of AI to support document intelligence for contracts.
- Fee for service. We use AI to extract provider contact information from contracts and then send notices to those providers when we need to make a change to our contract.
- In the future, yes, potentially for authoring the Contract and for a Provider Relations CRM (Customer Relationship Management) tool.
- The AI tools and use cases we are researching would be applied to all contracts.
- In exploratory phases of this capability.
- value-based & fee for service
- Augmented search of provider contracts via an LLM
- We are exploring the use of AI models to extract metadata information from executed contracts to setup and audit contract configuration in our claims adjudication systems.

Question 7.52
For those companies answering 'Y' to Q7.50: What is the current level of AI/ML Deployment?
Research: 18 (86%), Proof of Concept: 0 (0%), Prototype: 3 (14%), Implemented in Production: 0 (0%).

Question 7.53
Does your company require, plan to require, or is exploring the requirement of any of your in-network providers to utilize a system, service, or software that uses AI/ML?
Yes: 19 (25%), No: 57 (75%).

Question 7.54
If answered yes to Question 7.53, what system/service/software is required and for what purpose?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Care Radius CareProminence:
  - Automated Workflows: Streamlines processes to reduce manual effort and administrative costs.
  - Compliance Adherence: Ensures continual compliance with ever-changing regulations.
  - Quality Improvement: Enhances quality scores and optimizes healthcare experiences for members.
  - Comprehensive Member View: Provides a holistic view of each member to drive optimal health outcomes.
- These features help healthcare providers and payers deliver better care while maintaining regulatory compliance and operational efficiency.
- A provider data management tool for provider roster management.
- Insurer is exploring solutions that will help in-network providers identify and monitor hierarchical condition categories. Providers would not be required to use the solution.
- EviCore Intellipath - a system used for Prior Authorizations that reviews and automatically approves Prior Authorizations.
- Prior authorization reviews and submission.
- We have a provider portal where providers currently submit documents (for example, medical records). We are considering using AI to automatically tag documents that a provider sends us through the portal, i.e. identifying if the document is a medical record or a dispute.
- Researching Contract Management and Provider Relation Customer Relationship Management Systems that have AI capabilities.

Question 7.55
For those companies answering 'Y' to Q7.53: What is the current level of AI/ML Deployment?
Research: 11 (58%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 8 (42%).

Question 7.56
Does your company require, plan to require, or is exploring the requirement of any of your out-of-network providers to utilize a system, service, or software that uses AI/ML? Yes: 7 (9%), No: 69 (91%).

Question 7.57

If answered yes to Question 7.56, what system/service/software is required and for what purpose?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Care Radius CareProminence provides:
  - Automated Workflows: Streamlines processes to reduce manual effort and administrative costs.
  - Compliance Adherence: Ensures continual compliance with ever-changing regulations.
  - Quality Improvement: Enhances quality scores and optimizes healthcare experiences for members.
  - Comprehensive Member View: Provides a holistic view of each member to drive optimal health outcomes.
- These features help healthcare providers and payers deliver better care while maintaining regulatory compliance and operational efficiency.
- Prior authorization reviews and submissions
- Researching Contract Management and Provider Relation Customer Relationship Management Systems that have AI capabilities.

Question 7.58

For those companies answering 'Y' to Q7.56: What is the current level of AI/ML Deployment?
Research: 7 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

GROUP MAJOR MEDICAL – SINGLE EMPLOYER (SMALL GROUP)

Product Pricing and Plan Design Questions

Question 8.2

1. Does your company currently use, plan to use, or is exploring the use of AI/ML to calculate rates or any component of a rate? If yes, which of the following rating factors are developed using AI?

Table 18: Company Use, Plan, or Exploring Of AI/ML to Calculate Rates or Any Component of a Rate

Rating Variable	Yes	No
Geography	6	59
Tobacco - do you screen for tobacco usage and price accordingly?	2	63
Age	5	60
Risk Adjustment Analysis	7	58
Social Determinants of Health	4	61
Claims History	11	54
PBM Rebates	4	61
Trend - utilization, cost, and severity	14	51
Benefit relativity - Actuarial Value, cost-sharing, etc.	4	61
Network factors	3	62
Morbidity	6	59
Projected enrollment	5	60
State-sponsored subsidized programs	1	64
Other: Please list, i.e. biometrics, wearables, etc.	3	62

For those companies answering 'Y' to question 1:
2. What is the current level of AI/ML Deployment?

Table 19: Current Level of AI/ML Deployment to Calculate Rates or Component of Rate

Rating Variable	Research	Proof of Concept	Prototype	Implemented in Production
Geography	1	1	1	0
Tobacco - do you screen for tobacco usage and price accordingly?	1	0	0	0
Age	1	0	1	0
Risk Adjustment Analysis	3	0	1	0
Social Determinants of Health	3	0	0	0

Rating Variable	Research	Proof of Concept	Prototype	Implemented in Production
Claims History	4	0	0	0
PBM Rebates	1	0	0	0
Trend - utilization, cost, and severity	3	0	0	0
Benefit relativity - Actuarial Value, cost-sharing, etc.	1	0	0	0
Network factors	1	0	0	0
Morbidity	2	0	0	0
Projected enrollment	3	0	1	0
State-sponsored subsidized programs	1	0	0	0
Other: Please list, i.e. biometrics, wearables, etc.	1	1	1	0
Total	26	2	5	0

Question 8.3
List (i.e. biometrics, wearables, etc.) for "Other" category:

- Company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Biometric detection
- Partnership with third party developing mobile application to detect health conditions.

Question 8.4
Does your company currently use, plan to use, or is exploring the use of AI/ML to design or develop plans for specific cohorts, member populations, conditions etc.?
Yes: 11 (17%), No: 54 (83%).

Question 8.5
If answered yes to Question 8.4, please explain. For example, do you use AI/ML to design products that consider changes to copay, deductibles, benefits, wellness features, services, or programs for a specific population of consumers?

- Company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. Company's AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Company utilizes techniques like dimensionality reduction to help design benefits that will appeal to and meet the needs of a given population or consumer segment. Ultimately, this approach assists with analysis and pre-work; models are not making autonomous decisions in this arena.
- AI is used to predict group level estimates on cost, disease prevalence and overall risk. This can be used to recommend products or services to prospective or renewing clients.

- In the context of care management program outreach, AI/ML is being used to identify members with possible care gaps who would benefit from affordable care.
- In the exploratory phases of these capabilities.

Question 8.6
For those companies answering 'Y' to Q8.4: What is the current level of AI/ML Deployment?
Research: 4 (36%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 7 (64%).

Claims Adjudication Questions

Question 8.17
Does your company currently use, plan to use, or is exploring the use of AI/ML to analyze any of the following coding areas?

Table 20: Company Use, Plan, or Exploring of AI/ML to Analyze Any of the Following Coding Areas of a Rate

Coding Area	Yes	No
Rx inpatient	16	49
Rx outpatient	17	48
Behavioral Health inpatient	16	49
Behavioral Health outpatient	18	47
Medical Health inpatient	18	47
Medical Health outpatient	20	45

Question 8.18
For those companies answering 'Y' to Q8.17: What is the current level of AI/ML Deployment?
Research: 29 (28%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 76 (72%).

Question 8.19
Does your company currently use, plan to use, or is exploring the use of AI/ML for benefit eligibility determination?
Yes: 15 (23%), No: 51 (77%).

Question 8.20
For those companies answering 'Y' to Q8.19: What is the current level of AI/ML Deployment?
Research: 4 (27%), Proof of Concept: 7 (47%), Prototype: 0 (0%), Implemented in Production: 4 (27%).

Question 8.21
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect first-party liability (potential for recovering compensation from an accident/injury)?
Yes: 14 (21%), No: 52 (79%).

Question 8.22
For those companies answering 'Y' to Q8.21: What is the current level of AI/ML Deployment?
Research: 1 (7%), Proof of Concept: 0 (0%), Prototype: 4 (29%), Implemented in Production: 9 (64%).

Question 8.23
Does your company or a contracted vendor currently use, plan to use, or is exploring the use of AI/ML to negotiate out of network claims with providers?
Yes: 8 (12%), No: 58 (88%).

Question 8.24
If answered yes to Question 8.23, is human intervention required?
Yes: 6 (75%), No: 2 (25%).

Question 8.25
If answered yes to Question 8.23, does the reimbursement amount change based on the negotiation results?
Yes: 6 (75%), No: 2 (25%).

Question 8.26
Does your company currently use, plan to use, or is exploring the use of AI/ML for any other claims adjudication functions?
Yes: 38 (58%), No: 28 (42%).

Question 8.27
If answered yes to Question 8.26, please explain.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Pre-auth fraud detection
- Duplicate providers, duplicate billing, claims suspension
- AI driven claims automation, insights, and recommendations for claims approval, resolving issues (edits), assess high dollar claim risk, and optimize routing for manual examiners when needed.
- Currently, investigating and piloting third party solutions, including SHIFT technologies, for claims repricing, adjudication, and prior-auth risk detection. However, this is not currently planned to be put into production.
- Ongoing testing of AI to 1) speed auto-adjudication and payment 2) AI to more clearly identify issues with claims that cannot be auto-adjudicated to aid human claim reviews to get issues resolved faster. AI is not used and will not be used to deny a claim.
- Company is currently evaluating vendors that have AI claims adjudication capabilities.
- ML modeling is being explored to identify claims (at risk of being overpaid or underpaid) for further review by a human being.

- Exploring the usage of agents to help in our current automations with human in the loop.
- ML modeling is being explored to identify claims (at risk of being overpaid or underpaid) for further review by a human being.
- Use LLMs for Claims Ops to navigate Manual SPIs for non-standard benefits; Use LLMs to determine solve for COB/Medicare edits; reduce manual work.
- Multiplan, a third-party vendor contracted for payment integrity purposes, utilizes AI.
- We have several use cases on our 2025 roadmap relating to claims processing, claims adjustments, and claims information requests.

Prior Authorization Questions

Question 8.28
Does your company currently use, plan to use, or is exploring the use of AI/ML to determine whether prior authorization is required?
Yes: 27 (41%), No: 39 (59%).

Question 8.29
For those companies answering 'Y' to Q8.28: What is the current level of AI/ML Deployment?
Research: 12 (44%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 15 (56%).

Question 8.30
Does your company currently use, plan to use, or is exploring the use of AI/ML to review prior authorizations for approval?
Yes: 47 (71%), No: 19 (29%).

Question 8.31
For those companies answering 'Y' to Q8.30: What is the current level of AI/ML Deployment?
Research: 11 (23%), Proof of Concept: 2 (4%), Prototype: 1 (2%), Implemented in Production: 33 (70%).

Question 8.32
For those companies answering 'Y' to Q8.30, please check all that apply.

Table 21: Company Use, Plan, or Exploring of AI/ML to Review Prior Authorizations for Approval

Coding Area	Yes	No
Rx inpatient	13	34
Rx outpatient	13	34
Behavioral Health inpatient	21	26
Behavioral Health outpatient	18	29
Medical Health inpatient	36	11
Medical Health outpatient	31	16

Question 8.33

Does your company currently use, plan to use, or is exploring the use of AI/ML to review prior authorizations for denial?

Yes: 7 (11%), No: 59 (89%).

Question 8.34

For those companies answering 'Y' to Q8.33: What is the current level of AI/ML Deployment?

Research: 1 (14%), Proof of Concept: 0 (0%), Prototype: 1 (14%), Implemented in Production: 5 (71%).**Question 8.35**

For those companies answering 'Y' to Q8.33, please check all that apply.

Table 22: Company Use, Plan, or Exploring of AI/ML to Review Prior Authorizations for Denial

Coding Area	Yes	No
Rx inpatient	7	0
Rx outpatient	7	0
Behavioral Health inpatient	7	0
Behavioral Health outpatient	7	0
Medical Health inpatient	7	0
Medical Health outpatient	7	0

Question 8.36

Does your company currently use, plan to use, or is exploring the use of AI/ML for any other prior authorization functions?

Yes: 15 (23%), No: 51 (77%).

Question 8.37

If answered yes to Question 8.36, please elaborate.

- We are exploring the use of AI tools to identify completeness of medical records for PA. Our PBM vendor uses prior authorization process involves the use of AI where Machine Learning models are utilized to assesses all requests. There is human involvement in all stages of this process. Any potential denials determinations are made by a human.
- We are exploring the use of AI tools to identify completeness of medical records for PA.
- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- The intent of this model was to automatically approve the auth or send it to be normally reviewed by a human and NOT to deny authorizations.
- Clinical records review.

- Currently investigating and piloting third party solutions , including SHIFT technologies, for claims repricing, adjudication, and prior-auth risk detection. However, this is not currently planned to be put into production.
- We have only explored using NLP to do automated data entry for prior authorizations.
- Read into EMR to determine if patient's chart has met clinical criteria.
- Clinical Decision Support Tool may be used to extract and display information from scanned clinical documents for a clinician to review a case in a more efficient manner. Clinicians are still required to review and edit the AI outputs.
- We use AI/ML for prior authorization intake automation.

Question 8.38
For those companies answering 'Y' to Q8.36: What is the current level of AI/ML Deployment?
Research: 6 (40%), Proof of Concept: 0 (0%), Prototype: 1 (7%), Implemented in Production: 8 (53%).

Utilization/Severity/Quality Management Questions

Question 8.14
Does your company currently use, plan to use, or is exploring the use of AI/ML to determine if step therapy protocols have been adhered to?
Yes: 12 (18%), No: 54 (82%).

Question 8.15
For those companies answering 'Y' to Q8.14: What is the current level of AI/ML Deployment?
Research: 2 (17%), Proof of Concept: 1 (8%), Prototype: 0 (0%), Implemented in Production: 9 (75%).

Question 8.16
For those companies answering 'Y' to Q8.14: If yes, provide details to include how AI is used to monitor adherence by the health plan, provider, and/or consumer.

- Only with regard to medication protocols our contracted PBM uses Models and algorithms, including Artificial Intelligence (AI), predictive models, and machine learning solutions to increase the ability to positively impact member health and affordability for prescription drug issues. The PBM uses AI technologies to analyze data and uncover patterns and insights to help improve outcomes, increase connectivity between the patient and the healthcare system, speed up administrative processes, and improve the member experience. Their algorithms provide insights regarding its customer population, which they use to enhance healthcare access and quality of care. For example, algorithms assist them in predicting which customers are most likely to stand to benefit from using certain of its products (e.g., a telehealth option), a specific health intervention (e.g., a wellness check), or reminders (e.g., to continue taking necessary medications).

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- As part of our monitoring our AI helps us to evaluate alternative drugs as part of the adherence which is a part of our step therapy process.
- The company is still evaluating AI capabilities in this space and has no specific timeline to move beyond the Research stage.
- We are currently exploring this area.

Question 8.39

Does your company currently use, plan to use, or is exploring the use of AI/ML in developing or administering disease management programs?
Yes: 31 (47%), No: 35 (53%).

Question 8.40

For those companies answering 'Y' to Q8.39: What is the current level of AI/ML Deployment?
Research: 6 (19%), Proof of Concept: 2 (6%), Prototype: 0 (0%), Implemented in Production: 23 (74%).

Question 8.41

Does your company currently use, plan to use, or is exploring the use of AI/ML in your utilization management practices?
Yes: 38 (58%), No: 28 (42%).

Question 8.42

If answered yes to Question 8.41, please check all that apply.

Table 23: Company Use, Plan, or Exploring of AI/ML in Utilization Management Practices

Utilization Management Practice	Yes	No
Activities for improving health outcomes	29	9
Activities to prevent hospital readmissions	29	9
Activities to improve patient safety	22	16
Activities to reduce medical errors	19	19
Activities for wellness	26	12
Activities for health promotions	24	14
Activities to reduce health disparities	19	19
Activities to reduce healthcare disparities	9	29
Formulary management	2	36
Concurrent review	7	31
Downcoding	12	26
Prepayment review	10	28
Clinical standards review	8	30

Utilization Management Practice	Yes	No
Prospective review	15	23
Retrospective review	18	20

Question 8.43
For those companies answering 'Y' to Q8.41: What is the current level of AI/ML Deployment?
Research: 9 (24%), Proof of Concept: 3 (8%), Prototype: 0 (0%), Implemented in Production: 26 (68%).

Question 8.44
Does your company currently use, plan to use, or is exploring the use of AI/ML to determine which prescription drugs are subject to step therapy?
Yes: 3 (5%), No: 63 (95%).

Question 8.45
For those companies answering 'Y' to Q8.44: What is the current level of AI/ML Deployment?
Research: 3 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 8.46
Does your company currently use, plan to use, or is exploring the use of AI/ML to design or develop step therapy requirements?
Yes: 1 (2%), No: 65 (98%).

Question 8.47
For those companies answering 'Y' to Q8.46: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 8.48
Does your company currently use, plan to use, or is exploring the use of AI/ML to administer step therapy programs?
Yes: 3 (5%), No: 63 (95%).

Question 8.49
For those companies answering 'Y' to Q8.48: What is the current level of AI/ML Deployment?
Research: 3 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 8.59
Does your company directly contract, plan to directly contract, or is exploring directly contracting with utilization management vendors (prior authorization, diagnostic tools, prescription assessments, etc.) that use AI/ML?
Yes: 30 (45%), No: 36 (55%).

Question 8.60

If answered yes to Question 8.59, what automated decisions are made by the vendors?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Claims re-pricing and fraud detection.
- Cohere uses AI for the following functionality:
    - Document processing: Conversion of physical documents into digitized, structured data
    - HOW: Fax intake, inputs for rules-based approvals, manual clinical review
    - Document segmentation: Identification of blocks of text that are semantically related, and separation from semantically different blocks
    - HOW: Manual clinical review, inputs for rules-based approvals
    - Named entity recognition: Extraction of information from unstructured text into predefined categories (e.g,. clinical indications)
    - HOW: Inputs for rules-based approvals, manual clinical review
    - Information retrieval: Identification and return of information from available resources (e.g., a segmented document)
    - HOW: Inputs for rules-based approvals, manual clinical review
    - Predictive decisioning: Looks for patterns between clinician-reviewed historical authorizations and patient attributes to determine the probability that medical necessity has been met
    - HOW: Approvals when a predetermined threshold has been met
- The intent of this model was to automatically approve the auth or send it to be normally reviewed by a human and NOT to deny authorizations.
- Evaluate authorization and make a determination of approval.
- Prior Authorization Approval decisions.
- Affiliated Carelon vendors provide automated approvals for prior authorizations in certain situations where any regulatory approval to deploy this AI solution has been obtained if required, and where clinical medical guidelines are met.
- We are currently reviewing the use of AI by a third party management company. It has not yet been implemented yet with our data.
- Vendors use AI to simplify the prior authorization process
- Claims are retrospectively reviewed to determine necessary claim edits.
- EviCore Intellipath reviews Prior Authorization applicants and decides if the PA is automatically approved or not.
- The company is currently evaluating vendors that have AI capabilities.
- Automated approvals by reading med record.
- We use a vendor for some of our prior authorization reviews that use AI to approve select cases that meet certain criteria.
- While some vendors may approve certain service requests, all denial decisions are made by a human, ensuring that AI is not used to automate these determinations.

Question 8.61
For those companies answering 'Y' to Q8.59: What is the current level of AI/ML Deployment?
Research: 6 (20%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 24 (80%).

Question 8.62
Does your company currently use, plan to use, or is exploring use AI/ML for other utilization/severity/ quality management related functions?
Yes: 18 (27%), No: 48 (73%).

Question 8.63
If answered yes to Question 8.62, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- The intent of this model was to automatically approve the auth or send it to be normally reviewed by a human and NOT to deny authorizations.
- We utilize predictive modeling to identify potential care gaps based on STARS measures.
- Machine Learning algorithm to predict likelihood of hospital readmission.
- AI is used to predict risk/severity of a member to prioritize outreach or other activities. AI is also used to predict quality gaps to proactively outreach and mitigate potential quality issues.
- AI/ML is used to identify members at risk for specific health conditions to provide targeted interventions and improve health outcomes.
- Exploring ML Usage to improve Quality outcome.
- The company is currently evaluating vendors that have AI capabilities.
- Early identification of upcoming medical events (surgery, imaging, labs) for proactive member education around potential options and reminders on provided tools for provider selection.
- Third-party vendor uses AI/ML in software development process related to vendor management practices; all content created by AI includes manual review and approval. Nothing is solely created through AI use.
- Care Management - AI is used to identify individuals that are likely in need of focused support or outreach to help them manage their care/condition and enable better health outcomes.

Question 8.64
For those companies answering 'Y' to Q8.62: What is the current level of AI/ML Deployment?
Research: 3 (17%), Proof of Concept: 2 (11%), Prototype: 0 (0%), Implemented in Production: 13 (72%).

Risk Management Questions

Question 8.65
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wearable Devices?
Yes: 11 (17%), No: 55 (83%).

Question 8.66
For those companies answering 'Y' to Q8.65: What is the current level of AI/ML Deployment?
Research: 11 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 8.67
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wellness Initiatives?
Yes: 15 (23%), No: 51 (77%).

Question 8.68
For those companies answering 'Y' to Q8.67:What is the current level of AI/ML Deployment?
Research: 1 (7%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 14 (93%).

Question 8.69
Does your company currently use, plan to use, or is exploring the use of AI/ML for Discount Medical Programs?
Yes: 6 (9%), No: 60 (91%).

Question 8.70
For those companies answering 'Y' to Q8.69: What is the current level of AI/ML Deployment?
Research: 1 (17%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 5 (83%).

Question 8.71
Does your company currently use, plan to use, or is exploring the use of AI/ML for Technology to Detect Smoking?
Yes: 1 (2%), No: 65 (98%).

Question 8.72
For those companies answering 'Y' to Q8.71: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 8.73
Does your company currently use, plan to use, or is exploring the use of AI/ML for Disease Detection?
Yes: 16 (24%), No: 50 (76%).

Question 8.74
For those companies answering 'Y' to Q8.73: What is the current level of AI/ML Deployment?
Research: 3 (19%), Proof of Concept: 2 (13%), Prototype: 0 (0%), Implemented in Production: 11 (69%).

Question 8.75
Does your company currently use, plan to use, or is exploring the use of AI/ML for Other Risk Management Functions?
Yes: 24 (36%), No: 42 (64%).

Question 8.76

If answered yes to Question 8.75, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Vantage Analytics: analytics that helps payers improve member care quality and network performance, manage population risk, and optimize revenue while decreasing administrative waste and reducing health claim expenditures
- Gradient AI offers AI software solutions for underwriting and claims management in group health, P&C, and workers' comp insurance. Their solutions leverage rich data, AI expertise, and industry insights to improve risk assessment, pricing, and profitability
- ImpactPro is a health risk analytics tool by Optum that helps identify individuals who will benefit most from population health management programs. It leverages the analytical foundation of Optum Symmetry to profile and stratify populations by predicting future risk.
- Ingenix Hinge Health is a 3rd party app that learns from members' interactions with the program to optimize the member experience and adjust as needed to support the member's health journey. The company receives analytics on the data. E.g. Excess Cost Model for CM
- Omada leverages AI for some of our coaching capabilities (such as analyzing photos of meals), as well as for member pathways for weight management.
- Predicting the chance that the condition exists and was not documented at a condition category level, not at any individual disease level.
- Currently investigating and piloting third party solutions, including SHIFT technologies, for claims repricing, adjudication, and prior-auth risk detection. However, this is not currently planned to be put into production.
- AI is used to predict various risks in the business and referred to a human for review and determination of actions.
- AI/ML is used for predictive risk models to manage and mitigate risks associated with chronic conditions.
- predicting the chance that the condition exists and was not documented at a condition category level, not at any individual disease level.
- The company currently uses AI for risk modeling.
- Research.

Question 8.77

For those companies answering 'Y' to Q8.75: What is the current level of AI/ML Deployment?
Research: 5 (21%), Proof of Concept: 0 (0%), Prototype: 1 (4%), Implemented in Production: 18 (75%).

Risk Adjustment Questions

Question 8.78

Does your company currently use, plan to use, or is exploring the use of AI/ML to inform methodologies around risk adjustment?

Yes: 33 (50%), No: 33 (50%).

Question 8.79
For those companies answering 'Y' to Q8.78: What is the current level of AI/ML Deployment?
Research: 9 (27%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 24 (73%).

Question 8.80
Does your company currently use, plan to use, or is exploring the use of AI/ML to model risk adjustment factors?
Yes: 30 (45%), No: 36 (55%).

Question 8.81
For those companies answering 'Y' to Q8.80: What is the current level of AI/ML Deployment?
Research: 10 (33%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 20 (67%).

Fraud Detection Questions

Question 8.82
Does your company currently use, plan to use, or is exploring the use of AI/ML for auto-decision on non-fraudulent claims (i.e. fast-tracking claim processing of non-fraudulent claims)?
Yes: 20 (30%), No: 46 (70%).

Question 8.83
For those companies answering 'Y' to Q8.82: What is the current level of AI/ML Deployment?
Research: 3 (15%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 17 (85%).

Question 8.84
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect and refer claims for potential fraud?
Yes: 34 (52%), No: 32 (48%).

Question 8.85
For those companies answering 'Y' to Q8.84: What is the current level of AI/ML Deployment?
Research: 13 (38%), Proof of Concept: 0 (0%), Prototype: 1 (3%), Implemented in Production: 20 (59%).

Question 8.86
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect medical provider fraud?
Yes: 30 (45%), No: 36 (55%).

Question 8.87
For those companies answering 'Y' to Q8.86: What is the current level of AI/ML Deployment?

Research: 7 (23%), Proof of Concept: 1 (3%), Prototype: 0 (0%), Implemented in Production: 22 (73%).

Question 8.88
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect criminal fraud ring activity (stolen provider/member IDs, impersonated providers, inflated treatments common to homecare and DME providers)?
Yes: 9 (14%), No: 57 (86%).

Question 8.89
For those companies answering 'Y' to Q8.88: What is the current level of AI/ML Deployment?
Research: 3 (33%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 6 (67%).

Question 8.90
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect social network fraud (less sophisticated than criminal fraud ring activity, but similar issues)?
Yes: 6 (9%), No: 60 (91%).

Question 8.91
For those companies answering 'Y' to Q8.90: What is the current level of AI/ML Deployment?
Research: 2 (33%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 4 (67%).

Question 8.92
Does your company currently use, plan to use, or is exploring the use of AI/ML indirectly for facial recognition/behavior models to detect fraud (e.g. through providers, telemedicine, etc.)?
Yes: 0 (0%), No: 66 (100%).

Question 8.93
For those companies answering 'Y' to Q8.92: What is the current level of AI/ML Deployment? N/A

Question 8.94
Does your company currently use, plan to use, or is exploring the use of AI/ML directly for facial recognition/behavior models to detect fraud?
Yes: 0 (0%), No: 66 (100%).

Question 8.95
For those companies answering 'Y' to Q8.94: What is the current level of AI/ML Deployment?
N/A

Question 8.96
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect prescription drug misuse?
Yes: 21 (32%), No: 45 (68%).

Question 8.97
For those companies answering 'Y' to Q8.96: What is the current level of AI/ML Deployment?
Research: 2 (10%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 19 (90%).

Question 8.98
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect fraud other than those mentioned above?
Yes: 8 (12%), No: 58 (88%).

Question 8.99
For those companies answering 'Y' to Q8.98, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- AI/ML is used to detect unusual billing patterns and potential duplicate claims, enhancing fraud detection capabilities.
- The company currently uses a vendor to efficiently detect complex potential fraud schemes by leveraging various machine learning modeling techniques through associate interaction and feedback.
- Dental.
- Third-party vendor uses AI to review company email for potential phishing attempts.
- Utilizing for data mining opportunities.

Question 8.100
For those companies answering 'Y' to Q8.98: What is the current level of AI/ML Deployment?
Research: 3 (38%), Proof of Concept: 1 (13%), Prototype: 0 (0%), Implemented in Production: 4 (50%).

Data Processing Questions

Question 8.101
Does your company currently use, plan to use, or is exploring the use of AI/ML to impute race or any other data values?
Yes: 7 (11%), No: 59 (89%).

If yes, please explain.

- The only protected class characteristics that we infer are Race/Ethnicity; however, the vast majority of protected class characteristics that we store do not rise from inference at all. Thus, there is an ensemble approach to identify Race/Ethnicity of which the final piece utilizes statistical inference. Our current logic to identify Race/Ethnicity in our population leverages data from several different sources. We use a 3-phase approach to identify a person's race/ethnicity. Phase

1, we source race information from different administrative and clinical datasets. Phase 2, for members that may not have available information or may have multiple inconsistent sources of information, we derive race/ethnicity using a person-level or family-level imputation processes. Phase 3, we leverage the Bayesian Improved First Name Surname Geocoding Methodology to determine race/ethnicity information for members that have not been identified in first two phases. When using BIFSG, we only use results that have a confidence probability of .9 and above.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.

Question 8.102

For those companies answering 'Y' to Q8.101: What is the current level of AI/ML Deployment?
Research: 3 (43%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 4 (57%).

Question 8.103

How does your company ensure that data used to train your AI/ML model is representative of the population for which it will be used?

- We compartmentalize into discrete datasets focused on a specific objective.
- The company does not utilize population generically- Company population would consist of our consumers, patients, and members.
- Each AI production Use Case is evaluated and confirmed that the target population for application is consistent with the cohort used for training and evaluation.
- We test and document how the data used for bias testing compares to the target population. For example, the demographic breakdown of the tested data should be like the user base demographic. The data used to train the AI system needs to be like the user population base.
- We filter and compartmentalize the data to the discrete points that will be used in any decision making and/or output.
- We have policies and procedures in place to mandate how AI is developed, tested and monitored. This prescribes how we ensure that bias is mitigated and that populations are representative.
- Random sampling using a percentage method.
- Data is carefully selected and validated to ensure it reflects the diversity and characteristics of the target population, with ongoing monitoring and adjustments as needed governed by a robust corporate AI Governance structure.
- We do population analysis before any cohort is used for AI/ML Model.
- Our company ensures the data used to train our AI/ML models is appropriate for the intended purpose through a hands-on and evolving approach. We build our datasets to directly control and review the scope of the data, allowing us to verify which demographics or regions are included or excluded. Before training, we perform data quality checks, such as identifying outliers and reviewing or imputing missing data, to ensure the dataset is clean and reliable as needed in the specific use case.

- While we have not historically evaluated model performance across specific groups or documented assumptions and biases formally, we recognize the importance of these practices and are actively working toward incorporating them into our processes. These future enhancements will help ensure our models better reflect the diversity of the populations they serve and identify potential disparities in performance.
- The company compares the distribution of data used in the development of AI/ML models to distributions across the book of business. Depending on the use case, if certain classes or groups are under- or overrepresented, we may adjust the sample to create a more balanced dataset.
- Use current full population data for training.
- We contract with vendors to handle management of our AI tooling and models.
- This is being done by a third party and our data is included with a larger sample properly representing the statistical norms for this population.
- We use standard industry approaches.
- The company seeks to maximize the extent to which the same data pipelines are used for both the training population as the deployment population, and the distribution of the data are directly compared prior to fitting the AI/ML model.
- Each development team is expected to source appropriately representative, broad, and diverse data sets. Teams are directed to ensure that the training and testing data is representative of the population on which the model would be deployed. For example, a disease prediction system will need to train and test using a wide variety of patient data that represent different races, genders, and age. Voice bots should test with real voices. Teams determine how to collect data representing select population groups. First, teams should use self-reported forms of this data wherever possible. Teams should also consider if there is a standard dataset for the population of interest for their AI solution. Then, consult with relevant data privacy contacts and analytics leadership to confirm the appropriate data to use.
- Using third party to identify utilization opportunities on an individual member.
- The company has established Responsible AI practices for all AI use cases to ensure population representation in circumstances where there could be bias. We evaluate each use case throughout the development maturity lifecycle to ensure the model is representative and mitigate any identified risks.
- Data is quality checked and audited when used.
- Data is carefully selected and validated to ensure it reflects the diversity and characteristics of the target population, with ongoing monitoring and adjustments as needed governed by a robust corporate AI Governance structure.
- We do population analysis before any cohort is used for models.

Question 8.104

Does your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for accuracy?

Table 24: Company Testing of Data (Internal, External, Algorithmic Outcomes) Used in Modeling or Resulting from Modeling for Accuracy

Data Type	Yes	No
Internal	60	16
External (i.e., 3rd Party)	46	30
Algorithmic Outcomes	50	26

Question 8.105

If yes to Question 8.104: Explain how your company tests any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for accuracy?

Internal Data

- By performing a combination of manual and automated testing against known qualities to determine percentage of accuracy.
- We test all model output for accuracy. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, re-sampled sensitivity and specificity measurement, across cohorts, is conducted whenever model output is used in operations.
- Internal data is tested for completeness and consistency using proprietary statistical methods.
- We test all model output for accuracy. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, re-sampled sensitivity and specificity measurement, across cohorts, is conducted whenever model output is used in operations.
- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- We compare multiple executions using different models and settings against manual verification to determine accuracy.
- Enterprise Data Governance policies and testing ensure the accuracy of individual data elements. Enterprise Model Governance & Model lifecycle policies prescribe the testing and ongoing monitoring of AI
- Internal data is tested for completeness and consistency using proprietary statistical methods.
- Internal data is constructed to ensure it meets accuracy standards.
- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- Tested for quality and accuracy before used for reporting.
- Descriptive statistics
- We review and check all internal data for accuracy. Started with the way we curate and develop the dataset by deciding on the types of filters and structure of the data. Testing for outliers and incomplete data. And ensuring the data is accurate and representative for its use case.
- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable, and thus serve our customers effectively and efficiently

- Company has Data Governance protocols that test data for correctness and reliability. We implement validation rules to check for logical consistency and expected formats, verify that data values fall within expected ranges, identify and remove duplicate data, ensure that related fields are consistent, reconcile data from different sources or systems within the organization, and track changes in the data over time.
- AI processes are modeled from established manual processes, allowing for parallel operation to validate accuracy.
- Derived internal data is validated for accuracy against raw data using control/QC reports.
- We use standard industry approaches
- Data accuracy is ensured by assiduous data pipelines and validated procedures
- Testing methodologies for internal data, external data, and algorithmic outcomes varies depending on the nature of the data and the AI use case for which the data is deployed. For example, testing model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, then use the Hispanic value first, then the race values. The Responsible AI program, working in collaboration with technical teams and privacy/data governance teams, publishes guidance on testing expectation and resources for both predictive AI models and generative AI models. Developers are directed to approach the testing process throughout the AI development lifecycle. For example, summary metadata on the data used to train and test the model should be gathered during the collect and process data phase of development rather than just pulled together after the model has been built.
- Internal and external data are tested for accuracy through exploratory data analysis (EDA), which involves basic data quality checks to identify errors, inconsistencies, or missing values, as well as assessments of temporal degradation of training data. Data sourced from our strategic data warehouse follows our data governance requirement of establishing data quality testing within 90 days of release for production use.
- Automated and manual testing.
- Internal data is constructed to ensure it meets accuracy standards
- Validating based upon identified validity of engagement from members.

External Data (i.e., third-party)

- By comparing results from external services with internal known qualities, and/or leveraging third party datasets and services to validate internal results
- We test all model output for accuracy. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, re-sampled sensitivity and specificity measurement, across cohorts, is conducted whenever model output is used in operations.
- External data is tested for reasonableness.
- We test all model output for accuracy. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, re-sampled sensitivity and specificity measurement, across cohorts, is conducted whenever model output is used in operations.

- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- Enterprise Data Governance policies and testing ensure the accuracy of individual data elements. Enterprise Model Governance & Model lifecycle policies prescribe the testing and ongoing monitoring of AI
- External data is tested for reasonableness.
- External data is confirmed to meet accuracy standards prior to procurement
- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable, and thus serve our customers effectively and efficiently
- External data undergo a variety of checks for data completeness and accuracy. Although the specific checks vary by data source, typically company evaluates those data against internal data and benchmarks. We review external dataset for internal consistency, ensuring that similar data points (e.g., categories, labels) are uniformly defined and represented, examine metadata provided with the external dataset (e.g., data collection process, definitions, and limitations). We also collect feedback from users who utilize external data to identify any recurring issues or inaccuracies they have encountered.
- AI processes are modeled from established manual processes, allowing for parallel operation to validate accuracy.
- If there is overlap between internal and external data, we can validate that values match. External data is also checked against historical norms.
- We use standard industry approaches
- Methodology is reviewed, and AI Distributions are reviewed by Subject Matter Experts
- Testing methodologies for internal data, external data, and algorithmic outcomes varies depending on the nature of the data and the AI use case for which the data is deployed. For example, testing model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, then use the Hispanic value first, then the race values. The Responsible AI program, working in collaboration with technical teams and privacy/data governance teams, publishes guidance on testing expectation and resources for both predictive AI models and generative AI models. Developers are directed to approach the testing process throughout the AI development lifecycle. For example, summary metadata on the data used to train and test the model should be gathered during the collect and process data phase of development rather than just pulled together after the model has been built.
- Internal and external data are tested for accuracy through exploratory data analysis (EDA), which involves basic data quality checks to identify errors, inconsistencies, or missing values, as well as assessments of temporal degradation of training data. If the external data is brought into our strategic

data warehouse it will be included in our data governance requirement to establish data quality testing within 90 days of release for production use.
- External data is confirmed to meet accuracy standards prior to procurement

Algorithmic Outcomes
- We are only in development of internal models and test there. For example, in our ML models that stratify prospective risk of a member experiencing an adverse health outcome (e.g., hospitalization or emergency department) we employ a post-hoc out-of-time validation process and analyze True Positives, False Positives, False Negatives, True Negatives by protected class characteristics of age, race, and gender. These reports show if the observed errors are consistent across characteristics such as age, race, and gender, by comparing strata of prospective risk generated from the algorithm to observed outcomes in the respective post-period once enough time has elapsed.
- Comparing results from different model executions for accuracy.
- We test all model output for accuracy. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, re-sampled sensitivity and specificity measurement, across cohorts, is conducted whenever model output is used in operations.
- Model output is tested using traditional ML techniques such as confusion matrix, lift, AUC, etc.
- We test all model output for accuracy. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, re-sampled sensitivity and specificity measurement, across cohorts, is conducted whenever model output is used in operations.
- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- Enterprise Data Governance policies and testing ensure the accuracy of individual data elements. Enterprise Model Governance & Model lifecycle policies prescribe the testing and ongoing monitoring of AI
- Company's AI Governance process ensures algorithmic outcomes meet accuracy standards. Internally developed algorithms are required to demonstrate adherence to accuracy standards and developers of procured, externally-developed algorithms are required to attest to evaluation of model results for accuracy.
- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase
- Confusion Matrix.
- Any model we develop in-house has accuracy measures which are tested and validated across multiple sub-groups in the data and continuous testing is done.
- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable, and thus serve our customer effectively and efficiently
- Company splits the data into test-train-and validation data sets and validate model outcomes on testing and validation to ensure the model is not overfitting. We use k-fold cross-validation to assess model performance, averaging results to provide a more robust estimate of accuracy. All algorithmic

outputs are evaluated for fit across several measures including accuracy, precision, recall, F1, AUC, and MAE and MSE for regression models.

- AI processes are modeled from established manual processes, allowing for parallel operation to validate accuracy.
- We do extensive manual and automated validation testing to ensure that our predictions and algorithms are calculating as expected. (e.g. output test records and run calculations in a separate test process, check variability from expectation or benchmarks). When developing models, we validate against holdout and out-of-time samples to ensure that models work similarly on various cuts of the population
- We use standard industry approaches
- We do extensive manual and automated validation testing to ensure that our predictions and algorithms are calculating as expected. (e.g. output test records and run calculations in a separate test process, check variability from expectation or benchmarks). When developing models, we validate against holdout and out-of-time samples to ensure that models work similarly on various cuts of the population.
- Model metrics such as Areas Under Curve, Average Precision Recall, True Positive Rate, Positive Predictive Value, and Discounted Cumulative Gain
- Testing methodologies for internal data, external data, and algorithmic outcomes varies depending on the nature of the data and the AI use case for which the data is deployed. For example, testing model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, then use the Hispanic value first, then the race values. The Responsible AI program, working in collaboration with technical teams and privacy/data governance teams, publishes guidance on testing expectation and resources for both predictive AI models and generative AI models. Developers are directed to approach the testing process throughout the AI development lifecycle. For example, summary metadata on the data used to train and test the model should be gathered during the collect and process data phase of development rather than just pulled together after the model has been built.
- Algorithmic outcomes are tested for accuracy by monitoring data drift in continuous and categorical features using statistical techniques. Additionally, we measure score and/or prediction drift to detect any changes in model performance over time.
- Our AI Governance process ensures algorithmic outcomes meet accuracy standards. Internally developed algorithms are required to demonstrate adherence to accuracy standards and developers of procured, externally-developed algorithms are required to attest to evaluation of model results for accuracy.

Question 8.106

Does your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for validity?

Table 25: Company Testing of Data (Internal, External, Algorithmic Outcomes) Used in Modeling or Resulting from Modeling for Accuracy

Data Type	Yes	No
Internal	60	16
External	45	31
Algorithmic Outcomes	50	26

Question 8.107

If yes to Question 8.106. Explain how your company tests any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for validity?

Internal Data

- Same as previous.
- We test all model output for validity, invalid models are retired and decommissioned. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, the method of measuring model performance relative to an objective will differ, according to the use case and model deployed. Methods used include: Sensitivity or True Positive Rate, Positive Predictive Value, F1 score, AUC/ROC, Confusion Matrix Assessment, etc.
- Internal data is tested for completeness and consistency using proprietary statistical methods.
- We test all model output for validity, invalid models are retired and decommissioned.
- Our methods differ across differing business contexts, but are not specific to the above categories. Generally, the method of measuring model performance relative to an objective will differ, according to the use case and model deployed. Methods used include: Sensitivity or True Positive Rate, Positive Predictive Value, F1 score, AUC/ROC, Confusion Matrix Assessment, etc.
- Dataset(s) used must be representative of the intended population and should be fit for the intended purpose. Datasets should include diverse populations for training and testing, where possible. The training population and scoring population should have similar demographic distributions across protected attributes. A data analysis is required to be completed for each line of business by comparing the training dataset attributes to the scoring population attributes. Training datasets must be evaluated for:
  - Integrity and appropriateness
  - Evaluation of data completeness
  - Adverse Bias and fairness
  - Training data profile must be archived.
- We manually spot check the input and output to gauge validity, and then perform subsequent analysis on the output to identify outliers and known conditions.
- Enterprise Data Governance policies and testing ensure the accuracy of individual data elements. Enterprise Model Governance & Model lifecycle policies prescribe the testing and ongoing monitoring of AI
- Internal data is tested for completeness and consistency using proprietary statistical methods.

- Internal data is constructed to ensure it meets validity standards.
- Tested for quality and accuracy before used for reporting.
- Descriptive Statistics
- We make sure the datasets used for AI/ML modeling are relevant for the use case at hand. We ensure the data is accurate and that the data is consistent.
- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable, and thus serve our customers effectively and efficiently
- Company runs a number of data validation rules to check for data integrity. This includes ensuring that data types are correct, mandatory fields are filled, and values fall within expected ranges. We also perform statistical analysis to assess data distributions and identify outliers using techniques like z-scores, interquartile ranges, or box plots to detect anomalies in the data.
- AI processes are modeled from established manual processes, allowing for parallel operation to validate.
- We analyze the range and consistency over time across full and sub-populations as a way to test internal data.
- We use standard industry approaches
- We analyze the range and consistency over time across full and sub-populations as a way to test internal data.
- Modeling data distributions are reviewed by Subject Matter Experts and compared against publicly available data where available.AI Data traits such as bias, missingness, type of distribution, mean and std, AI skew are reviewed and matched against expected outcomes
- Testing methodologies for internal data, external data, and algorithmic outcomes varies depending on the nature of the data and the AI use case for which the data is deployed. For example, testing model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, then use the Hispanic value first, then the race values. The Responsible AI program, working in collaboration with technical teams and privacy/data governance teams, publishes guidance on testing expectation and resources for both predictive AI models and generative AI models. Developers are directed to approach the testing process throughout the AI development lifecycle. For example, summary metadata on the data used to train and test the model should be gathered during the collect and process data phase of development rather than just pulled together after the model has been built.
- Internal and external data are tested for accuracy through exploratory data analysis (EDA), which involves basic data quality checks to identify errors, inconsistencies, or missing values, as well as assessments of temporal degradation of training data. Data sourced from our strategic data warehouse follows our data governance requirement of establishing data quality testing within 90 days of release for production use.
- Automated and manual testing.

External Data (i.e., third-party)

- We test all model output for validity, invalid models are retired and decommissioned. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, the method of measuring model performance relative to an objective will differ, according to the use case and model deployed. Methods used include: Sensitivity or True Positive Rate, Positive Predictive Value, F1 score, AUC/ROC, Confusion Matrix Assessment, etc.
- External data is tested for reasonableness.
- We test all model output for validity, invalid models are retired and decommissioned .Our methods differ across differing business contexts, but are not specific to the above categories. Generally, the method of measuring model performance relative to an objective will differ according to the use case and model deployed. Methods used include: Sensitivity or True Positive Rate, Positive Predictive Value, F1 score, AUC/ROC, Confusion Matrix Assessment, etc."
- Dataset(s) used must be representative of the intended population and should be fit for the intended purpose. Datasets should include diverse populations for training and testing, where possible. The training population and scoring population should have similar demographic distributions across protected attributes. A data analysis is required to be completed for each line of business by comparing the training dataset attributes to the scoring population attributes. Training datasets must be evaluated for:
    - Integrity and appropriateness
    - Evaluation of data completeness
    - Adverse Bias and fairness
    - Training data profile must be archived.
- Enterprise Data Governance policies and testing ensure the accuracy of individual data elements. Enterprise Model Governance & Model lifecycle policies prescribe the testing and ongoing monitoring of AI.
- External data is tested for reasonableness.
- External data is confirmed to meet validity standards prior to procurement.
- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable, and thus serve our customers effectively and efficiently.
- We assess the validity of external data by researching the data provider’s reputation, methodology, and data collection practices. We evaluate external data for completeness, accuracy, consistency, and timeliness using data profiling techniques similar to those applied to internal data. We compare the external data against internal data to understand whether the data are within expected ranges. We also evaluate data over time to observe and understand shifts in data consistency and representativeness.
- AI processes are modeled from established manual processes, allowing for parallel operation to validate.
- We analyze the overlap between internal and external data to ensure that values match.
- We use standard industry approaches.
- Methodology is reviewed, and AI Distributions are reviewed by Subject Matter Experts.
- Testing methodologies for internal data, external data, and algorithmic outcomes varies depending on the nature of the data and the AI use case for which the data is deployed. For example, testing

model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, then use the Hispanic value first, then the race values. The Responsible AI program, working in collaboration with technical teams and privacy/data governance teams, publishes guidance on testing expectation and resources for both predictive AI models and generative AI models. Developers are directed to approach the testing process throughout the AI development lifecycle. For example, summary metadata on the data used to train and test the model should be gathered during the collect and process data phase of development rather than just pulled together after the model has been built.

- Internal and external data are tested for accuracy through exploratory data analysis (EDA), which involves basic data quality checks to identify errors, inconsistencies, or missing values, as well as assessments of temporal degradation of training data. If the external data is brought into our strategic data warehouse it will be included in our data governance requirement to establish data quality testing within 90 days of release for production use.
- External data is confirmed to meet validity standards prior to procurement

Algorithmic Outcomes

- We are only in development of internal models and test there. For example, in our ML models that stratify prospective risk of a member experiencing an adverse health outcome (e.g., hospitalization or emergency department) we employ a post-hoc out-of-time validation process and analyze True Positives, False Positives, False Negatives, True Negatives by protected class characteristics of age, race, and gender. These reports show if the observed errors are consistent across characteristics such as age, race, and gender, by comparing strata of prospective risk generated from the algorithm to observed outcomes in the respective post-period once enough time has elapsed."
- We test all model output for validity, invalid models are retired and decommissioned. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, the method of measuring model performance relative to an objective will differ, according to the use case and model deployed. Methods used include: Sensitivity or True Positive Rate, Positive Predictive Value, F1 score, AUC/ROC, Confusion Matrix Assessment, etc.
- Model output is tested using traditional ML techniques such as confusion matrix, lift, AUC, etc.
- We test all model output for validity, invalid models are retired and decommissioned.
- Our methods differ across differing business contexts, but are not specific to the above categories. Generally, the method of measuring model performance relative to an objective will differ, according to the use case and model deployed. Methods used include: Sensitivity or True Positive Rate, Positive Predictive Value, F1 score, AUC/ROC, Confusion Matrix Assessment, etc.
- Dataset(s) used must be representative of the intended population and should be fit for the intended purpose. Datasets should include diverse populations for training and testing, where possible. The training population and scoring population should have similar demographic distributions across protected attributes. A data analysis is required to be completed for each line of business by comparing the training dataset attributes to the scoring population attributes. Training datasets must be evaluated for:

  - Integrity and appropriateness
  - Evaluation of data completeness
  - Adverse Bias and fairness
  - Training data profile must be archived."
- Enterprise Data Governance policies and testing ensure the accuracy of individual data elements. Enterprise Model Governance & Model lifecycle policies prescribe the testing and ongoing monitoring of AI
- The company's AI Governance process ensures algorithmic outcomes meet accuracy standards. Internally developed algorithms are required to demonstrate adherence to accuracy standards and developers of procured, externally-developed algorithms are required to attest to evaluation of model results for accuracy.
- Confusion Matrix
- For our internally developed models we review to make sure the outputs are relevant to the purpose of the model, ensure the results are accurate and that they are consistent when used.
- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable, and thus serve our customers effectively and efficiently
- We compare the algorithm's predictions to a known ground truth or labeled dataset to establish a baseline for accuracy and validity. We use cross validation techniques like k-fold cross-validation to ensure that the model's performance is consistent across different subsets of the data. We evaluate the algorithm for potential biases and fairness issues. We also conduct detailed analyses of the algorithm's errors to understand the types of cases where it may fail, which helps validate the overall robustness of the algorithm.
- AI processes are modeled from established manual processes, allowing for parallel operation to validate.
- We check the range and consistency across full and sub-populations and against historical norms/benchmarks. We further perform periodic assessments of model performance statistics to assess for drift from the original development validity statistics. As part of our AI Governance function, we document the intended uses of model outcomes and review them to ensure that uses of algorithmic outcomes are valid (aligned with the modeled outcome and intended use).
- We use standard industry approaches
- Distribution of algorithmic outcome are tested to match distribution of target data that it is modeled upon
- Testing methodologies for internal data, external data, and algorithmic outcomes varies depending on the nature of the data and the AI use case for which the data is deployed. For example, testing model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, then use the Hispanic value first, then the race values. The Responsible AI program, working in collaboration with technical teams and privacy/data governance teams, publishes guidance on testing expectation and resources for both predictive AI models and generative AI models. Developers are directed to approach the testing process

throughout the AI development lifecycle. For example, summary metadata on the data used to train and test the model should be gathered during the collect and process data phase of development rather than just pulled together after the model has been built.

- Algorithmic outcomes are tested for accuracy by monitoring data drift in continuous and categorical features using statistical techniques. Additionally, we measure score and/or prediction drift to detect any changes in model performance over time

Question 8.131

What percentage of your business reflects Generalized Linear Model?

0 to 25%: 60 (92%), More than 25% to 50%: 5 (8%), More than 50% to 75%: 0 (0%), More than 75% to 100%: 0 (0%).

Question 8.132

Indicate by checking the boxes below for the machine-learning techniques that are used in each of the listed functional areas for Group Major Medical - Single Employer - Small Employer.

Table 26: Count of Machine Learning Techniques Used in Functional Areas for Group Major Medical-Single Employer-Small Employer

Machine Learning Techniques													
Function	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	Other	Total
Sales & Marketing	8	9	8	6	5	0	7	9	9	8	9	9	87
Utilization/ Severity/ Quality Management	5	13	3	9	3	0	2	7	5	3	8	9	67
Risk Management	7	9	7	5	0	0	0	0	7	2	8	10	55
Product Pricing and Plan Design	4	10	2	0	5	0	4	9	4	0	7	7	52
Prior Authorization	3	9	2	3	6	0	2	4	2	2	3	9	45
Strategic Operations	2	7	1	6	5	0	0	7	6	0	1	5	40
Risk Adjustment	0	10	0	3	0	0	2	2	5	0	0	10	32
Fraud Detection	2	3	2	1	3	0	3	0	2	4	2	6	28

Machine Learning Techniques													
Function	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	Other	Total
Claims Adjudication	0	6	0	0	5	0	0	2	0	0	0	5	18
Data Processing	1	2	1	3	0	0	2	0	0	0	0	8	17
Total	32	78	26	36	32	0	22	40	40	19	38	78	441
% Excl N/A	7%	18%	6%	8%	7%	0%	5%	9%	9%	4%	9%	18%	100%

Note: Total column excludes N/As

Key:
1. Deep Learning (DL)
2. Ensemble (ENS)
3. Neural Networks (NN)
4. Regularization (REG)
5. Rule System (RS)
6. Large Language Models (LLM)
7. Bayesian (BAY)
8. Decision Tree (DT)
9. Dimensionality Reduction (DR)
10. Instance-Based (IB)
11. Clustering (CLU)
12. Cox Regression (COX)

Question 8.133

List the Names of AI/ML Model in Use for Each Functional Areas. Enter "None" if there are no AI/ML models for a functional area.

Table 27: Names of AI/ML Model in Use for Each Functional Area

Product Pricing and Plan Design

CMS Benefits + Enrollment Growth, MA Plan Life Cycle, Product Recommendation, MA Member Segmentation, Prospective Risk Score, High Cost Claimant Model, Company New Business Models, Company Renewal Model, Cotiviti Variability Bins	2
CMS Benefits + Enrollment Growth, MA Plan Life Cycle, Product Recommendation, MA Member Segmentation, Prospective Risk Score, High-Cost Claimant Model, Company New Business Models, Company Renewal Model, Cotiviti Variability Bins	3
Decline to share model names, and names would be meaningless	1
DR, CLU	2
Company uses various machine-learning techniques in its AI Solutions.	3
Gradient Boosting Regression Model	1
Morbidity Model, Trend Model, Gradient Boosting Machine	1
N/A	18
None	28

Claims Adjudication	
ACE	5
AI DupCheck, Kairos Prompt Pay	2
AWS Textract, Tree-based classifiers (CATboost)	1
CART, Conditional Decision Trees	2
Decline to share model names, and names would be meaningless	1
Company uses various machine-learning techniques in its AI Solutions.	1
Company uses various machine-learning techniques in its AI Solutions.	3
N/A	16

Prior Authorization	
Auto Authorization Model	5
AWS Textract	1
CART, Conditional Decision Trees	2
Commercial AI Auto-Approvals, GPD AI Auto-Approval	2
Decline to share model names, and names would be meaningless	1
Company uses various machine-learning techniques in its AI Solutions.	4
intelliPath AI	1
NLP, LLM	2
N/A	15
None	26

Utilization/Severity/Quality Management	
CART, Conditional Decision Trees, Cohere	2

Utilization/Severity/Quality Management	
Chronic ER Model, Cardiovascular Deterioration Risk Model	2
Decline to share model names, and names would be meaningless	1
Company uses various machine-learning techniques in its AI Solutions.	4
intelliPath AI	1
LLM	2
NLP LLM Gradient Boosting Machine	1
Quality Improvement	2
Sentence-BERT, AWS Textract, Logit, Tree-based classifiers (catboost)	1
SNF Episodic, Readmissions 7 Day, Excess Cost - Forward, Excess Cost - Inpatient, Excess Cost - Post Discharge	5
N/A	15
None	22

Fraud Detection	
Decline to share model names, and names would be meaningless	1
Company uses various machine-learning techniques in its AI Solutions.	1
Company uses various machine-learning techniques in its AI Solutions.	3
Post Pay Duplicates & Date Duplicates	2
RGS, BAY	2
The names of the AI/ML models used are proprietary business information.	1
Unknown	2
N/A	15
None	34

Risk Management	
Breast Cancer Screening Compliance Likelihood, Colorectal Cancer Screening Compliance Likelihood, Cervical Cancer Screening Compliance Likelihood, Annual Wellness Exam Completion Likelihood, Prediabetes, Falls, Hypertension in Pregnancy, Cancer model(s), Well 360 model(s), Excess Cost - Forward, Excess Cost - Inpatient, Excess Cost - Post Discharge, Prospective Risk Score, High Cost Claimant Models, Inpatient Auth Model, Pended Claims Model	2
Breast Cancer Screening Compliance Likelihood, Colorectal Cancer Screening Compliance Likelihood, Cervical Cancer Screening Compliance Likelihood, Annual Wellness Exam Completion Likelihood, Prediabetes, Falls, Hypertension in Pregnancy, Cancer model(s), Well 360 model(s), Excess Cost - Forward, Excess Cost - Inpatient, Excess Cost - Post Discharge, Prospective Risk Score, High-Cost Claimant Models, Inpatient Auth Model, Pended Claims Model	3

Risk Management	
Cardiac Event Prediction Model	2
CNN, LLM	2
Decline to share model names, and names would be meaningless	1
Company uses various machine-learning techniques in its AI Solutions.	1
Company uses various machine-learning techniques in its AI Solutions.	3
intelliPath AI	1
N/A	17
None	29

Risk Adjustment	
*Specific AI Model Used Unknown	1
Advancement of VBC Payment Model Portfolio	2
AWS Textract	1
CART, Conditional Decision Trees, Cohere	2
Company uses various machine-learning techniques in its AI Solutions.	4
Gradient Boosting Regression Model	1
Company uses LLM and RS. The names of the AI/ML models used are proprietary business information.	1
N/A	16
NLP	1
NLP LLM Gradient Boosting Machine	1
Prospective Risk Score, High Cost Claimant Model, Company New Business Model, Company Renewal Model, Cotiviti Variability Bins	2
Prospective Risk Score, High-Cost Claimant Model, Company New Business Model, Company Renewal Model, Cotiviti Variability Bins	3
RGS, BAY	2
Veradigm	1
N/A	16
None	24

Data Processing	
BART, WHISPER	1
Company uses various machine-learning techniques in its AI Solutions.	1
Company uses various machine-learning techniques in its AI Solutions.	4
ENS, LOLM, RGS, BAY	2
See 8.132	4
Snowflake Cortex	1

Data Processing	
Whisper, Bark, GTP3.5/4	1
N/A	18
None	30

Sales & Marketing	
*Specific AI Model Used Unknown	1
BAY	2
Data Ingestion for Online Sales, Dimensionality reduction, Bayesian Modeling, Conditional Decision Trees	2
Company uses various machine-learning techniques in its AI Solutions.	4
GPT 4.0	1
GPT-4, Uknown	1
Likely-to-Buy ACA OEP, True Prospects, Likely-to-Churn UCD FEDVIP, Likely-to-Buy MA N2M, Late Retiree True Prospects, Likely-to-Buy MA AEP, True Prospects, Likely-to-Respond MA, True Prospects, Likely-to-Churn AHN, Likely-to-Churn ACA, MA Churn Model, Health Archetype Predictions, Living Health Enrollment - Spring, Likely-to-Buy MA, B2B Prospects, Medicaid Churn, Lung Cancer, Colorectal Cancer, Breast Cancer, Cervical Cancer, ED Utilization, Avoidable ED, Orthopedic Care Alignment	5
Member Retention	2
Random Forest, Chi-Square Automatic Interaction Detection, Principal Component Analysis, K-Means, Hierarchical clustering.	1
See 8.132	3
Third party data sets, GPT3.5/4	1
We partner with Social Media companies who leverage AI/ML to deliver targeted ad content, and they have a multitude of models that they use.	1
N/A	15
None	20

Strategic Operations	
*Specific AI Model Used Unknown	1
Accenture Proprietary Model	3
Adherence to Policy and Procedures	1
Anthropic Claude, Meta Llama	1
Co-Pilot	1
Decline to share model names, and names would be meaningless	1
Directory Search	1
Company uses various machine-learning techniques in its AI Solutions.	4

Strategic Operations	
ENS, DT	2
GPT-4 turbo, GPT-O1 mini, custom language model	1
Likely-to-Respond to Respond by Email MA Members, HEDIS framework/chart work, AHN No Show, Engagement	5
N/A	14
Neural Networks (for Payment Integrity associated with digitized scanned documents)	1

Question 8.134
Please provide any additional comments related to the use of AI/ML in Group Major Medical - Single Employer - Small Employer.

- In the interest of clarity, the company has no AI/ML in production as defined by this survey. Our business reflects zero use of Generalized Linear Modeling.
- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Our approach is to keep a human in the loop. That means we focus our efforts on using AI to augment human judgment, but not displace it. We use AI to augment the expertise of our employees that can increase productivity, reduce potential errors, and provide employees more time to focus on higher-level tasks.
- Our governance framework reflects our corporate values and is consistent with our company Code of Ethics. It provides a lens to evaluate the ethical validity of an AI application and helps meet federal and state regulations, The Association rules, and other corporate policies related to data use.

Sales & Marketing Questions

Question 8.108
Does your company currently use, plan to use, or is exploring the use of AI/ML for online advertising targeted towards consumers?
Yes: 24 (36%), No: 42 (64%).

Question 8.109
For those companies answering 'Y' to Q8.108: What is the current level of AI/ML Deployment?
Research: 9 (38%), Proof of Concept: 4 (17%), Prototype: 0 (0%), Implemented in Production: 11 (46%).

Question 8.110

Does your company currently use, plan to use, or is exploring the use of AI/ML to identify sales opportunities?
Yes: 21 (32%), No: 45 (68%).

Question 8.111
For those companies answering 'Y' to Q8.110: What is the current level of AI/ML Deployment?
Research: 8 (38%), Proof of Concept: 0 (0%), Prototype: 2 (10%), Implemented in Production: 11 (52%).

Question 8.112
Does your company currently use, plan to use, or is exploring the use of AI/ML to structure broker compensation?
Yes: 1 (2%), No: 65 (98%).

Question 8.113
For those companies answering 'Y' to Q8.112: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 8.114
Does your company currently use, plan to use, or is exploring the use of AI/ML to identify individual coverage health reimbursement arrangements (ICHRA) sales opportunities?
Yes: 6 (9%), No: 60 (91%).

Question 8.115
For those companies answering 'Y' to Q8.114: What is the current level of AI/ML Deployment?
Research: 1 (17%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 5 (83%).

Question 8.116
Does your company currently use, plan to use, or is exploring the use of AI/ML to identify candidates for self-funding/stop-loss arrangements?
Yes: 18 (27%), No: 48 (73%).

Question 8.117
For those companies answering 'Y' to Q8.116: What is the current level of AI/ML Deployment?
Research: 4 (22%), Proof of Concept: 0 (0%), Prototype: 5 (28%), Implemented in Production: 9 (50%).

Question 8.118
Does your company currently use, plan to use, or is exploring the use of AI/ML for Identification of Recipients of Mail or Phone Advertising?
Yes: 15 (23%), No: 51 (77%).

Question 8.119

For those companies answering 'Y' to Q8.118: What is the current level of AI/ML Deployment?
Research: 4 (27%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 11 (73%).

Question 8.120
Does your company currently use, plan to use, or is exploring the use of AI/ML to develop products, programs, or services for existing customers?
Yes: 20 (30%), No: 46 (70%).

Question 8.121
For those companies answering 'Y' to Q8.120: What is the current level of AI/ML Deployment?
Research: 10 (50%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 10 (50%).

Question 8.122
Does your company currently use, plan to use, or is exploring the use of AI/ML for Identification of Potential Customer Groups?
Yes: 27 (41%), No: 39 (59%).

Question 8.123
For those companies answering 'Y' to Q8.122: What is the current level of AI/ML Deployment?
Research: 9 (33%), Proof of Concept: 0 (0%), Prototype: 1 (4%), Implemented in Production: 17 (63%).

Question 8.124
Does your company currently use, plan to use, or is exploring the use of AI/ML for Demand Modeling?
Yes: 20 (30%), No: 46 (70%).

Question 8.125
For those companies answering 'Y' to Q8.124: What is the current level of AI/ML Deployment?
Research: 18 (90%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 2 (10%).

Question 8.126
Does your company currently use, plan to use, or is exploring the use of AI/ML for online sales, quoting, or shopping experience?
Yes: 26 (39%), No: 40 (61%).

Question 8.127
For those companies answering 'Y' to Q8.126: What is the current level of AI/ML Deployment?
Research: 12 (46%), Proof of Concept: 1 (4%), Prototype: 2 (8%), Implemented in Production: 11 (42%).

Question 8.128
Does your company currently use, plan to use, or is exploring the use of AI/ML for other marketing-related solutions?
Yes: 11 (17%), No: 55 (83%).

Question 8.129

For those companies answering 'Y' to Q8.128: Please list up to 10 other sales & marketing-related functions solutions where you are using or may potentially use AI/ML and indicate their highest level of deployment.

Table 28: Sales & Marketing-Related Functions Solutions in Use or May Potentially Use with Level of Deployment

Sales & Marketing-Related Functions Solution	Research	Proof of Concept	Prototype	Implemented in Production
Marketing copy or content	0	0	0	0
Predictive marketing analytics	0	0	0	0
Image creation- adobe	0	1	0	0
Social Listening	0	0	0	0
RFP Responses	0	0	0	1
GenerativeAI use in content development	0	3	0	0
We are exploring the use of AI to help us respond to RFPs, using our historical RFP responses as guidelines	0	0	0	0
Cicle.so	0	0	0	1
Geo-Fencing	0	0	0	0
Circle.so	0	0	0	1
Digital Marketing	0	0	0	1
Content automation tool in digital content management	0	0	0	4
A/B Testing	0	0	0	2
Social Advertising	0	0	0	0
Creative Design	0	0	0	1
Market research leveraging external partner's social listening / AI capabilities to surface insights	0	0	0	3
Audio Communications	0	0	0	1
Member Clinical Outreach	0	0	0	1

Question 8.130

For those companies answering 'Y' to Q8.128: What is the current level of AI/ML Deployment?
Research: 4 (36%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 7 (64%).

Strategic Operations Questions

Question 8.7
Does your company own provider groups?
Yes: 10 (15%), No: 55 (85%).

Question 8.8
For the areas in your business where AI/ML is in use, does that AI/ML process use data from these providers?
Yes: 2 (20%), No: 8 (80%).

Question 8.9
If answered yes to Question 8.8, how is it being used?

- To identify high risk members for population health interventions; Factors include: members with high clinical impact, risk adjustment coding opportunities, or member that haven't had an annual wellness checkup. Change will be made in 2025.
- Cohere provides:
  - Conversion of physical documents into digitized structured data
  - IDs blocks of text that are semantically relation and separation from semantically different blocks
  - Extraction of information from unstructured text into predefined categories
  - Identification and return of information from valuable resources
  - Looks for patterns between clinician reviewed historical authorizations and patient attributes to determine the probability that medical necessity has been met.

Question 8.10
For those companies answering 'Y' to Q8.7: What is the current level of AI/ML Deployment?
Research: 4 (40%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 6 (60%).

Question 8.11
Is your company owned by a provider group?
Yes: 9 (14%), No: 56 (86%).

Question 8.12
If answered yes to Question 8.10, please explain. For the areas in your business where AI/ML is in use, does that AI process use data from these providers? If so, how is it being used?

- No
- Not at this time.
- N/A
- Yes, the EHR record is the source and destination for alerting providers to member health conditions.

- No.
- No, the insured does not use data from these providers for product pricing and plan design.
- No AI Tools are shared between our plans and parent company.

Question 8.13
For those companies answering 'Y' to Q8.11: What is the current level of AI/ML Deployment?
Research: 7 (78%), Proof of Concept: 0 (0%), Prototype: 1 (11%), Implemented in Production: 1 (11%).

Question 8.50
Does your company currently use, plan to use, or is exploring the use of AI/ML in any way in your provider contracting process?
Yes: 13 (20%), No: 53 (80%).

Question 8.51
If answered yes to Question 8.50, please explain the types of contracts and how they are used (e.g. value-based, fee for service, or defined contributions).

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- We are currently exploring the use of AI to support document intelligence for contracts.
- In the future, yes, potentially for authoring the Contract and for a Provider Relations CRM (Customer Relationship Management) tool.
- Internal use to identify and bring in article information for employees.
- In exploratory phases of this capability
- Augmented search of provider contracts via an LLM

Question 8.52
For those companies answering 'Y' to Q8.50: What is the current level of AI/ML Deployment?
Research: 13 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 8.53
Does your company require, plan to require, or is exploring the requirement of any of your in-network providers to utilize a system, service, or software that uses AI/ML?
Yes: 16 (24%), No: 50 (76%).

Question 8.54
If answered yes to Question 8.53, what system/service/software is required and for what purpose?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.

- Care Radius CareProminence:
  - Automated Workflows: Streamlines processes to reduce manual effort and administrative costs.
  - Compliance Adherence: Ensures continual compliance with ever-changing regulations.
  - Quality Improvement: Enhances quality scores and optimizes healthcare experiences for members.
  - Comprehensive Member View: Provides a holistic view of each member to drive optimal health outcomes.
  - These features help healthcare providers and payers deliver better care while maintaining regulatory compliance and operational efficiency.
- A provider data management tool for provider roster management.
- EviCore Intellipath - a system used for Prior Authorizations that reviews and automatically approves Prior Authorizations.
- Prior auth submissions.
- Researching Contract Management and Provider Relation Customer Relationship Management Systems that have AI capabilities.
- Internal use cases to use AI to bring in just in time information.

Question 8.55
For those companies answering 'Y' to Q8.53: What is the current level of AI/ML Deployment?
Research: 8 (50%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 8 (50%).

Question 8.56
Does your company require, plan to require, or is exploring the requirement of any of your out-of-network providers to utilize a system, service, or software that uses AI/ML?
Yes: 8 (12%), No: 58 (88%).

Question 8.57
If answered yes to Question 8.56, what system/service/software is required and for what purpose?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Care Radius CareProminence:
  - Automated Workflows: Streamlines processes to reduce manual effort and administrative costs.
  - Compliance Adherence: Ensures continual compliance with ever-changing regulations.
  - Quality Improvement: Enhances quality scores and optimizes healthcare experiences for members.
  - Comprehensive Member View: Provides a holistic view of each member to drive optimal health outcomes.

  - These features help healthcare providers and payers deliver better care while maintaining regulatory compliance and operational efficiency.
- Prior auth submissions.
- Researching Contract Management and Provider Relation Customer Relationship Management Systems that have AI capabilities.

Question 8.58

For those companies answering 'Y' to Q8.56: What is the current level of AI/ML Deployment?
Research: 8 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

GROUP MAJOR MEDICAL – OTHER EMPLOYER (LARGE GROUP)

Product Pricing and Plan Design Questions

Question 9.2

1. Does your company currently use, plan to use, or is exploring the use of AI/ML to calculate rates or any component of a rate? If yes, which of the following rating factors are developed using AI?

Table 29: Company Use, Plan, or Exploring of AI/ML to Calculate Rates or Any Component of a Rate

Rating Variable	Yes	No
Geography	6	58
Tobacco - do you screen for tobacco usage and price accordingly?	2	62
Age	5	59
Risk Adjustment Analysis	7	57
Social Determinants of Health	4	60
Claims History	13	51
PBM Rebates	3	61
Trend - utilization, cost, and severity	16	48
Benefit relativity - Actuarial Value, cost-sharing, etc.	4	60
Network factors	3	61
Morbidity	12	52
Projected enrollment	6	58
State-sponsored subsidized programs	1	63
Other: please list, i.e. biometrics, wearables, etc.	3	61

For those companies answering 'Y' to question 1:

2. What is the current level of AI/ML Deployment?

Table 30: Company Use, Plan, or Exploring of AI/ML to Calculate Rates or Any Component of a Rate

Rating Factor	Research	Proof of Concept	Prototype	Implemented in Production
Geography	1	0	2	0
Tobacco - do you screen for tobacco usage and price accordingly?	1	0	0	0
Age	1	0	1	0
Risk Adjustment Analysis	1	0	1	0
Social Determinants of Health	3	0	0	0
Claims History	2	0	0	0

Rating Factor	Research	Proof of Concept	Prototype	Implemented in Production
PBM Rebates	3	0	0	0
Trend - utilization, cost, and severity	2	0	0	0
Benefit relativity - Actuarial Value, cost-sharing, etc.	3	0	0	0
Network factors	3	0	0	0
Morbidity	2	0	0	0
Projected enrollment	4	0	1	0
State-sponsored subsidized programs	1	0	0	0
Other: please list, i.e. biometrics, wearables, etc.	1	0	2	0
Total	28	0	7	0

Question 9.3
List (i.e. biometrics, wearables, etc.) for "Other" category:

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Third party partnership for biometric detection.
- Partnership with a third party to develop a mobile application that uses biometrics to detect health issues.

Question 9.4
Does your company currently use, plan to use, or is exploring the use of AI/ML to design or develop plans for specific cohorts, member populations, conditions etc.?
Yes: 14 (22%), No: 50 (78%).

Question 9.5
If answered yes to Question 9.4, please explain. For example, do you use AI/ML to design products that consider changes to copay, deductibles, benefits, wellness features, services, or programs for a specific population of consumers?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Market and member demographics and projection.
- The company utilizes techniques like dimensionality reduction to help design benefits that will appeal to and meet the needs of a given population or consumer segment. Ultimately, this approach assists with analysis and pre-work; models are not making autonomous decisions in this arena.

- AI is used to predict group level estimates on cost, disease prevalence and overall risk. This can be used to recommend products or services to prospective or renewing clients.
- Insurer is exploring the use of automation to develop group sales cards (GIC monthly). Process would use RPA and/or OCR.
- In the context of care management program outreach, AI/ML is being used to identify members with possible care gaps who would benefit from affordable care.
- In the exploratory phases of these capabilities.

Question 9.6
For those companies answering 'Y' to Q9.4: What is the current level of AI/ML Deployment?
Research: 6 (43%), Proof of Concept: 0 (0%), Prototype: 1 (7%), Implemented in Production: 7 (50%).

Claims Adjudication Questions

Question 9.18
Does your company currently use, plan to use, or is exploring the use of AI/ML to analyze any of the following coding areas? If yes, please check all that apply.

Table 31: Company Use, Plan, or Exploring of AI/ML to Analyze Coding Areas

Coding Area	Yes	No
Rx Inpatient	16	48
Rx Outpatient	17	47
Behavioral Health Inpatient	15	49
Behavioral Health Outpatient	15	49
Medical Inpatient	17	47
Medical Outpatient	21	43

Question 9.19
For those companies answering 'Y' to Q9.18: What is the current level of AI/ML Deployment?
Research: 10 (10%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 91 (90%).

Question 9.20
Does your company currently use, plan to use, or is exploring the use of AI/ML for benefit eligibility determination?
Yes: 16 (25%), No: 48 (75%).

Question 9.21
For those companies answering 'Y' to Q9.20: What is the current level of AI/ML Deployment?
Research: 4 (25%), Proof of Concept: 7 (44%), Prototype: 0 (0%), Implemented in Production: 5 (31%).

Question 9.22
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect first-party liability (potential for recovering compensation from an accident/injury)?
Yes: 9 (19%), No: 39 (81%).

Question 9.23
For those companies answering 'Y' to Q9.22: What is the current level of AI/ML Deployment?
Research: 1 (8%), Proof of Concept: 0 (0%), Prototype: 4 (31%), Implemented in Production: 8 (62%).

Question 9.24
Does your company or a contracted vendor currently use, plan to use, or is exploring the use of AI/ML to negotiate out of network claims with providers?
Yes: 9 (14%), No: 55 (86%).

Question 9.25
For those companies answering 'Y' to Q9.24: If yes, is human intervention required?
Yes: 6 (67%), No: 3 (33%).

Question 9.26
For those companies answering 'Y' to Q9.24: If yes, does the reimbursement amount change based on the negotiation results?
Yes: 6 (67%), No: 3 (33%).

Question 9.27
Does your company currently use, plan to use, or is exploring the use of AI/ML for any other claims adjudication functions?
Yes: 35 (55%), No: 29 (45%).

Question 9.28
If answered yes to Question 9.27, please explain.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Pre-auth risk detection.
- AI driven claims automation, insights, and recommendations for claims approval, resolving issues (edits), assess high dollar claim risk, and optimize routing for manual examiners when needed.
- Currently investigating and piloting third party solutions, including SHIFT technologies, for claims repricing, adjudication, and prior-auth risk detection. However, this is not currently planned to be put into production.
- Duplicate providers, duplicate billing, claims suspension.
- The company is currently evaluating vendors that have AI claims adjudication capabilities.

- ML modeling is being explored to identify claims (at risk of being overpaid or underpaid) for further review by a human being.
- Exploring the usage of agents to help in our current automations with human in the loop.
- Use LLMs for Claims Ops to navigate Manual SPIs for non-standard benefits; Use LLMs to determine solve for COB/Medicare edits; reduce manual work.
- Use LLMs for Claims Ops to navigate Manual SPIs for non-standard benefits; Use LLMs to determine solve for COB/Medicare edits; reduce manual work; Automate the COB process and dental claims adjudication; Acupuncture Claims Automation; Claim simulation tool to automatically submit, retrieve and analyze claims to validate intended claim payment outcomes are achieved; Automate claims predicted to have a CFNF edit and route to Network Repricing Unit.
- Multiplan, a third-party vendor contracted for payment integrity purposes, utilizes AI.
- We have several use cases on our 2025 roadmap relating to claims processing, claims adjustments, and claims information requests.

Prior Authorization Questions

Question 9.29
Does your company currently use, plan to use, or is exploring the use of AI/ML to determine whether prior authorization is required?
Yes: 28 (44%), No: 36 (56%).

Question 9.30
For those companies answering 'Y' to Q9.29: What is the current level of AI/ML Deployment?
Research: 10 (36%), Proof of Concept: 1 (4%), Prototype: 1 (4%), Implemented in Production: 16 (57%).

Question 9.31
Does your company currently use, plan to use, or is exploring the use of AI/ML to review prior authorizations for approval?
Yes: 45 (70%), No: 19 (30%).

Question 9.32
For those companies answering 'Y' to Q9.31: What is the current level of AI/ML Deployment?
Research: 11 (24%), Proof of Concept: 2 (4%), Prototype: 1 (2%), Implemented in Production: 31 (69%).

Question 9.33
For those companies answering 'Y' to Q9.31, please check all that apply.

Table 32: Company Use, Plan, or Exploring of AI/ML to Review Prior Authorizations for Approval

Coding Area	Yes	No
Rx Inpatient	14	31

Coding Area	Yes	No
Rx Outpatient	14	31
Behavioral Health Inpatient	23	22
Behavioral Health Outpatient	19	26
Medical Inpatient	38	7
Medical Outpatient	34	11

Question 9.34

Does your company currently use, plan to use, or is exploring the use of AI/ML to review prior authorizations for denial?

Yes: 5 (8%), No: 59 (92%).

Question 9.35

For those companies answering 'Y' to Q9.34: What is the current level of AI/ML Deployment?

Research: 1 (20%), Proof of Concept: 0 (0%), Prototype: 1 (20%), Implemented in Production: 3 (60%).

Question 9.36

For those companies answering 'Y' to Q9.34, please check all that apply.

Table 33: Company Use, Plan, or Exploring of AI/ML to Review Prior Authorizations for Denial

Coding Area	Yes	No
Rx Inpatient	5	0
Rx Outpatient	5	0
Behavioral Health Inpatient	5	0
Behavioral Health Outpatient	5	0
Medical Inpatient	5	0
Medical Outpatient	5	0

Question 9.37

Does your company currently use, plan to use, or is exploring the use of AI/ML for any other prior authorization functions?

Yes: 15 (23%), No: 49 (77%).

Question 9.38

For those companies answering 'Y' to Q9.37, please elaborate.

- We are exploring the use of AI tools to identify completeness of medical records for PA. Our PBM vendor uses prior authorization process involves the use of AI where Machine Learning models are utilized to assesses all requests. There is human involvement in all stages of this process. Any potential denials determinations are made by a human.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Pre-auth fraud detection.
- Clinical record review.
- Currently investigating and piloting third party solutions, including SHIFT technologies, for claims repricing, adjudication, and prior-auth risk detection. However, this is not currently planned to be put into production.
- The intent of this model was to automatically approve the auth or send it to be normally reviewed by a human and NOT to deny authorizations.
- We have only researched using NLP to do automated data entry for prior authorizations.
- Read into EMR to determine if patient's chart has met clinical criteria.
- Clinical Decision Support Tool may be used to extract and display information from scanned clinical documents for a clinician to review a case in a more efficient manner. Clinicians are still required to review and edit the AI outputs
- We use AI/ML for prior authorization intake automation.

Question 9.39
For those companies answering 'Y' to Q9.37: What is the current level of AI/ML Deployment?
Research: 6 (40%), Proof of Concept: 0 (0%), Prototype: 2 (13%), Implemented in Production: 7 (47%).

Utilization/Severity/Quality Management Questions

Question 9.15
Does your company currently use, plan to use, or is exploring the use of AI/ML to determine if step therapy protocols have been adhered to?
Yes: 11 (17%), No: 53 (83%).

Question 9.16
For those companies answering 'Y' to Q9.15: What is the current level of AI/ML Deployment?
Research: 2 (18%), Proof of Concept: 1 (9%), Prototype: 0 (0%), Implemented in Production: 8 (73%).

Question 9.17
If answered yes to Question 9.15, provide details to include how AI is used to monitor adherence by the health plan, provider, and/or consumer.

- Only with regard to medication protocols our contracted PBM uses Models and algorithms, including Artificial Intelligence (AI), predictive models, and machine learning solutions to increase the ability to positively impact member health and affordability for prescription drug issues. The PBM uses AI technologies to analyze data and uncover patterns and insights to help improve outcomes, increase connectivity between the patient and the healthcare system, speed up administrative processes, and improve the member experience. Their algorithms provide insights

regarding its customer population, which they use to enhance healthcare access and quality of care. For example, algorithms assist them in predicting which customers are most likely to stand to benefit from using certain of its products (e.g., a telehealth option), a specific health intervention (e.g., a wellness check), or reminders (e.g., to continue taking necessary medications).

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- As part of our monitoring our AI helps us to evaluate alternative drugs as part of the adherence which is a part of our step therapy process.
- The company is currently evaluating AI capabilities in this space and has no specific timeline to move beyond the Research stage.
- We are currently exploring this area.
- The company uses various machine-learning techniques in its AI Solutions.

Question 9.40

Does your company currently use, plan to use, or is exploring the use of AI/ML in developing or administering disease management programs?

Yes: 30 (47%), No: 34 (53%).

Question 9.41

For those companies answering 'Y' to Q9.40: What is the current level of AI/ML Deployment?

Research: 6 (20%), Proof of Concept: 2 (7%), Prototype: 0 (0%), Implemented in Production: 22 (73%).

Question 9.42

Does your company currently use, plan to use, or is exploring the use of AI/ML in your utilization management practices?

Yes: 33 (52%), No: 31 (48%).

Question 9.43

For those companies answering 'Y' to Q9.42: If yes, please check all that apply.

Table 34: Company Use, Plan, or Exploring of AI/ML in Utilization Practices

Utilization Management Practice	Yes	No
Activities for improving health outcomes	28	5
Activities to prevent hospital readmissions	28	5
Activities to improve patient safety	22	11
Activities to reduce medical errors	16	17
Activities for wellness	24	9
Activities for health promotions	22	11
Activities to reduce health disparities	19	14

Utilization Management Practice	Yes	No
Activities to reduce healthcare disparities	9	24
Formulary management	2	31
Concurrent review	9	24
Downcoding	11	22
Prepayment review	10	23
Clinical standards review	8	25
Prospective review	15	18
Retrospective review	19	14

Question 9.44
For those companies answering 'Y' to Q9.42: What is the current level of AI/ML Deployment?
Research: 6 (18%), Proof of Concept: 2 (6%), Prototype: 0 (0%), Implemented in Production: 25 (76%).

Question 9.45
Does your company currently use, plan to use, or is exploring the use of AI/ML to determine which prescription drugs are subject to step therapy?
Yes: 3 (5%), No: 61 (95%).

Question 9.46
For those companies answering 'Y' to Q9.45: What is the current level of AI/ML Deployment?
Research: 3 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 9.47
Does your company currently use, plan to use, or is exploring the use of AI/ML to design or develop step therapy requirements?
Yes: 1 (2%), No: 63 (98%).

Question 9.48
For those companies answering 'Y' to Q9.47: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 9.49
Does your company currently use, plan to use, or is exploring the use of AI/ML to administer step therapy programs?
Yes: 3 (5%), No: 61 (95%).

Question 9.50
For those companies answering 'Y' to Q9.49: What is the current level of AI/ML Deployment?
Research: 3 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 9.60

Does your company directly contract, plan to directly contract, or is exploring directly contracting with utilization management vendors (prior authorization, diagnostic tools, prescription assessments, etc.) that use AI/ML?

Yes: 29 (45%), No: 35 (55%).

Question 9.61

If answered yes to Question 9.60, what automated decisions are made by the vendors?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- The company uses AI for the following functionality:
    - Document processing: Conversion of physical documents into digitized, structured data
    - HOW: Fax intake, inputs for rules-based approvals, manual clinical review
    - Document segmentation: Identification of blocks of text that are semantically related, and separation from semantically different blocks
    - HOW: Manual clinical review, inputs for rules-based approvals
    - Named entity recognition: Extraction of information from unstructured text into predefined categories (e.g,. clinical indications)
    - HOW: Inputs for rules-based approvals, manual clinical review
    - Information retrieval: Identification and return of information from available resources (e.g., a segmented document)
    - HOW: Inputs for rules-based approvals, manual clinical review
    - Predictive decisioning: Looks for patterns between clinician-reviewed historical authorizations and patient attributes to determine the probability that medical necessity has been met
    - HOW: Approvals when a predetermined threshold has been met
- Affiliated vendors provide automated approvals for prior authorizations in certain situations where any regulatory approval to deploy this AI solution has been obtained if required, and where clinical medical guidelines are met.
- One of our current partners is planning on using AI with a human in the loop. We are currently investigating their planned use.
- Evaluate authorization and make a determination of approval.
- We have only researched with the vendor their capabilities to use AI/ML in terms of Utilization Management and Quality Management.
- Vendors use AI to simplify the prior authorization process.
- Vended solutions are used for certain claims edits.
- EviCore Intellipath will review Prior Authorizations and automatically approve PAs with a high likelihood of approval.
- The company is currently evaluating vendors that have AI capabilities.
- Automated approvals by reading med record.

- We use a vendor for some of our prior authorization reviews that uses AI to approve select cases that meet certain criteria.
- While some vendors may approve certain service requests, all denial decisions are made by a human, ensuring that AI is not used to automate these determinations.
- Prior authorization approvals.

Question 9.62
For those companies answering 'Y' to Q9.60: What is the current level of AI/ML Deployment?
Research: 7 (24%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 22 (76%).

Question 9.63
Does your company currently use, plan to use, or is exploring use AI/ML for other utilization/severity/ quality management related functions?
Yes: 16 (25%), No: 48 (75%).

Question 9.64
If answered yes to Question 9.63, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Machine Learning algorithm to predict likelihood of hospital readmission.
- We are using AI/ML for call transcription, sentiment analysis, and conversational data discovery.
- We utilize predictive modeling to identify potential care gaps based on STARS measures.
- AI/ML is used to identify members at risk for specific health conditions to provide targeted interventions and improve health outcomes.
- Improve Quality Score outcome.
- AI is used to predict risk/severity of a member to prioritize outreach or other activities. AI is also used to predict quality gaps to proactively outreach and mitigate potential quality issues.
- The company is currently evaluating vendors that have AI capabilities.
- Early identification of upcoming medical events (surgery, imaging, labs) for proactive member education around potential options and reminders on provided tools for provider selection.
- Third-party vendor uses AI/ML in software development process; all content created by AI includes manual review and approval. Nothing is solely created through AI use.
- Exploring ML Usage to improve Quality outcome

Question 9.65
For those companies answering 'Y' to Q9.63: What is the current level of AI/ML Deployment?
Research: 4 (25%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 12 (75%).

Risk Management Questions

Question 9.66
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wearable Devices?
Yes: 9 (14%), No: 55 (86%).

Question 9.67
For those companies answering 'Y' to Q9.66: What is the current level of AI/ML Deployment?
Research: 9 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 9.68
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wellness Initiatives?
Yes: 15 (23%), No: 49 (77%).

Question 9.69
For those companies answering 'Y' to Q9.68: What is the current level of AI/ML Deployment?
Research: 1 (7%), Proof of Concept: 0 (0%), Prototype: 1 (7%), Implemented in Production: 13 (87%).

Question 9.70
Does your company currently use, plan to use, or is exploring the use of AI/ML for Discount Medical Programs?
Yes: 4 (6%), No: 60 (94%).

Question 9.71
For those companies answering 'Y' to Q9.70: What is the current level of AI/ML Deployment?
Research: 1 (25%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 3 (75%).

Question 9.72
Does your company currently use, plan to use, or is exploring the use of AI/ML for Technology to Detect Smoking?
Yes: 1 (2%), No: 63 (98%).

Question 9.73
For those companies answering 'Y' to Q9.72: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 9.74
Does your company currently use, plan to use, or is exploring the use of AI/ML for Disease Detection?
Yes: 14 (22%), No: 50 (78%).

Question 9.75
For those companies answering 'Y' to Q9.74: What is the current level of AI/ML Deployment?

Research: 3 (21%), Proof of Concept: 1 (7%), Prototype: 0 (0%), Implemented in Production: 10 (71%).

Question 9.76
Does your company currently use, plan to use, or is exploring the use of AI/ML for Other Risk Management Functions?
Yes: 22 (34%), No: 42 (66%).

Question 9.77
If answered yes to Question 9.76, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Fraud detection
- Vantage Analytics: Analytics that helps payers improve member care quality and network performance, manage population risk, and optimize revenue while decreasing administrative waste and reducing health claim expenditures.
- Gradient AI offers AI software solutions for underwriting and claims management in group health, P&C, and workers' comp insurance. Their solutions leverage rich data, AI expertise, and industry insights to improve risk assessment, pricing, and profitability
- ImpactPro is a health risk analytics tool by Optum that helps identify individuals who will benefit most from population health management programs. It leverages the analytical foundation of Optum Symmetry to profile and stratify populations by predicting future risk.
- InGenix Hinge Health is a 3rd party app that learns from members' interactions with the program to optimize the member experience and adjust as needed to support the member's health journey. The company receives analytics on the data.
- Omada leverages AI for some of our coaching capabilities (such as analyzing photos of meals), as well as for member pathways for weight management.
- Predicting the chance that the condition exists and was not documented at a condition category level, not at any individual disease level.
- Currently investigating and piloting third party solutions, including SHIFT technologies, for claims repricing, adjudication, and prior-auth risk detection. However, this is not currently planned to be put into production.
- Excess Cost Model for CM.
- AI/ML is used for predictive risk models to manage and mitigate risks associated with chronic conditions.
- Predicting the chance that the condition exists and was not documented at a condition category level, not at any individual disease level.
- The company currently uses AI for risk modeling.
- Research

Question 9.78
For those companies answering 'Y' to Q9.76: What is the current level of AI/ML Deployment?
Research: 6 (27%), Proof of Concept: 0 (0%), Prototype: 1 (5%), Implemented in Production: 15 (68%).

Risk Adjustment Questions

Question 9.79
Does your company currently use, plan to use, or is exploring the use of AI/ML to inform methodologies around risk adjustment?
Yes: 23 (36%), No: 41 (64%).

Question 9.80
For those companies answering 'Y' to Q9.79: What is the current level of AI/ML Deployment?
Research: 5 (22%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 18 (78%).

Question 9.81
Does your company currently use, plan to use, or is exploring the use of AI/ML to model risk adjustment factors?
Yes: 21 (33%), No: 43 (67%).

Question 9.82
For those companies answering 'Y' to Q9.81: What is the current level of AI/ML Deployment?
Research: 5 (24%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 16 (76%).

Fraud Detection Questions

Question 9.83
Does your company currently use, plan to use, or is exploring the use of AI/ML for auto-decision on non-fraudulent claims (i.e. fast-tracking claim processing of non-fraudulent claims)?
Yes: 18 (28%), No: 46 (72%).

Question 9.84
For those companies answering 'Y' to Q9.83: What is the current level of AI/ML Deployment?
Research: 2 (11%), Proof of Concept: 0 (0%), Prototype: 1 (6%), Implemented in Production: 15 (83%).

Question 9.85
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect and refer claims for potential fraud?
Yes: 33 (52%), No: 31 (48%).

Question 9.86
For those companies answering 'Y' to Q9.85: What is the current level of AI/ML Deployment?

Research: 14 (42%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 19 (58%).

Question 9.87
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect medical provider fraud?
Yes: 27 (42%), No: 37 (58%).

Question 9.88
For those companies answering 'Y' to Q9.87: What is the current level of AI/ML Deployment?
Research: 6 (22%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 21 (78%).

Question 9.89
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect criminal fraud ring activity (stolen provider/member IDs, impersonated providers, inflated treatments common to homecare and DME providers)?
Yes: 10 (16%), No: 54 (84%).

Question 9.90
For those companies answering 'Y' to Q9.89: What is the current level of AI/ML Deployment?
Research: 3 (30%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 7 (70%).

Question 9.91
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect social network fraud (less sophisticated than criminal fraud ring activity, but similar issues)? Yes: 7 (11%), No: 57 (89%).

Question 9.92
For those companies answering 'Y' to Q9.91: What is the current level of AI/ML Deployment?
Research: 2 (29%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 5 (71%).

Question 9.93
Does your company currently use, plan to use, or is exploring the use of AI/ML indirectly for facial recognition/behavior models to detect fraud (e.g. through providers, telemedicine, etc.)?
Yes: 0 (0%), No: 64 (100%).

Question 9.94
For those companies answering 'Y' to Q9.93: What is the current level of AI/ML Deployment? N/A

Question 9.95
Does your company currently use, plan to use, or is exploring the use of AI/ML directly for facial recognition/behavior models to detect fraud?
Yes: 0 (0%), No: 64 (100%).

Question 9.96
For those companies answering 'Y' to Q9.95: What is the current level of AI/ML Deployment? N/A

Question 9.97
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect prescription drug misuse?
Yes: 20 (31%), No: 44 (69%).

Question 9.98
For those companies answering 'Y' to Q9.97: What is the current level of AI/ML Deployment?
Research: 2 (10%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 18 (90%).

Question 9.99
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect fraud other than those mentioned above?
Yes: 8 (13%), No: 56 (88%).

Question 9.100
If answered yes to Question 9.99, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- AI/ML is used to detect unusual billing patterns and potential duplicate claims, enhancing fraud detection capabilities.
- The company currently uses a vendor to efficiently detect complex potential fraud schemes by leveraging various machine learning modeling techniques through associate interaction and feedback.
- Third-party vendor uses AI to review company email for potential phishing attempts.

Question 9.101
For those companies answering 'Y' to Q9.99: What is the current level of AI/ML Deployment?
Research: 4 (50%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 4 (50%).

Data Processing Questions

Question 9.102
Does your company currently use, plan to use, or is exploring the use of AI/ML to impute race or any other data values?
Yes: 8 (13%), No: 56 (88%).

If yes, please explain.

- The only protected class characteristics that we infer are Race/Ethnicity; however, the vast majority of protected class characteristics that we store do not rise from inference at all. Thus, there is an ensemble approach to identify Race/Ethnicity of which the final piece utilizes statistical inference. Our current 3-phase approach to identify a person's race/ethnicity. Phase 1, we source race information from different administrative and clinical datasets. Phase 2, for available information or may have multiple inconsistent sources of information, we derive race/ethnicity using a person-level or family-level imputation processes. Phase 3, we leverage the Bayesian Improved First Name Surname Geocoding Methodology to determine race/ethnicity information for members that have not been identified in first two phases. When using BIFSG, we only use results that have a confidence probability of .9 and above.
- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- We do not impute race or any other sensitive data values. Data values that cannot introduce bias are imputed where appropriate.
- Data is sourced from within our organization using advanced statistical sampling techniques and is analyzed for any bias.
- We do so by ensuring that AI/ML models are trained on historical data for the same population for which they will be used.
- Where self-reported data is available, we will compare AI/ML results with self-reported data to assess the rate of discrepancy.
- We do so by ensuring that AI/ML models are trained on historical data for the same population for which they will be used.
- We deploy models to shadow-mode to confirm that test set metrics and online metrics are close. We monitor models in production for distributional drift.

Question 9.103

For those companies answering 'Y' to Q9.102: What is the current level of AI/ML Deployment?
Research: 3 (38%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 5 (63%).

Question 9.104

How does your company ensure that data used to train your AI/ML model is representative of the population for which it will be used?

- Use compartmentalized datasets and/or data limited by network or tenant.
- The company does not utilize population generically- Company population would consist of our consumers, patients, and members.
- We test and document how the data used for bias testing compares to the target population. For example, the demographic breakdown of the tested data should be like the user base demographic. The data used to train the AI system needs to be like the user population base.

- We compartmentalize and restrict data used in ML/AI models, algorithms, and activities to ensure it is appropriate for and appropriately used by justified business users.
- We have policies and procedures in place to mandate how AI is developed, tested and monitored. This prescribes how we ensure that bias is mitigated and that populations are representative.
- Each AI production Use Case is evaluated and confirmed that the target population for application is consistent with the cohort used for training and evaluation.
- Random sampling using a percentage method.
- Data is carefully selected and validated to ensure it reflects the diversity and characteristics of the target population, with ongoing monitoring and adjustments as needed governed by a robust corporate AI Governance structure.
- We use population analysis before any cohort is used for AI/ML model.
- The company compares the distribution of data used in the development of AI/ML models to distributions across the book of business. Depending on the use case, if certain classes or groups are under- or overrepresented, we may adjust the sample to create a more balanced dataset.
- Use current full population data set for training.
- All relevant tooling is managed by vendor
- This is being done by a third party and our data is included with a larger sample properly representing the statistical norms for this population.
- We use standard industry approaches.
- The company seeks to maximize the extent to which the same data pipelines are used for both the training population and the deployment population, and the distribution of the data are directly compared prior to fitting the AI/ML model.
- Each development team is expected to source appropriately representative, broad, and diverse data sets. Teams are directed to ensure that the training and testing data is representative of the population on which the model would be deployed. For example, a disease prediction system will need to train and test using a wide variety of patient data that represent different races, genders, and age. Voice bots should test with real voices. Teams determine how to collect data representing select population groups. First, teams should use self-reported forms of this data wherever possible. Teams should also consider if there is a standard dataset for the population of interest for their AI solution. Then, consult with relevant data privacy contacts and analytics leadership to confirm the appropriate data to use.
- The company has established Responsible AI practices for all AI use cases to ensure population representation in circumstances where there could be bias. We evaluate each use case throughout the development maturity lifecycle to ensure the model is representative and mitigate any identified risks.
- Quality checks and audits of data.

Question 9.105

Does your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for accuracy?

Table 35: Company Testing of Data (Internal, External, Algorithmic Outcomes) Used In Modeling or Resulting From Modeling For Accuracy

Data Type	Yes	No
Internal	49	15
External (i.e., 3rd Party)	39	25
Algorithmic Outcomes	44	20

Question 9.106

If yes to Question 9.105. Explain how your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for accuracy?

Internal Data

- Test accuracy and reliability of model outputs across model types and versions.
- We test all model output for accuracy. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, re-sampled sensitivity and specificity measurement , across cohorts , is conducted whenever model output is used in operations.
- Internal data is cross checked against other available data sources any discrepancies are investigated and resolved
- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- We use a combination of models to test for accuracy, manually inspecting the results against known or desired outcome, and to determine percentage of accuracy.
- Enterprise Data Governance policies and testing ensure the accuracy of individual data elements. Enterprise Model Governance & Model lifecycle policies prescribe the testing and ongoing monitoring of AI
- Internal data is tested for completeness and consistency using proprietary statistical methods.
- Internal data is constructed to ensure it meets accuracy standards.
- Data are reviewed for quality and accuracy before used in production.
- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable, and thus serve our customers effectively and efficiently
- The company has Data Governance protocols that test data for correctness and reliability. We implement validation rules to check for logical consistency and expected formats, verify that data values fall within expected ranges, identify and remove duplicate data, ensure that related fields are consistent, reconcile data from different sources or systems within the organization, and track changes in the data over time.
- AI processes are modeled from established manual processes, allowing for parallel operation to validate accuracy.
- We analyze derived internal data for accuracy against raw data using control/QC reports.
- We use standard industry approaches

- Data accuracy is ensured by assiduous data pipelines and validated procedures
- Testing methodologies for internal data, external data, and algorithmic outcomes varies depending on the nature of the data and the AI use case for which the data is deployed. For example, testing model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, then use the Hispanic value first, then the race values. The Responsible AI program, working in collaboration with technical teams and privacy/data governance teams, publishes guidance on testing expectation and resources for both predictive AI models and generative AI models. Developers are directed to approach the testing process throughout the AI development lifecycle. For example, summary metadata on the data used to train and test the model should be gathered during the collect and process data phase of development rather than just pulled together after the model has been built.
- Internal and external data are tested for accuracy through exploratory data analysis (EDA), which involves basic data quality checks to identify errors, inconsistencies, or missing values, as well as assessments of temporal degradation of training data. Data sourced from our strategic data warehouse follows our data governance requirement of establishing data quality testing within 90 days of release for production use.
- Automated and manual testing.
- Internal data is constructed to ensure it meets accuracy standards.
- Descriptive Statistic

External Data (i.e., third-party)

- Utilize external AI services and datasets for supplemental validation
- We test all model output for accuracy. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, re-sampled sensitivity and specificity measurement , across cohorts , is conducted whenever model output is used in operations.
- We test all model output for accuracy. Our methods differ across differing business
- contexts, but are not specific to the above categories. Generally, re-sampled sensitivity and specificity measurement , across cohorts , is conducted whenever model output is used in operations."
- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- Enterprise Data Governance policies and testing ensure the accuracy of individual data elements. Enterprise Model Governance & Model lifecycle policies prescribe the testing and ongoing monitoring of AI
- External data is tested for reasonableness.
- External data is confirmed to meet accuracy standards prior to procurement.
- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.

- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable and thus serve our customers effectively and efficiently
- External data undergo a variety of checks for data completeness and accuracy. Although the specific checks vary by data source, typically company evaluates those data against internal data and benchmarks. We review external dataset for internal consistency, ensuring that similar data points (e.g., categories, labels) are uniformly defined and represented, examine metadata provided with the external dataset (e.g., data collection process, definitions, and limitations). We also collect feedback from users who utilize external data to identify any recurring issues or inaccuracies they have encountered.
- AI processes are modeled from established manual processes, allowing for parallel operation to validate accuracy.
- If there is overlap between internal and external data, we can validate that values match. External data is also checked against historical norms.
- We use standard industry approaches
- Methodology is reviewed, and AI Distributions are reviewed by Subject Matter Experts
- Testing methodologies for internal data, external data, and algorithmic outcomes varies depending on the nature of the data and the AI use case for which the data is deployed. For example, testing model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, then use the Hispanic value first, then the race values. The Responsible AI program, working in collaboration with technical teams and privacy/data governance teams, publishes guidance on testing expectation and resources for both predictive AI models and generative AI models. Developers are directed to approach the testing process throughout the AI development lifecycle. For example, summary metadata on the data used to train and test the model should be gathered during the collect and process data phase of development rather than just pulled together after the model has been built.
- Internal and external data are tested for accuracy through exploratory data analysis (EDA), which involves basic data quality checks to identify errors, inconsistencies, or missing values, as well as assessments of temporal degradation of training data. If the external data is brought into our strategic data warehouse it will be included in our data governance requirement to establish data quality testing within 90 days of release for production use.
- External data is confirmed to meet accuracy standards prior to procurement.

Algorithmic Outcomes

- We are only in development of internal models and test there. For example, in our ML models that stratify prospective risk of a member experiencing an adverse health outcome (e.g., hospitalization or emergency department) we employ a post-hoc out-of-time validation process and analyze True Positives, False Positives, False Negatives, True Negatives by protected class characteristics of age, race, and gender. These reports show if the observed errors are consistent across characteristics such as age, race, and gender, by comparing strata of prospective risk

generated from the algorithm to observed outcomes in the respective post-period once enough time has elapsed.

- Compute accuracy metrics, depending on the type of model.
- We test all model output for accuracy. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, re-sampled sensitivity and specificity measurement , across cohorts , is conducted whenever model output is used in operations.
- Algorithmic outcomes are tested for accuracy using the appropriate statistical tests and compared to the original source data used by the algorithm.
- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- Enterprise Data Governance policies and testing ensure the accuracy of individual data elements. Enterprise Model Governance & Model lifecycle policies prescribe the testing and ongoing monitoring of AI
- Model output is tested using traditional ML techniques such as confusion matrix, lift, AUC, etc.
- The company's AI Governance process ensures algorithmic outcomes meet accuracy standards. Internally developed algorithms are required to demonstrate adherence to accuracy standards and developers of procured, externally-developed algorithms are required to attest to evaluation of model results for accuracy.
- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase
- Confusion Matrix
- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable, and thus serve our customers effectively and efficiently
- The company splits the data into test-train-and validation data sets and validate model outcomes on testing and validation to ensure the model is not overfitting. We use k-fold cross-validation to assess model performance, averaging results to provide a more robust estimate of accuracy. All algorithmic outputs are evaluated for fit across several measures including accuracy, precision, recall, F1, AUC, and MAE and MSE for regression models.
- AI processes are modeled from established manual processes, allowing for parallel operation to validate accuracy.
- We do extensive manual and automated validation testing to ensure that our predictions and algorithms are calculating as expected. (e.g. output test records and run calculations in a separate test process, check variability from expectation or benchmarks). When developing models, we validate against holdout and out-of-time samples to ensure that models work similarly on various cuts of the population.
- We use standard industry approaches
- Model metrics such as Areas Under Curve, Average Precision Recall, True Positive Rate, Positive Predictive Value, and Discounted Cumulative Gain.

- Testing methodologies for internal data, external data, and algorithmic outcomes varies depending on the nature of the data and the AI use case for which the data is deployed. For example, testing model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, then use the Hispanic value first, then the race values. The Responsible AI program, working in collaboration with technical teams and privacy/data governance teams, publishes guidance on testing expectation and resources for both predictive AI models and generative AI models. Developers are directed to approach the testing process throughout the AI development lifecycle. For example, summary metadata on the data used to train and test the model should be gathered during the collect and process data phase of development rather than just pulled together after the model has been built.
- Algorithmic outcomes are tested for accuracy by monitoring data drift in continuous and categorical features using statistical techniques. Additionally, we measure score and/or prediction drift to detect any changes in model performance over time

Question 9.107
Does your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for validity?

Table 36: Company Testing of Data (Internal, External, Algorithmic Outcomes) Used In Modeling or Resulting From Modeling For Validity

Data Type	Yes	No
Internal	48	16
External	38	26
Algorithmic Outcomes	44	20

Question 9.108
If yes to Question 9.107. Explain how your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for validity?

Internal Data
- We test all model output for validity, invalid models are retired and decommissioned. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, the method of measuring model performance relative to an objective will differ, according to the use case and model deployed. Methods used include: Sensitivity or True Positive Rate, Positive Predictive Value, F1 score, AUC/ROC, Confusion Matrix Assessment, etc.
- We test all model output for validity, invalid models are retired and decommissioned.

- Our methods differ across differing business contexts, but are not specific to the above categories. Generally, the method of measuring model performance relative to an objective will differ, according to the use case and model deployed. Methods used include:
  - Sensitivity or True Positive Rate, Positive Predictive Value, F1 score,
  - AUC/ROC, Confusion Matrix Assessment, etc
- Internal data is checked for missing values, outliers, and consistency. Descriptive statistics are analyzed.
- Dataset(s) used must be representative of the intended population and should be fit for the intended purpose. Datasets should include diverse populations for training and testing, where possible. The training population and scoring population should have similar demographic distributions across protected attributes. A data analysis is required to be completed for each line of business by comparing the training dataset attributes to the scoring population attributes. Training datasets must be evaluated for:
  - Integrity and appropriateness
  - Evaluation of data completeness
  - Adverse Bias and fairness
  - Training data profile must be archived.
- We use multiple models to process a data set, and then manually compare the results. Subsequently, we continually test the results for known outliers or issues.
- Enterprise Data Governance policies and testing ensure the accuracy of individual data elements. Enterprise Model Governance & Model lifecycle policies prescribe the testing and ongoing monitoring of AI
- Internal data is tested for completeness and consistency using proprietary statistical methods.
- Internal data is constructed to ensure it meets validity standards.
- Data are reviewed for quality and accuracy before used in production.
- Descriptive Statistics
- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable, and thus serve our customers effectively and efficiently
- The company runs a number of data validation rules to check for data integrity. This includes ensuring that data types are correct, mandatory fields are filled, and values fall within expected ranges. We also perform statistical analysis to assess data distributions and identify outliers using techniques like z-scores, interquartile ranges, or box plots to detect anomalies in the data.
- AI processes are modeled from established manual processes, allowing for parallel operation to validate.
- We analyze the range and consistency over time across full and sub-populations as a way to test internal data.
- We use standard industry approaches
- Modeling data distributions are reviewed by Subject Matter Experts and compared against publicly available data where available.AI Data traits such as bias, missingness, type of distribution, mean and std, AIDistributions are reviewed and matched against expected outcomes.

- Testing methodologies for internal data, external data, and algorithmic outcomes varies depending on the nature of the data and the AI use case for which the data is deployed. For example, testing model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, then use the Hispanic value first, then the race values. The Responsible AI program, working in collaboration with technical teams and privacy/data governance teams, publishes guidance on testing expectation and resources for both predictive AI models and generative AI models. Developers are directed to approach the testing process throughout the AI development lifecycle. For example, summary metadata on the data used to train and test the model should be gathered during the collect and process data phase of development rather than just pulled together after the model has been built.
- Internal and external data are tested for validity through exploratory data analysis (EDA), which involves basic data quality checks to identify errors, inconsistencies, or missing values, as well as assessments of temporal degradation of training data. Data sourced from our strategic data warehouse follows our data governance requirement of establishing data quality testing within 90 days of release for production use. Data is evaluated to assess which data quality dimensions should be tested against and data quality rules are established with corresponding alerts to manage failed tests.
- Automated and manual testing

External Data

- We test all model output for validity, invalid models are retired and decommissioned. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, the method of measuring model performance relative to an objective will differ, according to the use case and model deployed. Methods used include: Sensitivity or True Positive Rate, Positive Predictive Value, F1 score, AUC/ROC, Confusion Matrix Assessment, etc
- Dataset(s) used must be representative of the intended population and should be fit for the intended purpose. Datasets should include diverse populations for training and testing, where possible. The training population and scoring population should have similar demographic distributions across protected attributes. A data analysis is required to be completed for each line of business by comparing the training dataset attributes to the scoring population attributes. Training datasets must be evaluated for:
  - Integrity and appropriateness
  - Evaluation of data completeness
  - Adverse Bias and fairness
  - Training data profile must be archived.
- Enterprise Data Governance policies and testing ensure the accuracy of individual data elements. Enterprise Model Governance & Model lifecycle policies prescribe the testing and ongoing monitoring of AI
- External data is tested for reasonableness.
- External data is confirmed to meet validity standards prior to procurement.

- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable, and thus serve our customers effectively and efficiently
- We assess the validity of external data by researching the data provider's reputation, methodology, and data collection practices. We evaluate external data for completeness, accuracy, consistency, and timeliness using data profiling techniques similar to those applied to internal data. We compare the external data against internal data to understand whether the data are within expected ranges. We also evaluate data over time to observe and understand shifts in data consistency and representativeness.
- AI processes are modeled from established manual processes, allowing for parallel operation to validate.
- Check overlap between internal and external data to ensure that values match.
- We use standard industry approaches
- Methodology is reviewed, and AI Distributions are reviewed by Subject Matter Experts
- Testing methodologies for internal data, external data, and algorithmic outcomes varies depending on the nature of the data and the AI use case for which the data is deployed. For example, testing model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, then use the Hispanic value first, then the race values. The Responsible AI program, working in collaboration with technical teams and privacy/data governance teams, publishes guidance on testing expectation and resources for both predictive AI models and generative AI models. Developers are directed to approach the testing process throughout the AI development lifecycle. For example, summary metadata on the data used to train and test the model should be gathered during the collect and process data phase of development rather than just pulled together after the model has been built.
- Internal and external data are tested for validity through exploratory data analysis (EDA), which involves basic data quality checks to identify errors, inconsistencies, or missing values, as well as assessments of temporal degradation of training data. If external data is brought onto our strategic data warehouse and used in a model it will follow our data governance requirement of establishing data quality testing within 90 days of release for production use. Data is evaluated to assess which data quality dimensions should be tested against and data quality rules are established with corresponding alerts to manage failed tests.
- External data is confirmed to meet validity standards prior to procurement.

Algorithmic Outcomes

- We test all model output for validity, invalid models are retired and decommissioned. Our methods differ across differing business contexts, but are not specific to the above categories. Generally, the method of measuring model performance relative to an objective will differ, according to the use case and model deployed. Methods used include: Sensitivity or True Positive Rate, Positive Predictive Value, F1 score, AUC/ROC, Confusion Matrix Assessment, etc.
- Algorithmic outcomes are statistically analyzed and compared to the data used by the algorithm

- Dataset(s) used must be representative of the intended population and should be fit for the intended purpose. Datasets should include diverse populations for training and testing, where possible. The training population and scoring population should have similar demographic distributions across protected attributes. A data analysis is required to be completed for each line of business by comparing the training dataset attributes to the scoring population attributes. Training datasets must be evaluated for:
  - Integrity and appropriateness
  - Evaluation of data completeness
  - Adverse Bias and fairness
  - Training data profile must be archived.
- Enterprise Data Governance policies and testing ensure the accuracy of individual data elements. Enterprise Model Governance & Model lifecycle policies prescribe the testing and ongoing monitoring of AI
- Model output is tested using traditional ML techniques such as confusion matrix, lift, AUC, etc.
- Our AI Governance process ensures algorithmic outcomes meet accuracy standards. Internally developed algorithms are required to demonstrate adherence to accuracy standards and developers of procured, externally-developed algorithms are required to attest to evaluation of model results for accuracy.
- Confusion Matrix
- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable, and thus serve our customers effectively and efficiently
- We compare the algorithm's predictions to a known ground truth or labeled dataset to establish a baseline for accuracy and validity. We use cross validation techniques like k-fold cross-validation to ensure that the model's performance is consistent across different subsets of the data. We evaluate the algorithm for potential biases and fairness issues. We also conduct detailed analyses of the algorithm's errors to understand the types of cases where it may fail, which helps validate the overall robustness of the algorithm.
- AI processes are modeled from established manual processes, allowing for parallel operation to validate.
- We analyze the range and consistency across full and sub-populations and against historical norms/benchmarks. We further perform periodic assessment of model performance statistics to assess for drift from original development validity statistics. As part of our AI Governance function, we document the intended uses of model outcomes and review them to ensure that uses of algorithmic outcomes are valid (aligned with the modeled outcome and intended use).
- We analyze the range and consistency across full and sub-populations and against historical norms/benchmarks. We further perform periodic assessment of model performance statistics to assess for drift from original development validity statistics. As part of our AI Governance function, we document the intended uses of model outcomes and review them ensure that uses of algorithmic outcomes are valid (aligned with the modeled outcome and intended use).
- We use standard industry approaches

- Distribution of algorithmic outcome are tested to match distribution of target data that it is modeled upon.
- Testing methodologies for internal data, external data, and algorithmic outcomes varies depending on the nature of the data and the AI use case for which the data is deployed. For example, testing model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, then use the Hispanic value first, then the race values. The Responsible AI program, working in collaboration with technical teams and privacy/data governance teams, publishes guidance on testing expectation and resources for both predictive AI models and generative AI models. Developers are directed to approach the testing process throughout the AI development lifecycle. For example, summary metadata on the data used to train and test the model should be gathered during the collect and process data phase of development rather than just pulled together after the model has been built.
- Algorithmic outcomes are tested for validity by monitoring data drift in continuous and categorical features using statistical techniques. Additionally, we measure score and/or prediction drift to detect any changes in model performance over time

Question 9.131

What percentage of your business reflects Generalized Linear Model?

0 to 25%: 58 (92%), More than 25% to 50%: 4 (6%), More than 50% to 75%: 0 (0%), More than 75% to 100%: 1 (2%).

Question 9.132

Indicate by checking the boxes below for the machine-learning techniques that are used in each of the listed functional areas for Group Major Medical - Single Employer - Other Employer.

Table 37: Count of Machine Learning Techniques Used In Functional Areas For Group Major Medical-Single Employer- Other Employer

Machine Learning Technique													
Function	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	Other	Total
Utilization/ Severity/ Quality Management	7	12	4	11	3	0	3	8	6	3	7	8	72
Sales & Marketing	4	8	9	5	3	0	7	8	6	5	8	9	72

Machine Learning Technique													
Function	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	Other	Total
Product Pricing and Plan Design	7	10	3	2	3	0	5	8	4	0	7	9	58
Prior Authorization	4	7	4	4	4	0	3	4	2	2	2	8	45
Risk Management	6	8	4	4	1	0	0	1	3	0	4	8	39
Strategic Operations	0	7	1	5	3	0	0	5	4	0	1	5	31
Fraud Detection	2	3	1	1	3	0	2	0	2	4	2	6	26
Risk Adjustment	1	6	1	3	0	0	2	2	3	0	0	8	26
Data Processing	1	2	2	3	0	0	3	0	0	0	0	8	19
Claims Adjudication	0	4	0	0	3	0	0	2	0	0	0	5	14
Total	32	67	29	38	23	0	25	38	30	14	31	74	402
%	8%	17%	7%	9%	6%	0%	6%	9%	7%	3%	8%	18%	100%

Note: Total column excludes N/As

Key:
1. Deep Learning (DL)
2. Ensemble (ENS)
3. Neural Networks (NN)
4. Regularization (REG)
5. Rule System (RS)
6. Large Language Models (LLM)
7. Bayesian (BAY)
8. Decision Tree (DT)
9. Dimensionality Reduction (DR)
10. Instance-Based (IB)
11. Clustering (CLU)
12. Cox Regression (COX)

Question 9.133

List the Names of AI/ML Model in Use for Each Functional Areas.

Table 38: Names of AI/ML Model in Use for Each Functional Area

Product Pricing and Plan Design	
A combination of third party and proprietary models and datasets.	1
CMS Benefits + Enrollment Growth, MA Plan Life Cycle, Product Recommendation, MA Member Segmentation, , Prospective Risk Score, High Cost Claimant Model, Company New Business Models, Company Renewal Model, Cotiviti Variability Bins	3
Computational Technique, Monte Carlo Simulations. Gradient Boosted Regression Trees, Recurrent Neural Networks	1
DR, CLU	2
Morbidity Model, Trend Model, Gradient Boosting Machine	2
OCR, Hierarchical Clustering	2
N/A	17
None	26

Claims Adjudication	
ACE	3
AI DupCheck, Kairos Prompt Pay	2
AWS Textract, Tree-based classifiers (catboost)	1
CART, Conditional Decision Trees	2
N/A	17

Prior Authorization	
Auto Authorization Model	3
AWS Textract	1
CART, Conditional Decision Trees	2
Commercial AI Auto-Approvals, GPD AI Auto-Approval	2
Decline to share model names, and names would be meaningless	1
Company uses various machine-learning techniques in its AI Solutions.	1
intelliPath AI	1
NLP, LLM	2
N/A	16
None	26
TBD	1

Utilization/Severity/Quality Management	
Bart, Whisper, GPT3.5/4	1
CART, Conditional Decision Trees, Cohere	2

Utilization/Severity/Quality Management	
Chronic ER Model, Cardiovascular Deterioration Risk Model	2
intelliPath AI	1
LLM	2
NLP LLM Gradient Boosting Machine	1
Quality Improvement	2
Sentence-BERT, AWS Textract, Logit, Tree-based classifiers (catboost)	1
SNF Episodic, Readmissions 7 Day, Excess Cost - Forward, Excess Cost - Inpatient, Excess Cost - Post Discharge	3
N/A	14
None	22
TBD	1

Write in: XGBoost, Random Forest, Linear Regression

Fraud Detection	
Post Pay Duplicates & Date Duplicates	2
RGS, BAY	2
N/A	16
None	33

Risk Management	
Breast Cancer Screening Compliance Likelihood, Colorectal Cancer Screening Compliance Likelihood, Cervical Cancer Screening Compliance Likelihood, Annual Wellness Exam Completion Likelihood, Prediabetes, Falls, Hypertension in Pregnancy, Cancer model(s), Well 360 model(s), Excess Cost - Forward, Excess Cost - Inpatient, Excess Cost - Post Discharge, Prospective Risk Score, High Cost Claimant Models, Inpatient Auth Model, Pended Claims Model	3
Cardiac Event Prediction Model	2
CNN, LLM	2
N/A	17
None	31

Risk Adjustment	
*Specific AI Model Used Unknown	1
Advancement of VBC Payment Model Portfolio	2
AWS Textract	1
CART, Conditional Decision Trees, Cohere	2

Risk Adjustment	
Gradient Boosting Regression Model	1
NLP	1
NLP LLM Gradient Boosting Machine	1
Prospective Risk Score, High Cost Claimant Model, Company New Business Model, Company Renewal Model, Cotiviti Variability Bins	3
RGS, BAY	2
Veradigm	1
N/A	15
None	25

Data Processing	
BART, WHISPER	1
Whisper, Bark, GTP3.5/4	1
ENS, LOLM, RGS, BAY	2
See 8.132	4
N/A	18
None	30

Sales & Marketing	
*Specific AI Model Used Unknown	1
BAY	2
Data Ingestion for Online Sales, Dimensionality reduction, Bayesian Modeling, Conditional Decision Trees	3
GPT 4.0	1
Likely-to-Buy ACA OEP, True Prospects, Likely-to-Churn UCD FEDVIP, Likely-to-Buy MA N2M, Late Retiree True Prospects, Likely-to-Buy MA AEP, True Prospects, Likely-to-Respond MA, True Prospects, Likely-to-Churn AHN, Likely-to-Churn ACA, MA Churn Model, Health Archetype Predictions, Living Health Enrollment - Spring, Likely-to-Buy MA, B2B Prospects, Medicaid Churn, Lung Cancer, Colorectal Cancer, Breast Cancer, Cervical Cancer, ED Utilization, Avoidable ED, Orthopedic Care Alignment	3
Member Retention	2
N/A	15
None	21
Random Forest, Chi-Square Automatic Interaction Detection, Principal Component Analysis, K-Means, Hierarchical clustering.	1
See 9.132	3
N/A	15

Sales & Marketing	
None	21

Strategic Operations	
*Specific AI Model Used Unknown	1
Accenture Proprietary Model	3
Adherence to Policy and Procedures	1
Anthropic Claude, Meta Llama	1
Co-Pilot	1
Directory Search	1
ENS, DT	2
GPT-4 turbo, GPT-O1 mini, custom language model	1
Likely-to-Respond to Respond by Email MA Members, HEDIS framework/chart work, AHN No Show, Engagement	3

Question 9.134

Please provide any additional comments related to the use of AI/ML in Group Major Medical - Single Employer - Other Employer.

- In the interest of clarity, the company has no AI/ML in production as defined by this survey. Our business reflects zero use of Generalized Linear Modeling.
- Use of AI is very recent (<3 months), we are piloting services that help predict risk for new groups to aid in underwriting. Creating AI Governance/Principles/Framework is part of the organization's 2025 Strategic Plan.
- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Only utilized for agent call monitoring and translation purposes.
- Our approach is to keep a human in the loop. That means we focus our efforts on using AI to augment human judgment, but not displace it. We use AI to augment the expertise of our employees that can increase productivity, reduce potential errors, and provide employees more time to focus on higher-level tasks.
- Our governance framework reflects our corporate values and is consistent with our Code of Ethics. It provides a lens to evaluate the ethical validity of an AI application and helps meet federal and state regulations, The Association rules, and other corporate policies related to data use.
- The Machine Learning Taxonomy characterizations are made to the best of insurer's knowledge since all solutions are vended solutions at this time.

Sales & Marketing Questions

Question 9.109
Does your company currently use, plan to use, or is exploring the use of AI/ML for online advertising targeted towards consumers?
Yes: 25 (39%), No: 39 (61%).

Question 9.110
For those companies answering 'Y' to Q9.109: What is the current level of AI/ML Deployment?
Research: 10 (40%), Proof of Concept: 4 (16%), Prototype: 0 (0%), Implemented in Production: 11 (44%).

Question 9.111
Does your company currently use, plan to use, or is exploring the use of AI/ML for Identification of Recipients of Mail or Phone Advertising?
Yes: 15 (23%), No: 49 (77%).

Question 9.112
For those companies answering 'Y' to Q9.111: What is the current level of AI/ML Deployment?
Research: 7 (47%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 8 (53%).

Question 9.113
Does your company currently use, plan to use, or is exploring the use of AI/ML to develop products, programs, or services for existing customers?
Yes: 18 (28%), No: 46 (72%).

Question 9.114
For those companies answering 'Y' to Q9.113: What is the current level of AI/ML Deployment?
Research: 11 (61%), Proof of Concept: 0 (0%), Prototype: 1 (6%), Implemented in Production: 6 (33%).

Question 9.115
Does your company currently use, plan to use, or is exploring the use of AI/ML to identify sales opportunities?
Yes: 17 (27%), No: 47 (73%).

Question 9.116
For those companies answering 'Y' to Q9.115: What is the current level of AI/ML Deployment?
Research: 6 (35%), Proof of Concept: 0 (0%), Prototype: 2 (12%), Implemented in Production: 9 (53%).

Question 9.117
Does your company currently use, plan to use, or is exploring the use of AI/ML to structure broker compensation?
Yes: 4 (6%), No: 60 (94%).

Question 9.118
For those companies answering 'Y' to Q9.117: What is the current level of AI/ML Deployment?
Research: 4 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 9.119
Does your company currently use, plan to use, or is exploring the use of AI/ML to identify individual coverage health reimbursement arrangements (ICHRA) sales opportunities?
Yes: 4 (6%), No: 60 (94%).

Question 9.120
For those companies answering 'Y' to Q9.119: What is the current level of AI/ML Deployment?
Research: 1 (25%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 3 (75%).

Question 9.121
Does your company currently use, plan to use, or is exploring the use of AI/ML to identify candidates for self-funding/stop-loss arrangements?
Yes: 16 (25%), No: 48 (75%).

Question 9.122
For those companies answering 'Y' to Q9.121: What is the current level of AI/ML Deployment?
Research: 5 (31%), Proof of Concept: 0 (0%), Prototype: 3 (19%), Implemented in Production: 8 (50%).

Question 9.123
Does your company currently use, plan to use, or is exploring the use of AI/ML for Identification of Potential Customer Groups?
Yes: 26 (41%), No: 38 (59%).

Question 9.124
For those companies answering 'Y' to Q9.123: What is the current level of AI/ML Deployment?
Research: 9 (35%), Proof of Concept: 0 (0%), Prototype: 2 (8%), Implemented in Production: 15 (58%).

Question 9.125
Does your company currently use, plan to use, or is exploring the use of AI/ML for Demand Modeling?
Yes: 19 (30%), No: 45 (70%).

Question 9.126
For those companies answering 'Y' to Q9.125: What is the current level of AI/ML Deployment?
Research: 15 (79%), Proof of Concept: 0 (0%), Prototype: 2 (11%), Implemented in Production: 2 (11%).

Question 9.127
Does your company currently use, plan to use, or is exploring the use of AI/ML for online sales, quoting, or shopping experience?

Yes: 24 (38%), No: 40 (63%).

Question 9.128
For those companies answering 'Y' to Q9.127: What is the current level of AI/ML Deployment?
Research: 9 (38%), Proof of Concept: 4 (17%), Prototype: 0 (0%), Implemented in Production: 11 (46%).

Question 9.129
Does your company currently use, plan to use, or is exploring the use of AI/ML for other sales & marketing-related solutions?
Yes: 15 (23%), No: 49 (77%).

Question 9.130
Please list up to 10 other sales & marketing related solutions where you are using or may potentially use AI/ML and indicate their highest level of deployment.

Table 39: Names of Sales & Marketing-Related Functions Solutions In Use or May Potentially Use With Level of Deployment

Sales & Marketing-Related Functions Solution	Research	Proof of Concept	Prototype	Implemented in Production
Marketing content and copy	0	0	0	0
Image Creation via Adobe	0	1	0	0
Social Listening	0	0	0	0
Customer service	0	0	1	0
RFP Responses	0	0	0	1
content generation and optimization	0	0	0	0
GenerativeAI use in content development	0	3	0	0
We are exploring the use of AI to help us respond to RFPs, using our historical RFP responses as guidelines	0	0	0	0
Circle.so	0	0	0	2
Geo-Fencing	0	0	0	0
Digital Marketing	0	0	0	1
Content automation tool in digital content management	0	0	0	4
A/B Testing	0	0	0	2
Social Advertising	0	0	0	0
Creative Design	0	0	0	1
Market research leveraging external partner's social listening / AI capabilities to surface insights	0	0	0	1
Audio Communications	0	0	0	1
Member Clinical Outreach	0	0	0	1

Strategic Operations Questions

Question 9.7
Does your company own provider groups?
Yes: 8 (13%), No: 56 (88%).

Question 9.8
If answered yes to Question 9.7, for the areas in your business where AI/ML is in use, does that AI/ML process use data from these providers?
Yes: 2 (25%), No: 6 (75%).

Question 9.9
If answered yes to Question 9.8, how is it being used?

- To identify high risk members for population health interventions; Factors include: members with high clinical impact, risk adjustment coding opportunities, or member that haven't had an annual wellness checkup. Change will be made in 2025.
- Company provides: Conversion of physical documents into digitized structured data, IDs blocks of text that are semantically relation and separation from semantically different blocks, Extraction of information from unstructured text into predefined categories, Identification and return of information from valuable resources, Looks for patterns between clinician reviewed historical authorizations and patient attributes to determine the probably that medical necessity has been met.

Question 9.10
For those companies answering 'Y' to Q9.7: What is the current level of AI/ML Deployment?
Research: 2 (25%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 6 (75%).

Question 9.11
Is your company owned by a provider group?
Yes: 9 (14%), No: 55 (86%).

Question 9.12
If yes, for the areas in your business where AI/ML is in use, does that AI process use data from these providers?
Yes: 1 (11%), No: 8 (89%).

Question 9.13
For those companies answering 'Y' to Q9.11: If so, how is it being used?

- Currently being used to predict and compare pricing trends.

- Yes, the EHR record is the source and destination for alerting providers to member health conditions
- We are using a combination of third party datasets, models, and reporting for statistical analysis of prospective target markets.
- No, insurer does not use data from these providers with AI/ML processes for product pricing and plan design.
- AI, data and tooling is not shared between organizations.

Question 9.14
For those companies answering 'Y' to Q9.11: What is the current level of AI/ML Deployment?
Research: 5 (56%), Proof of Concept: 1 (11%), Prototype: 0 (0%), Implemented in Production: 3 (33%).

Question 9.51
Does your company currently use, plan to use, or is exploring the use of AI/ML in any way in your provider contracting process?
Yes: 12 (19%), No: 52 (81%).

Question 9.52
If answered yes to Question 9.51, please explain the types of contracts and how they are used (e.g. value-based, fee for service, or defined contributions).

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- We are currently exploring the use of AI to support document intelligence for contracts.
- In the future, yes, potentially for authoring the Contract and for a Provider Relations CRM (Customer Relationship Management) tool.
- In exploratory phases of this capability.
- Augmented provider contract search via LLM.

Question 9.53
For those companies answering 'Y' to Q9.51: What is the current level of AI/ML Deployment?
Research: 12 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 9.54
Does your company require, plan to require, or is exploring the requirement of any of your in-network providers to utilize a system, service, or software that uses AI/ML?
Yes: 15 (23%), No: 49 (77%).

Question 9.55
If answered yes to Question 9.54, what system/service/software is required and for what purpose?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Care Radius CareProminence:
    - Automated Workflows: Streamlines processes to reduce manual effort and administrative costs.
    - Compliance Adherence: Ensures continual compliance with ever-changing regulations.
    - Quality Improvement: Enhances quality scores and optimizes healthcare experiences for members.
    - Comprehensive Member View: Provides a holistic view of each member to drive optimal health outcomes.
    - These features help healthcare providers and payers deliver better care while maintaining regulatory compliance and operational efficiency.
- A provider data management tool for provider roster management.
- We use EviCore Intellipath to do our Prior Authorizations. Our providers submit their PA requests through EviCore.
- Prior auth submissions.
- Researching Contract Management and Provider Relation Customer Relationship Management Systems that have AI capabilities.

Question 9.56
For those companies answering 'Y' to Q9.54: What is the current level of AI/ML Deployment?
Research: 7 (47%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 8 (53%).

Question 9.57
Does your company require, plan to require, or is exploring the requirement of any of your out-of-network providers to utilize a system, service, or software that uses AI/ML?
Yes: 8 (13%), No: 56 (88%).

Question 9.58
If answered yes to Question 9.57, what system/service/software is required and for what purpose?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Care Radius CareProminence:
    - Automated Workflows: Streamlines processes to reduce manual effort and administrative costs.
    - Compliance Adherence: Ensures continual compliance with ever-changing regulations.
    - Quality Improvement: Enhances quality scores and optimizes healthcare experiences for members.
    - Comprehensive Member View: Provides a holistic view of each member to drive optimal health outcomes.

    - These features help healthcare providers and payers deliver better care while maintaining regulatory compliance and operational efficiency.
- Researching Contract Management and Provider Relation Customer Relationship Management Systems that have AI capabilities.

Question 9.59

For those companies answering 'Y' to Q9.57: What is the current level of AI/ML Deployment?
Research: 8 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

STUDENT PLANS

Product Pricing and Plan Design Questions

Question 10.2

1. Does your company currently use, plan to use, or is exploring the use of AI/ML to calculate rates or any component of a rate? If yes, which of the following rating factors are developed using AI?

Table 40: Company Use, Plan, or Exploring of AI/ML to Calculate Rates or Any Component of a Rate

Rating Variable	Yes	No
Geography	1	16
Tobacco - do you screen for tobacco usage and price accordingly?	1	16
Age	1	16
Risk Adjustment Analysis	1	16
Social Determinants of Health	1	16
Claims History	7	10
PBM Rebates	1	16
Trend - utilization, cost, and severity	8	9
Benefit relativity - Actuarial Value, cost-sharing, etc.	1	16
Network factors	1	16
Morbidity	1	16
Projected enrollment	1	16
State-sponsored subsidized programs	1	16
Other: please list, i.e. biometrics, wearables, etc.	1	16

For those companies answering 'Y' to question 1:

2. What is the current level of AI/ML Deployment?

Table 41: Current Level of AI/ML Deployment

Rating Variable	Research	Proof of Concept	Prototype	Implemented in Production
Geography	1	0	0	0
Tobacco - do you screen for tobacco usage and price accordingly?	1	0	0	0
Age	1	0	0	0
Risk Adjustment Analysis	1	0	0	0
Social Determinants of Health	1	0	0	0
Claims History	1	0	0	0

Rating Variable	Research	Proof of Concept	Prototype	Implemented in Production
PBM Rebates	1	0	0	0
Trend - utilization, cost, and severity	1	1	0	0
Benefit relativity - Actuarial Value, cost-sharing, etc.	1	0	0	0
Network factors	1	0	0	0
Morbidity	1	0	0	0
Projected enrollment	1	0	0	0
State-sponsored subsidized programs	1	0	0	0
Other: please list, i.e. biometrics, wearables, etc.	1	0	0	0
Total	14	1	0	0

Question 10.3
List (i.e. biometrics, wearables, etc.) for "Other" category:

The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.

Question 10.4
Does your company currently use, plan to use, or is exploring the use of AI/ML to design or develop plans for specific cohorts, member populations, conditions etc.?
Yes: 2 (12%), No: 15 (88%).

Question 10.5
If answered yes to Question 10.4, please explain. For example, do you use AI/ML to design products that consider changes to copay, deductibles, benefits, wellness features, services, or programs for a specific population of consumers?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- In the context of care management program outreach, AI/ML is being used to identify members with possible care gaps who would benefit from affordable care.

Question 10.6
For those companies answering 'Y' to Q10.4:
What is the current level of AI/ML Deployment?

Research: 1 (50%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 1 (50%).

Claims Adjudication Questions

Question 10.18
Does your company currently use, plan to use, or is exploring the use of AI/ML to analyze any of the following coding areas?

Table 42: Company Use, Plan, or Exploring of AI/ML to Analyze Following Coding Areas

Coding Area	Yes	No
Rx Inpatient	8	9
Rx Outpatient	9	8
Behavioral Health Inpatient	8	9
Behavioral Health Outpatient	8	9
Medical Inpatient	9	8
Medical Outpatient	10	7

Question 10.19
For those companies answering 'Y' to Q10.18: What is the current level of AI/ML Deployment?
Research: 7 (13%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 45 (87%).

Question 10.20
Does your company currently use, plan to use, or is exploring the use of AI/ML for benefit eligibility determination?
Yes: 8 (47%), No: 9 (53%).

Question 10.21
For those companies answering 'Y' to Q10.20: What is the current level of AI/ML Deployment?
Research: 1 (13%), Proof of Concept: 6 (75%), Prototype: 0 (0%), Implemented in Production: 1 (13%).

Question 10.22
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect first-party liability (potential for recovering compensation from an accident/injury)?
Yes: 4 (24%), No: 13 (76%).

Question 10.23
For those companies answering 'Y' to Q10.22: What is the current level of AI/ML Deployment?
Research: 1 (25%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 3 (75%).

Question 10.24
Does your company or a contracted vendor currently use, plan to use, or is exploring the use of AI/ML to negotiate out of network claims with providers?
Yes: 2 (12%), No: 15 (88%).

Question 10.25
For those companies answering 'Y' to Q10.24: If yes, is human intervention required?
Yes: 2 (100%), No: 0 (0%).

Question 10.26
For those companies answering 'Y' to Q10.25: If yes, does the reimbursement amount change based on the negotiation results?
Yes: 2 (100%), No: 0 (0%).

Question 10.27
Does your company currently use, plan to use, or is exploring the use of AI/ML for any other claims adjudication functions?
Yes: 10 (59%), No: 7 (41%).

Question 10.28
If answered yes to Question 10.27, please explain.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- AI driven claims automation, insights, and recommendations for claims approval, resolving issues (edits), assess high dollar claim risk, and optimize routing for manual examiners when needed.
- Duplicate providers, duplicate billing, claims suspension.
- The company is currently evaluating vendors that have AI claims adjudication capabilities.
- Automation of claims processing, auto approval of prior authorization.

Prior Authorization Questions

Question 10.29
Does your company currently use, plan to use, or is exploring the use of AI/ML to determine whether prior authorization is required?
Yes: 6 (35%), No: 11 (65%).

Question 10.30
For those companies answering 'Y' to Q10.29: What is the current level of AI/ML Deployment?
Research: 4 (67%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 2 (33%).

Question 10.31

Does your company currently use, plan to use, or is exploring the use of AI/ML to review prior authorizations for approval?

Yes: 14 (82%), No: 3 (18%).

Question 10.32

For those companies answering 'Y' to Q10.31: What is the current level of AI/ML Deployment?

Research: 4 (29%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 10 (71%).

Question 10.33

If answered yes to Question 10.31, please check all that apply.

Table 43: Company Use, Plan, or Exploring Of AI/ML to Review Prior Authorizations for Approval

Coding Area	Yes	No
Rx Inpatient	3	11
Rx Outpatient	4	10
Behavioral Health Inpatient	10	4
Behavioral Health Outpatient	9	5
Medical Inpatient	12	2
Medical Outpatient	12	2

Question 10.34

Does your company currently use, plan to use, or is exploring the use of AI/ML to review prior authorizations for denial?

Yes: 2 (12%), No: 15 (88%).

Question 10.35

For those companies answering 'Y' to Q10.34: What is the current level of AI/ML Deployment?

Research: 1 (50%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 1 (50%).

Question 10.36

If answered yes to Question 10.34, please check all that apply.

Table 44: Company Use, Plan, or Exploring Of AI/ML to Review Prior Authorizations for Denial

Coding Area	Yes	No
Rx Inpatient	2	0
Rx Outpatient	2	0
Behavioral Health Inpatient	2	0
Behavioral Health Outpatient	2	0
Medical Inpatient	2	0

Coding Area	Yes	No
Medical Outpatient	2	0

Question 10.37
Does your company currently use, plan to use, or is exploring the use of AI/ML for any other prior authorization functions?
Yes: 4 (24%), No: 13 (76%).

Question 10.38
For those companies answering 'Y' to Q10.37: If yes, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Clinical record review.
- The intent of this model was to automatically approve the auth or send it to be normally reviewed by a human and NOT to deny authorizations.
- Clinical Decision Support Tool may be used to extract and display information from scanned clinical documents for a clinician to review a case in a more efficient manner. Clinicians are still required to review and edit the AI outputs.

Question 10.39
For those companies answering 'Y' to Q10.37: What is the current level of AI/ML Deployment?
Research: 2 (50%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 2 (50%).

Utilization/Severity/Quality Management Questions

Question 10.15
Does your company currently use, plan to use, or is exploring the use of AI/ML to determine if step therapy protocols have been adhered to?
Yes: 2 (12%), No: 15 (88%).

Question 10.16
For those companies answering 'Y' to Q10.15: What is the current level of AI/ML Deployment?
Research: 2 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.17
If answered yes to Question 10.15, provide details to include how AI is used to monitor adherence by the health plan, provider, and/or consumer.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- The company is currently evaluating AI capabilities in this space and does not have a specific timeline to move beyond the Research stage.

Question 10.40

Does your company currently use, plan to use, or is exploring the use of AI/ML in developing or administering disease management programs?

Yes: 9 (53%), No: 8 (47%).

Question 10.41

For those companies answering 'Y' to Q10.40: What is the current level of AI/ML Deployment?

Research: 1 (11%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 8 (89%).

Question 10.42

Does your company currently use, plan to use, or is exploring the use of AI/ML in your utilization management practices?

Yes: 12 (71%), No: 5 (29%).

Question 10.43

If answered yes to Question 10.42, please check all that apply.

Table 45: Company Use, Plan, Or Exploring Of AI/ML In Utilization Management Practices

Utilization Management Practice	Yes	No
Activities for improving health outcomes	10	2
Activities to prevent hospital readmissions	10	2
Activities to improve patient safety	9	3
Activities to reduce medical errors	9	3
Activities for wellness	8	4
Activities for health promotions	9	3
Activities to reduce health disparities	9	3
Activities to reduce healthcare disparities	4	8
Formulary management	2	10
Concurrent review	3	9
Downcoding	8	4
Prepayment review	8	4
Clinical standards review	4	8
Prospective review	6	6
Retrospective review	9	3

Question 10.44
For those companies answering 'Y' to Q10.42: What is the current level of AI/ML Deployment?
Research: 3 (25%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 9 (75%).

Question 10.45
Does your company currently use, plan to use, or is exploring the use of AI/ML to determine which prescription drugs are subject to step therapy?
Yes: 3 (18%), No: 14 (82%).

Question 10.46
For those companies answering 'Y' to Q10.45: What is the current level of AI/ML Deployment?
Research: 3 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.47
Does your company currently use, plan to use, or is exploring the use of AI/ML to design or develop step therapy requirements?
Yes: 1 (6%), No: 16 (94%).

Question 10.48
For those companies answering 'Y' to Q10.47: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.49
Does your company currently use, plan to use, or is exploring the use of AI/ML to administer step therapy programs?
Yes: 1 (6%), No: 16 (94%).

Question 10.50
For those companies answering 'Y' to Q10.49: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.60
Does your company directly contract, plan to directly contract, or is exploring directly contracting with utilization management vendors (prior authorization, diagnostic tools, prescription assessments, etc.) that use AI/ML?
Yes: 13 (76%), No: 4 (24%).

Question 10.61
If answered yes to Question 10.60, what automated decisions are made by the vendors?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Affiliated vendors provide automated approvals for prior authorizations in certain situations where any regulatory approval to deploy this AI solution has been obtained if required, and where clinical medical guidelines are met.
- Evaluate authorization and make a determination of approval.
- Vended solutions are used to review claims and apply claims edits, as applicable.
- EviCore Intellipath reviews Prior Authorization applicants and decides if the PA is automatically approved or not.
- The company is currently evaluating vendors that have AI capabilities.
- We use a vendor for some of our prior authorization reviews that uses AI to approve select cases that meet certain criteria.
- N/A. The company is currently evaluating AI capabilities in this space and has no immediate timeline to move beyond the Research stage.

Question 10.62
For those companies answering 'Y' to Q10.60: What is the current level of AI/ML Deployment?
Research: 3 (23%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 10 (77%).

Question 10.63
Does your company currently use, plan to use, or is exploring use AI/ML for other utilization/severity/ quality management related functions?
Yes: 3 (18%), No: 14 (82%).

Question 10.64
If answered yes to Question 10.63, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Evaluate authorization and make a determination of approval.
- The company is currently evaluating vendors that have AI capabilities.

Question 10.65
For those companies answering 'Y' to Q10.63: What is the current level of AI/ML Deployment?
Research: 2 (67%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 1 (33%).

Risk Management Questions

Question 10.66
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wearable Devices?

Yes: 3 (18%), No: 14 (82%).

Question 10.67
For those companies answering 'Y' to Q10.66: What is the current level of AI/ML Deployment?
Research: 3 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.68
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wellness Initiatives?
Yes: 3 (18%), No: 14 (82%).

Question 10.69
For those companies answering 'Y' to Q10.68: What is the current level of AI/ML Deployment?
Research: 1 (33%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 2 (67%).

Question 10.70
Does your company currently use, plan to use, or is exploring the use of AI/ML for Discount Medical Programs?
Yes: 2 (12%), No: 15 (88%).

Question 10.71
For those companies answering 'Y' to Q10.70: What is the current level of AI/ML Deployment?
Research: 1 (50%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 1 (50%).

Question 10.72
Does your company currently use, plan to use, or is exploring the use of AI/ML for Technology to Detect Smoking?
Yes: 1 (6%), No: 16 (94%).

Question 10.73
For those companies answering 'Y' to Q10.72: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.74
Does your company currently use, plan to use, or is exploring the use of AI/ML for Disease Detection?
Yes: 3 (18%), No: 14 (82%).

Question 10.75
For those companies answering 'Y' to Q10.74: What is the current level of AI/ML Deployment?
Research: 1 (33%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 2 (67%).

Question 10.76
Does your company currently use, plan to use, or is exploring the use of AI/ML for Other Risk Management Functions?
Yes: 9 (53%), No: 8 (47%).

Question 10.77
If answered yes to Question 10.76, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Predicting the chance that the condition exists and was not documented at a condition category level
- The company currently uses AI for risk modeling.

Question 10.78
For those companies answering 'Y' to Q10.76: What is the current level of AI/ML Deployment?
Research: 1 (11%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 8 (89%).

Risk Adjustment Questions

Question 10.79
Does your company currently use, plan to use, or is exploring the use of AI/ML to inform methodologies around risk adjustment?
Yes: 9 (53%), No: 8 (47%).

Question 10.80
For those companies answering 'Y' to Q10.79: What is the current level of AI/ML Deployment?
Research: 2 (22%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 7 (78%).

Question 10.81
Does your company currently use, plan to use, or is exploring the use of AI/ML to model risk adjustment factors?
Yes: 8 (47%), No: 9 (53%).

Question 10.82
For those companies answering 'Y' to Q10.81: What is the current level of AI/ML Deployment?
Research: 1 (13%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 7 (88%).

Fraud Detection Questions

Question 10.83
Does your company currently use, plan to use, or is exploring the use of AI/ML for auto-decision on non-fraudulent claims (i.e. fast-tracking claim processing of non-fraudulent claims)?
Yes: 9 (53%), No: 8 (47%).

Question 10.84
For those companies answering 'Y' to Q10.83: What is the current level of AI/ML Deployment?
Research: 2 (22%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 7 (78%).

Question 10.85
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect and refer claims for potential fraud?
Yes: 12 (71%), No: 5 (29%).

Question 10.86
For those companies answering 'Y' to Q10.85: What is the current level of AI/ML Deployment?
Research: 3 (25%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 9 (75%).

Question 10.87
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect medical provider fraud?
Yes: 12 (71%), No: 5 (29%).

Question 10.88
For those companies answering 'Y' to Q10.87: What is the current level of AI/ML Deployment?
Research: 3 (25%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 9 (75%).

Question 10.89
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect criminal fraud ring activity (stolen provider/member IDs, impersonated providers, inflated treatments common to homecare and DME providers)?
Yes: 2 (12%), No: 15 (88%).

Question 10.90
For those companies answering 'Y' to Q10.89: What is the current level of AI/ML Deployment?
Research: 2 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.91
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect social network fraud (less sophisticated than criminal fraud ring activity, but similar issues)?

Yes: 1 (6%), No: 16 (94%).

Question 10.92
For those companies answering 'Y' to Q10.91: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.93
Does your company currently use, plan to use, or is exploring the use of AI/ML indirectly for facial recognition/behavior models to detect fraud (e.g. through providers, telemedicine, etc.)?
Yes: 0 (0%), No: 17 (100%).

Question 10.94
For those companies answering 'Y' to Q10.93: What is the current level of AI/ML Deployment?
N/A

Question 10.95
Does your company currently use, plan to use, or is exploring the use of AI/ML directly for facial recognition/behavior models to detect fraud?
Yes: 0 (0%), No: 17 (100%).

Question 10.96
For those companies answering 'Y' to Q10.95: What is the current level of AI/ML Deployment? N/A

Question 10.97
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect prescription drug misuse?
Yes: 10 (59%), No: 7 (41%).

Question 10.98
For those companies answering 'Y' to Q10.97: What is the current level of AI/ML Deployment?
Research: 2 (20%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 8 (80%).

Question 10.99
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect fraud other than those mentioned above?
Yes: 2 (12%), No: 15 (88%).

Question 10.100
If answered yes to Question 10.99, please elaborate.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- The company currently uses a vendor to efficiently detect complex potential fraud schemes by leveraging various machine learning modeling techniques through associate interaction and feedback.

Question 10.101
For those companies answering 'Y' to Q10.99: What is the current level of AI/ML Deployment?
Research: 1 (50%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 1 (50%).

Data Processing Questions

Question 10.102
Does your company currently use, plan to use, or is exploring the use of AI/ML to impute race or any other data values?
Yes: 1 (6%), No: 16 (94%).

Question 10.103
If answered yes to Question 10.102, please explain.

The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.

Question 10.104
For those companies answering 'Y' to Q10.102: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.105
How does your company ensure that data used to train your AI/ML model is representative of the population for which it will be used?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- We test and document how the data used for bias testing compares to the target population. For example, the demographic breakdown of the tested data should be like the user base demographic. The data used to train the AI system needs to be like the user population base.
- Random sampling using a percentage method.
- Each AI production Use Case is evaluated and confirmed that the target population for application is consistent with the cohort used for training and evaluation.

- The company ensures the data used to train our AI/ML models is appropriate for the intended purpose through a hands-on and evolving approach. We build our datasets to directly control and review the scope of the data, allowing us to verify which demographics or regions are included or excluded. Before training, we perform data quality checks, such as identifying outliers and reviewing or imputing missing data, to ensure the dataset is clean and reliable as needed in the specific use case. While we have not historically evaluated model performance across specific groups or documented assumptions and biases formally, we recognize the importance of these practices and are actively working toward incorporating them into our processes. These future enhancements will help ensure our models better reflect the diversity of the populations they serve and identify potential disparities in performance.
- The company compares the distribution of data used in the development of AI/ML models to distributions across the book of business. Depending on the use case, if certain classes or groups are under- or overrepresented, we may adjust the sample to create a more balanced dataset.
- We do so by ensuring that AI/ML models are trained on historical data for the same population for which they will be used. Where self-reported data is available, we compare AI/ML results with self-reported data to assess the rate of discrepancy.
- The company seeks to maximize the extent to which the same data pipelines are used for both the training population and the deployment population, and the distribution of the data are directly compared prior to fitting the AI/ML model.

Question 10.106
Does your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for accuracy?

Table 46: Company Testing of Data (Internal, External, Algorithmic Outcomes) Used in Modeling or Resulting from Modeling for Accuracy

Data Type	Yes	No
Internal	12	5
External (i.e., 3rd Party)	11	6
Algorithmic Outcomes	11	6

Question 10.107
If yes to Question 10.106. Explain how your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for validity?

Internal
- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- Agent call monitoring results are reviewed and updated by supervisor/manager prior to delivery.
- Internal data is tested for completeness and consistency using proprietary statistical methods.

- "All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- We review and check all internal data for accuracy. Started with the way we curate and develop the dataset by deciding on the types of filters and structure of the data. Testing for outliers and incomplete data. And ensuring the data is accurate and representative for its use case.
- We have Data Governance protocols that test data for correctness and reliability. We implement validation rules to check for logical consistency and expected formats, verify that data values fall within expected ranges, identify and remove duplicate data, ensure that related fields are consistent, reconcile data from different sources or systems within the organization, and track changes in the data over time.
- Derived internal data is validated for accuracy against raw data using control/QC reports.
- Data accuracy is ensured by assiduous data pipelines and validated procedures

External (i.e., third-party)

- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- Agent call monitoring results are reviewed and updated by supervisor/manager prior to delivery.
- External data is tested for reasonableness.
- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- External data undergo a variety of checks for data completeness and accuracy. Although the specific checks vary by data source, typically company evaluates those data against internal data and benchmarks. We review external dataset for internal consistency, ensuring that similar data points (e.g., categories, labels) are uniformly defined and represented, examine metadata provided with the external dataset (e.g., data collection process, definitions, and limitations). We also collect feedback from users who utilize external data to identify any recurring issues or inaccuracies they have encountered.
- If there is overlap between internal and external data, we can validate that values match. External data is also checked against historical norms.
- Methodology is reviewed, and AI Distributions are reviewed by Subject Matter Experts.

Algorithmic Outcomes

- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase.
- Model output is tested using traditional ML techniques such as confusion matrix, lift, AUC, etc.
- Any model we develop in-house has accuracy measures which are tested and validated across multiple sub-groups in the data and continuous testing is done.

- All AI solutions must be tested for accuracy, reliability, robustness, privacy, interpretability, and adverse bias prior to deployment. Testing results must be documented and retained for audit purposes. It is important to routinely validate and test during the deployment phase
- We split the data into test-train-and validation data sets and validate model outcomes on testing and validation to ensure the model is not overfitting. We use k-fold cross-validation to assess model performance, averaging results to provide a more robust estimate of accuracy. All algorithmic outputs are evaluated for fit across several measures including accuracy, precision, recall, F1, AUC, and MAE and MSE for regression models.
- We do extensive manual and automated validation testing to ensure that our predictions and algorithms are calculating as expected. (e.g. output test records and run calculations in a separate test process, check variability from expectation or benchmarks). When developing models, we validate against holdout and out-of-time samples to ensure that models work similarly on various cuts of the population.
- Model metrics such as Areas Under Curve, Average Precision Recall, True Positive Rate, Positive Predictive Value, and Discounted Cumulative Gain.

Question 10.108

Does your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for validity?

Table 47: Company Testing of Data (Internal, External, Algorithmic Outcomes) Used in Modeling or Resulting from Modeling for Validity

Data Type	Yes	No
Internal	11	6
External	10	7
Algorithmic Outcomes	11	6

Question 10.109

If yes to Question 10.108. Explain how your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for validity?

Internal

- Dataset(s) used must be representative of the intended population and should be fit for the intended purpose. Datasets should include diverse populations for training and testing, where possible. The training population and scoring population should have similar demographic distributions across protected attributes. A data analysis is required to be completed for each line of business by comparing the training dataset attributes to the scoring population attributes. Training datasets must be evaluated for:
    - Integrity and appropriateness
    - Evaluation of data completeness
    - Adverse Bias and fairness

  - Training data profile must be archived.
- We make sure the datasets used for AI/ML modeling are relevant for the use case at hand. We ensure the data is accurate and that the data is consistent.
- We run a number of data validation rules to check for data integrity. This includes ensuring that data types are correct, mandatory fields are filled, and values fall within expected ranges. We also perform statistical analysis to assess data distributions and identify outliers using techniques like z-scores, interquartile ranges, or box plots to detect anomalies in the data.
- We analyze the range and consistency over time across full and sub-populations as a way to test internal data.
- Modeling data distributions are reviewed by Subject Matter Experts and compared against publicly available data where available.AI Data traits such as bias, missingness, type of distribution, mean and std, AI skew are reviewed and matched against expected outcomes.

Question 10.133

What percentage of your business reflects Generalized Linear Model?

0 to 25%: 15 (94%), More than 25% to 50%: 1 (6%), More than 50% to 75%: 0 (0%), More than 75% to 100%: 0 (0%).

Question 10.134

Indicate by checking the boxes below for the machine-learning techniques that are used in each of the listed functional areas for Student.

Table 48: Count of Machine Learning Techniques Used in Functional Areas for Student

	Machine Learning Technique												
Function	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	Other	Total
Prod Pricing & Plan Design	1	3	1	0	1	0	1	1	0	0	1	5	14
Utilization/ Severity/ Quality Management	0	2	1	2	0	0	0	1	1	0	2	5	14
Sales & Marketing	1	2	1	0	1	0	0	1	1	1	1	5	14
Risk Management	1	2	1	0	0	0	0	0	1	0	2	5	12
Fraud Detection	1	0	0	1	1	0	0	0	0	1	0	6	10
Prior Authority	0	1	0	0	1	0	0	1	0	0	0	5	8

Machine Learning Technique													
Function	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	Other	Total
Risk Adjudication	0	2	0	0	0	0	0	0	1	0	0	5	8
Claims Adjudication	0	1	0	0	1	0	0	1	0	0	0	4	7
Data Processing	0	0	0	0	0	0	0	0	0	0	0	4	4
Total	4	13	4	3	5	0	1	5	4	2	6	44	91
%	8%	17%	7%	9%	6%	0%	6%	9%	7%	3%	8%	18%	100%

Note: Total column excludes N/As

Key:
1. Deep Learning (DL)
2. Ensemble (ENS)
3. Neural Networks (NN)
4. Regularization (REG)
5. Rule System (RS)
6. Large Language Models (LLM)
7. Bayesian (BAY)
8. Decision Tree (DT)
9. Dimensionality Reduction (DR)
10. Instance-Based (IB)
11. Clustering (CLU)
12. Cox Regression (COX)

Question 10.135
List the Names of AI/ML Model in Use for Each Functional Areas.

Table 49: Names of AI/ML Model in Use for Each Functional Areas

Product Pricing and Plan Design	
CMS Benefits + Enrollment Growth, MA Plan Life Cycle, Product Recommendation, MA Member Segmentation, , Prospective Risk Score, High Cost Claimant Model, Company New Business Models, Company Renewal Model, Cotiviti Variability Bins	1
Gradient Boosting Regression Model	1
Trend Model, Gradient Boosting Machine	1
NA	1
None	7

Claims Adjudication	
ACE	1
CART, Conditional Decision Trees	1
N/A	2
None	7

Prior Authorization	
Auto Authorization Model	1
CART, Conditional Decision Trees	1
N/A	1
None	7

Write in: We partner with EviCore Intellipath to use AI in our PA process. We have reached out to them to get the exact type of model used in their program and they have not provided us with that information.

Utilization/Severity/Quality Management	
CART, Conditional Decision Trees, Cohere	1
SNF Episodic, Readmissions 7 Day, Excess Cost - Forward, Excess Cost - Inpatient, Excess Cost - Post Discharge	2
N/A	2
None	6

Fraud Detection	
N/A	1
None	8

Write in: We partner with Healthcare Fraud Shield to detect fraud, they use AI and ML algorithms to identify fraud as part of their work. We do not have the exact types of models that they use in their program.

Risk Management	
Breast Cancer Screening Compliance Likelihood, Colorectal Cancer Screening Compliance Likelihood, Cervical Cancer Screening Compliance Likelihood, Annual Wellness Exam Completion Likelihood, Prediabetes, Falls, Hypertension in Pregnancy, Cancer model(s), Well 360 model(s), Excess Cost - Forward, Excess Cost - Inpatient, Excess Cost - Post Discharge, Prospective Risk Score, High Cost Claimant Models, Inpatient Auth Model, Pended Claims Model	1
N/A	2
None	7

Risk Adjustment	
Gradient Boosting Regression Model	1
Prospective Risk Score, High Cost Claimant Model, Company New Business Model, Company Renewal Model, Cotiviti Variability Bins	1
N/A	1
None	8

Data Processing	
N/A	2
None	9

Sales & Marketing	
Likely-to-Buy ACA OEP, True Prospects, Likely-to-Churn UCD FEDVIP, Likely-to-Buy MA N2M, Late Retiree True Prospects, Likely-to-Buy MA AEP, True Prospects, Likely-to-Respond MA, True Prospects, Likely-to-Churn AHN, Likely-to-Churn ACA, MA Churn Model, Health Archetype Predictions, Living Health Enrollment - Spring, Likely-to-Buy MA, B2B Prospects, Medicaid Churn, Lung Cancer, Colorectal Cancer, Breast Cancer, Cervical Cancer, ED Utilization, Avoidable ED, Orthopedic Care Alignment	3
N/A	1
None	7

Write in: We partner with Social Media companies who leverage AI/ML to deliver targeted ad content, and they have a multitude of models that they use

Strategic Operations	
Likely-to-Respond to Respond by Email MA Members, HEDIS framework/chart work, AHN No Show, Engagement	1
Neural Networks (for Payment Integrity involving scanned digitized documents)	1
N/A	2
None	6

Write in: Company uses NN and LLM. The names of the AI/ML models used are proprietary business information.

Question 10.136

Please provide any additional comments related to the use of AI/ML in Student.

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- AI only used for monitoring agent call performance and for language translation.
- ML Taxonomy identified to the best of insurer's ability given that AI/ML uses are vended solutions.
- The only use of AI in the Student Health Plans business is an insurance card scanning solution that uses natural language processing, a form of AI, to read the insurance card of a potential member and collect the relevant information from that card. AI is not used to process any of that information or data.

Sales & Marketing Questions

Question 10.110
Does your company currently use, plan to use, or is exploring the use of AI/ML for online advertising targeted towards consumers?
Yes: 8 (47%), No: 9 (53%).

Question 10.111
For those companies answering 'Y' to Q10.110: What is the current level of AI/ML Deployment?
Research: 4 (50%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 4 (50%).

Question 10.112
Does your company currently use, plan to use, or is exploring the use of AI/ML for Identification of Recipients of Mail or Phone Advertising?
Yes: 5 (29%), No: 12 (71%).

Question 10.113
For those companies answering 'Y' to Q10.112: What is the current level of AI/ML Deployment?
Research: 4 (80%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 1 (20%).

Question 10.114
Does your company currently use, plan to use, or is exploring the use of AI/ML to develop products, programs, or services for existing customers?
Yes: 3 (18%), No: 14 (82%).

Question 10.115
For those companies answering 'Y' to Q10.114: What is the current level of AI/ML Deployment?
Research: 1 (33%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 2 (67%).

Question 10.116

Does your company currently use, plan to use, or is exploring the use of AI/ML to identify sales opportunities?
Yes: 2 (12%), No: 15 (88%).

Question 10.117
For those companies answering 'Y' to Q10.116: What is the current level of AI/ML Deployment?
Research: 1 (50%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 1 (50%).

Question 10.118
Does your company currently use, plan to use, or is exploring the use of AI/ML to structure broker compensation?
Yes: 1 (6%), No: 16 (94%).

Question 10.119
For those companies answering 'Y' to Q10.118: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.120
Does your company currently use, plan to use, or is exploring the use of AI/ML to identify individual coverage health reimbursement arrangements (ICHRA) sales opportunities?
Yes: 2 (12%), No: 15 (88%).

Question 10.121
For those companies answering 'Y' to Q10.120: What is the current level of AI/ML Deployment?
Research: 1 (50%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 1 (50%).

Question 10.122
Does your company currently use, plan to use, or is exploring the use of AI/ML to identify candidates for self-funding/stop-loss arrangements?
Yes: 3 (18%), No: 14 (82%).

Question 10.123
For those companies answering 'Y' to Q10.122: What is the current level of AI/ML Deployment?
Research: 2 (67%), Proof of Concept: 0 (0%), Prototype: 1 (33%), Implemented in Production: 0 (0%).

Question 10.124
Does your company currently use, plan to use, or is exploring the use of AI/ML for Identification of Potential Customer Groups?
Yes: 10 (59%), No: 7 (41%).

Question 10.125

For those companies answering 'Y' to Q10.124: What is the current level of AI/ML Deployment?
Research: 2 (20%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 8 (80%).

Question 10.126
Does your company currently use, plan to use, or is exploring the use of AI/ML for Demand Modeling?
Yes: 4 (24%), No: 13 (76%).

Question 10.127
For those companies answering 'Y' to Q10.126: What is the current level of AI/ML Deployment?
Research: 3 (75%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 1 (25%).

Question 10.128
Does your company currently use, plan to use, or is exploring the use of AI/ML for online sales, quoting, or shopping experience?
Yes: 9 (53%), No: 8 (47%).

Question 10.129
For those companies answering 'Y' to Q10.128: What is the current level of AI/ML Deployment?
Research: 3 (33%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 6 (67%).

Question 10.130
Does your company currently use, plan to use, or is exploring the use of AI/ML for other sales & marketing-related solutions?
Yes: 1 (6%), No: 16 (94%).

Question 10.131
For those companies answering 'Y' to Q10.130: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.132
Please list up to 10 other sales & marketing related solutions where you are using or may potentially use AI/ML and indicate their highest level of deployment. N/A

Strategic Operations Questions

Question 10.7
Does your company own provider groups?
Yes: 0 (0%), No: 17 (100%).

Question 10.8

If yes, for the areas in your business where AI/ML is in use, does that AI/ML process use data from these providers? N/A

Question 10.9
If so, how is it being used? N/A
Question 10.10
For those companies answering 'Y' to Q10.7: What is the current level of AI/ML Deployment? N/A

Question 10.11
Is your company owned by a provider group?
Yes: 1 (6%), No: 16 (94%).

Question 10.12
For those companies answering 'Y' to Q10.11: If yes, for the areas in your business where AI/ML is in use, does that AI process use data from these providers?
Yes: 0 (0%), No: 1 (100%).

Question 10.13
If so, how is it being used? N/A

Question 10.14
For those companies answering 'Y' to Q10.11: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.51
Does your company currently use, plan to use, or is exploring the use of AI/ML in any way in your provider contracting process?
Yes: 1 (6%), No: 16 (94%).

Question 10.52
If yes, please explain the types of contracts and how they are used (e.g. value-based, fee for service, or defined contributions)

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.

Question 10.53
For those companies answering 'Y' to Q10.51: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

Question 10.54

Does your company require, plan to require, or is exploring the requirement of any of your in-network providers to utilize a system, service, or software that uses AI/ML?
Yes: 7 (41%), No: 10 (59%).

Question 10.55
If answered yes to Question 10.54, what system/service/software is required and for what purpose?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- A provider data management tool for provider roster management. EviCore Intellipath - a system used for Prior Authorizations that reviews and automatically approves Prior Authorizations.

Question 10.56
For those companies answering 'Y' to Q10.54: What is the current level of AI/ML Deployment?
Research: 1 (14%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 6 (86%).

Question 10.57
Does your company require, plan to require, or is exploring the requirement of any of your out-of-network providers to utilize a system, service, or software that uses AI/ML?
Yes: 1 (6%), No: 16 (94%).

Question 10.58
If answered yes to Question 10.57, what system/service/software is required and for what purpose?

- The company reviews and updates its strategic goals, imperatives, and projects annually. AI/ML is considered as part of those reviews. The AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.

Question 10.59
For those companies answering 'Y' to Q10.57: What is the current level of AI/ML Deployment?
Research: 1 (100%), Proof of Concept: 0 (0%), Prototype: 0 (0%), Implemented in Production: 0 (0%).

AI TESTING

Questions in this section of the survey were not market-specific; they were asked in the context of all markets a company participates in as a single unit.

Question 11.1:
Does your company test for bias in modeling data?
Yes: 59 (70%), No: 25 (30%).

Question 11.2:
Discuss how you test for bias in modeling data.

- We do not test for bias in the data itself; however, we do test for bias in the algorithmic outcomes
- The company utilizes core diagnostics to monitor and provide assurance of bias management.
- We use our own proprietary methods derived from Google, AWS, and Aequitas to check for adverse bias in training data.
- The company reviews vendors for bias risk management for all purchased products and services. We have an AI Governance Board and Technical Subcommittee. The subcommittee reviews the information for vendors that have any risk of bias. Company utilizes core diagnostics to monitor and provide assurance of bias management.
- Statistical Analysis
- As appropriate based on risk assessment, testing for bias in modeling data is a critical step in ensuring the accuracy of AI and machine learning models. The process involves the following:
- Critical Analysis: Testing for bias in modeling data is essential for ensuring AI/ML model accuracy, starting with a thorough examination of training data to identify potential bias areas.
- Feature Evaluation: Individual features are analyzed to detect imbalances or skewed distributions, which might lead to biased model outcomes.
- Use of Tools: Statistical testing and visualization tools are used to identify discrepancies and anomalies in feature distributions, ensuring early detection and adjustment of biases.
- SME Involvement: Engaging subject matter experts (SMEs) adds domain-specific insights, helping identify and mitigate biases that technical analysis might miss.
- Proactive Approach: This comprehensive strategy, combining technical and expert insights, ensures biases are addressed early, enhancing the robustness of model development.
- The company's multidisciplinary Enterprise Model Governance Board (MEG) provides top-down oversight, guidance and accountability for the development, deployment, and use of organizational Models. Models can be defined as programs or algorithms that rely on training data to recognize patterns and make predictions or recommendations. Key elements of this program include risk management, testing and mitigation, governance, and documentation. We also have an Artificial Intelligence Center of Enablement (AI COE). This cross-functional team is charged with providing thoughtful, strategic oversight to ensure our GenAI solutions are ethical, defensible, and in compliance with health care privacy and security requirements, while

simultaneously empowering the business to quickly incubate and apply AI capability and technologies.

- The MEG process is iterative and has the flexibility to assess emerging issues related to AI and bias, including generative AI. The MEG operates with direction from the enterprise Chief Privacy Officer, Chief Compliance and Risk Management Officer, and General Counsel with subject matter expertise from Global; Digital & Analytics which will evolve to the Enterprise AI Governance Board.
- Tracking model performance by race and ethnicity so we are aware of any bias for different race groups. We also look at descriptive steps to make sure the data set is balanced. We also check precision, recall, F1 score.
- If bias is demonstrated in model output, root cause evaluation includes testing for potential bias in the modeling data.
- We take a holistic view of bias, looking at the process, data, and model.
- Our Bias Evaluation Requirements are outlined in our AI Policy, which requires Program Owners of AI Initiatives to document bias evaluation and conduct equity assessments. We ask our teams to define appropriate fairness criteria specific to each AI project.
- For our internally built solutions, we have a formal Equity Audit Process that analyzes existing disparities in the process or outcome measures that models aim to predict. Our teams perform equity audit analysis comparing model performance across different patient and member subgroups and demographic characteristics.
- We establish Equity Key Performance Indicators (KPIs) for ongoing monitoring when we identify bias risk. This process includes identifying key stakeholders and analyzing current disparities related to the AI use case.
- For vendor solutions, we hold third-party vendors accountable for assessing and mitigating bias in their AI solutions. Our vendors must provide documentation on how they address potential biases, and our contracts may include provisions for bias detection, regular model updates, and monitoring.
- Internally built solutions: We have a formal Equity Audit Process for internally built solutions. Existing disparities in the process or outcome measures our model aims to predict are analyzed. We perform an equity audit analysis comparing model performance across different patient and member subgroups and demographic characteristics.
- Equity Key Performance Indicators (KPIs) are established for ongoing monitoring when bias risk is identified. The process includes identifying key stakeholders and analyzing current disparities related to the AI use case,
- Vendor Accountability: Third-party vendors are held accountable for assessing and mitigating bias in their AI solutions. Vendors must provide documentation on how they address potential biases. Contracts may include provisions for bias detection, regular model updates, and monitoring.
- We use industry standard approach to test for bias.
- The company incorporates a wide number of tests and evaluations including conducting exploratory data analysis (EDA) examining the distribution of sensitive attributes and comparing the distributions to population statistics to identify over/underrepresentation and examine correlations between sensitive attributes and the target variable. In the feature engineering

phase, we examine if proxy variables might inadvertently encode protected characteristics and consider the potential impact of derived features on different groups.

- Ensuring training is performed with complete customer population data and human monitoring for expected output. We explore demographic and feature distributions in our dataset.
- We test for bias in our own AI applications that we build/manage. Note: The primary questions and answers on this survey relate back to 3rd party produced and managed AI models.
- For testing bias on 1st party apps and data:
    - Define Bias Criteria
    - Ensure Representative Data
    - Evaluate Model Performance across segments
    - Microsoft Fair Learn
- Representative sampling to perform general testing and validation.
- To mitigate the risk of bias in algorithm target data, we have processes across our company to identify and mitigate potential bias in AI systems and use cases, including Obermeyer-style assessments where appropriate.
- We evaluate the representativeness of data used to train and test a model and determine if there are disparities in data quality or missingness across sociodemographic subgroups.
- Rate of missing data by protected class, distribution of input data by protected class, and distribution of target data by protected class.
- Each development team is expected to source appropriately representative, broad, and diverse data sets to ensure that the training and testing data is representative of the population on which the model would be deployed. For example, a disease prediction system will need to train and test using a wide variety of patient data that represents different races, genders, and age. Voice bots should test with real voices. Teams are expected to use self-reported forms of this data wherever possible and should also consider if there is a standard dataset for the population of interest for their AI solution. The team is also expected to consult with relevant data privacy contacts and analytics leadership to confirm the appropriate data to use.
- We evaluate the representativeness of data used to train and test a model and determine if there are disparities in data quality or missingness across sociodemographic subgroups
- We test for bias in modeling data by performing data quality testing, performing model training and retraining, and making sure to have human oversight and review for models that represent adequate risk.
- All use cases must go through the Responsible AI intake process and any risks identified must be mitigated before the use case is approved. All data used to train our models are profiled. Then, we use a randomized representative training data set to ensure we are not introducing bias.
- Our AI governance is developing. Currently, we test on a case-by-case basis and we manually examine whether outcomes are as expected and review these outcomes for bias via a governance committee.
- We utilize various techniques like feature importance analysis, data distributions, parity analysis, correlation analysis and deriving fairness metrics during development and statistical exploratory data analysis in general.

- We have very limited use of AI and ML in our core business where we do we maintain the skills in house to test for and mitigate bias. We follow and utilize industry best practices, such as statistical parity, equality of opportunity, and disparate impact analysis, to identify and mitigate potential biases.

Question 11.3:
Does your company test for bias in algorithmic outcomes?
Yes: 63 (75%), No: 21 (25%).

Question 11.4:
Discuss how you test for bias in algorithmic outcomes.

- We are only in development of internal models and test there. For example, in our ML models that stratify prospective risk of a member experiencing an adverse health outcome (e.g., hospitalization or emergency department) we employ a post-hoc out-of-time validation process and analyze True Positives, False Positives, False Negatives, True Negatives by protected class characteristics of age, race, and gender. These reports show if the observed errors are consistent across characteristics such as age, race, and gender, by comparing strata of prospective risk generated from the algorithm to observed outcomes in the respective post-period once enough time has elapsed.
- Test for transcription and summarization accuracy influenced by dialect or colloquial speech.
- We use our own proprietary methods derived from Google, AWS, and Aequitas to check for adverse bias in validation data.
- We test for bias in a variety of ways. One preferred technique measures key outcome variables across population and demographic cohorts to test whether parameters our model outputs differ systematically along these lines. Company also is using and planning to use vended components and product/services to support our AI initiatives. We will vet third party bias testing and metrics per Office of Management and Budget guidance.
- Statistical analysis is performed on protected classes using descriptive statistics, confusion matrices, model performance measures, prevalence, equalized odds and disparate impact analysis
- Our Model Governance Board provides top-down oversight, guidance and accountability for the development, deployment, and use of organizational Models. Models can be defined as programs or algorithms that rely on training data to recognize patterns and make predictions or recommendations. Key elements of this program include risk management, testing and mitigation, governance, and documentation. We also have an Artificial Intelligence Center of Enablement (AI COE). This cross-functional team is charged with providing thoughtful, strategic oversight to ensure our GenAI solutions are ethical, defensible, and in compliance with health care privacy and security requirements, while simultaneously empowering the business to quickly incubate and apply AI capability and technologies. The MEG process is iterative and has the flexibility to assess emerging issues related to AI and bias, including generative AI. The MEG operates with direction from the enterprise Chief Privacy Officer, Chief Compliance and Risk

Management Officer, and General Counsel with subject matter expertise from Global; Digital & Analytics which will evolve to the Enterprise AI Governance Board.

- We test for bias in algorithmic outcomes by using standardized fairness analysis, bias assessment via classification or regression models, and enterprise-wide bias metric/KPI tracking.
- Tracking model performance by race and ethnicity so we are aware of any bias for different race groups. We also look at descriptive steps to make sure the data set is balanced. We also check precision, recall, F1 score.
- Bias evaluations are conducted on all AI models that are currently deployed and is a necessary step before deployment is approved by the company AI Governance process. Appropriate bias evaluation methodologies are implemented for models that predict outcomes at both the member and provider levels. Bias evaluations typically include an analysis of race, gender, age, geography, and utilization groups and teams measure bias with a fairness metric. Both bias areas and fairness metric are determined by the Responsible AI Committee.
- We take a holistic view of bias, looking at the process, data, and model. Bias Evaluation Requirements: We have a company AI Policy that requires Program Owners of AI Initiatives to document bias evaluation and conduct equity assessments. They must define appropriate fairness criteria specific to each AI project. Internally built solutions: We have a formal Equity Audit Process for internally built solutions. Existing disparities in the process or outcome measures our model aims to predict are analyzed. We perform an equity audit analysis comparing model performance across different patient and member subgroups and demographic characteristics. Equity Key Performance Indicators (KPIs) are established for ongoing monitoring when bias risk is identified. The process includes identifying key stakeholders and analyzing current disparities related to the AI use case, Vendor Accountability: Third-party vendors are held accountable for assessing and mitigating bias in their AI solutions. Vendors must provide documentation on how they address potential biases. Contracts may include provisions for bias detection, regular model updates, and monitoring.
- We take a holistic view of bias, looking at the process, data, and model.
- Bias Evaluation Requirements: We have a company AI Policy that requires Program Owners of AI Initiatives to document bias evaluation and conduct equity assessments. They must define appropriate fairness criteria specific to each AI project.
- Internally built solutions: We have a formal Equity Audit Process for internally built solutions. Existing disparities in the process or outcome measures our model aims to predict are analyzed. We perform an equity audit analysis comparing model performance across patient and member subgroups and demographic characteristics.
- Equity Key Performance Indicators (KPIs) are established for ongoing monitoring when bias risk is identified. The process includes identifying key stakeholders and analyzing current disparities related to the AI use case, Vendor Accountability: Third-party vendors are held accountable for assessing and mitigating bias in their AI solutions. Vendors must provide documentation on how they address potential biases. Contracts may include provisions for bias detection, regular model updates, and monitoring.
- We utilize industry standard approach to test for bias in algorithmic outcomes

- We test for bias in algorithmic outcomes by using standardized fairness analysis, bias assessment via classification or regression models, and enterprise-wide bias metric/KPI tracking.
- We leverages various products that allow developers to assess which groups might be negatively impacted by a model and compare multiple models in terms of various fairness and accuracy metrics. We have augmented these tools with internally developed bias checks, metrics, and visualizations.
- We test for bias in our own AI applications that we build/manage. Note: The primary questions and answers on this survey relate back to 3rd party produced and managed AI models.
- To do so in the case of algorithmic outcomes, we rely on Microsoft FairLearn and now AI Foundry"
- Representative sampling to perform general testing and validation
- In-scope AI models are tested for bias when they're initially created, when they're significantly changed and on a regular basis. We test for bias consistent with industry best practices, by, among other things, mapping outputs to relevant demographic characteristics and comparing group-level metrics to standard industry criteria.
- We evaluate performance (e.g., sensitivity, specificity, PPV, NPV, AUC) by protected characteristics (e.g., age, race and ethnicity, sex). The results are then reviewed by relevant stakeholders to determine appropriate bias mitigation steps.
- Parity prior to modeling, Equal Outcomes, Equal Performance and Equal Allocation after modeling
- Predictive models are tested for whether prediction accuracy varies when the population is segmented by Age, Sex, Race, and Income.
- Testing model performance per race/ethnicity is performed at the Office and Management and Budget (OMB) minimum categories. Today, those categories are: African American or Black (B), American Indian or Alaska Native (AIAN), Asian (A), Hispanic (H), Native Hawaii or Pacific Islander (NHPI), and White (W). When race and ethnicity are reported separately, teams are expected to use the Hispanic value first, then the race values. For example, Company does not report Caucasian and White as separate groups. The OMB standard added Middle Eastern or North African (MENA) to the Standards for Maintaining, Collecting, and presenting Federal Data on Race and Ethnicity in 2024. Teams are expected to include a MENA label when that data is available. The data provenance for most company data sources is incomplete, so it is unclear when sex or gender refers to sex at birth or may refer to gender identity. Company does not yet have enough data on gender identity to report based on that attribute alone. Age requires categorization into decades of age. Human resources use cases and/or testing using contract worker or employee data uses under 40 versus 40+ age groups. Other use cases follow the common CDC adult age groups 2: 18-24, 25-35, 35-44, 45-54, 55-64, 65-74, 75-84, 85+. Juvenile reporting will be case specific: a) toddlers: 2-3 years old; b) preschoolers: 3-5 years old; c) middle childhood: 6-11 years old; d) young teens: 12-14 years old; e) adolescence: 15-17 years old. Teams developing models using text or chat are expected to test for English language proficiency. If self-reported language data is not available, then the guidelines in Evaluating Bias in AI/ML Use Cases Based on English Language Proficiency are followed.
- To test for bias in algorithmic outcomes, we analyze how different demographic groups are affected. By comparing results and controlling for other factors, we can identify potential

disparities and ensure that our algorithms are fair and unbiased. This involves looking for significant differences in outcomes between groups and investigating any issues that arise.

- All use cases must go through the Responsible AI intake process and any risks identified must be mitigated before the use case is approved. We use human in the loop principles and hyperlinks to the information from which the response was derived.
- We are building systemic tests for bias in algorithmic outcomes.
- Bias evaluations are conducted on all AI models that are currently deployed and is a necessary step before deployment is approved by the Company AI Governance process. Appropriate bias evaluation methodologies are implemented for models that predict outcomes at both the member and provider levels. Bias evaluations typically include an analysis of race, gender, age, geography, and utilization groups and teams measure bias with a fairness metric. Both bias areas and fairness metric are determined by the Responsible AI Committee.
- We prioritize fairness in our model development process. We begin by analyzing training data for representativeness. Then, we evaluate model performance across different demographic groups using metrics like disparate impact, equalized odds, and demographic parity, comparing outcomes to identify any disproportionate impact on specific groups. This analysis combines statistical tests with careful consideration of the context and potential impacts of the algorithm. Additionally, we assess potential biases that may not be numerically identifiable through various means, including consultation with subject matter experts and stakeholders, to ensure models predict appropriate outcomes and are designed for their intended use.
- We use industry standard approach to test for bias in algorithmic outcomes.
- We have very limited use of AI and ML in our core business where we do we maintain the skills in house to test for and mitigate bias. We follow and utilize industry best practices, such as statistical parity, equality of opportunity, and disparate impact analysis, to identify and mitigate potential biases.

Question 11.5:
Does your company test for model drift?
Yes: 64 (76%), No: 20 (24%).

Question 11.6:
How do you ensure your model has not drifted over time? Describe the methodologies you apply to track model drift.

- We are only in development of internal models and test there. We employ a Continuous Integration , Continuous Deployment and Delivery (CI/CD) framework for our ML solutions which are retrained/retuned on regular intervals. For the enterprise data incorporated in our ML solutions, data is refreshed (ETL monthly, weekly, or daily depending on the source) into our enterprise data lake where it is curated and cataloged prior to model consumption. For data drift, we compare the raw and scaled modeling data periodically to assess that model inputs are consistent with that of prior models. For model drift, we log model performance metrics by

percentile of risk/score for the applicable data sets (train, validation, and test) on each model run, including, but not limited to: precision, recall, specificity, sensitivity, F1 and weighted F1 scores.

- We use monitoring metrics, alerts, and dashboards in place to track model drift. Our ops teams and leaders are responsible for performance measurement and tracking of production models. When results vary over time, teams are alerted.
- We monitor for any significant differences between data being scored and the data that was used to train and validate the model. Training and validation data is securely saved for this purpose, and the monitoring process is automated.
- Model outputs are stored and periodic model performance reports are run to monitor the results over time
- We have capabilities in place that can track prediction distribution over time with predefined acceptable thresholds to detect and notify model owners when predictions deviate or fall from the acceptable range.
- Model monitoring process governed by the Enterprise Model Governance Board (MEG) and the Model Lifecycle Process (MLP) prescribe the ongoing monitoring for drift as well as annual model recertification for high-risk models.
- Track whether that the training used have statistic differences compared to the new dataset. We check model drift using the training model.
- Company response:
    - Data and Model Monitoring: Project teams are required to conduct regular monitoring of both data and model performance. This involves tracking data drift, which refers to changes in the input data distribution over time. Monitoring helps identify when the model's assumptions about the data no longer hold true, which can lead to decreased performance.
    - Model Interpretation: Company values help in understanding the contribution of each feature to the model's predictions, which can be crucial for identifying changes in feature importance that might indicate drift.
    - Bias and Fairness Evaluation: Regular evaluations for bias and fairness are conducted, helping to ensure that the model remains fair and unbiased over time, even as data distributions change.
    - Generalizability: The AI Governance process requires discussions on how well the model's patterns apply to unseen data. This involves testing the model's robustness to small perturbations in the data, which can help detect drift by revealing sensitivity to changes.
    - Impact Review: An ""impact review"" is required to assess the model's effectiveness in solving the intended problem.
    - Production Considerations: Considerations for deploying the model in a production environment include setting up systems for ongoing monitoring and maintenance to quickly detect and address drift."
- We have capabilities in place that can track prediction distribution over time with predefined acceptable thresholds to detect and notify model owners when predictions deviate or fall from the acceptable range.

- We have a comprehensive policy and process to monitoring model drift that includes the following:
    - Performance Monitoring Infrastructure:
        - We require Program Owners to implement operational monitoring processes for each deployed AI system.
        - We utilize monitoring tools and methodologies integrated with our electronic health record to track performance.
        - Our data pipeline monitoring detects data quality issues, corruption, or incompleteness that could impact model performance.
    - Statistical Performance Tracking:
        - We track key model metrics over time to detect gradual changes in performance
        - When a model deviates from its originally validated performance parameters, this triggers an alert
        - Regular reports assess for shifts in the underlying data distributions that could affect model reliability
    - Response Protocols:
        - When a drift threshold is detected, the program owner is notified
        - We conduct impact assessments to determine the scope and severity of any performance changes
        - Based on the assessment, we determine if broad stakeholder notification is needed and develop action plans
    - Accountability Framework:
        - Program Owners are accountable for monitoring their programs
        - Significant deviations must be reported to our AI Executive Steering Committee
        - Changes in model performance are documented and reviewed as part of our governance process.
    - Continuous Validation:
        - Models undergo regular revalidation to ensure they maintain expected performance levels
        - When drift is identified, we assess the need for model retraining or recalibration
        - Performance monitoring results inform ongoing model maintenance and improvement efforts
- We use industry standard approach/built-in tool capabilities to ensure model has not drifted over time.
- We have implemented continuous re-training into our CI/CD/CT pipeline ensuring models are up to date and protecting against model drift. We track model performance by capturing model fit statistics and predictions in a repository and regularly inspect outputs with visualizations, control charts, etc.
- Regularly monitor model performance and retrain as needed.
- We rerun evaluations on a regular cadence when models get updates (either internal or third party). The specific evaluation criteria will depend on the use.

- We test for bias in our own AI applications that we build/manage. Note: The primary questions and answers on this survey relate back to 3rd party produced and managed AI models. To do so in the case of model drift, we:
    - Identify Target variables and outcomes
    - Evaluate Input Content and Labels
    - Weigh against model output
    - Leverage Azure Machine Learn Factory, and now AI Foundry
    - Continuous monitoring using the tools referenced above
- Usage of modeling is very limited and we perform time series analysis to determine any potential drift.
- We test models periodically for drift through statistical measurements, data analysis and comparisons between production and baseline data, and comparisons against acceptable criteria. Performance is tracked at deployment in a registry, and we regularly monitor and track performance in production.
- We periodically evaluate model performance to assess validity and reliability over time. This includes a manual review of outputs by subject-matter experts to evaluate accuracy. We collect feedback from users to identify any suboptimal or inaccurate responses. We also monitor error rates over time to detect potential degradation. Some AI use cases also use alert systems to flag detect outlier behavior or unusual patterns which may signal drift.
- Use unit testing on query results, use Data Quality tracker (Great Expectations) on model results, and monitor model outputs in Power BI Dashboards
- New models implemented in 2024 have automatic, real-time monitoring of model predictions that track their values over time. Older models are periodically tested manually for accuracy.
- Models implemented in 2024 have automatic, real-time monitoring of model predictions that track their values over time. Older models are periodically tested manually for accuracy.
- Teams are expected to consider the issues raised in previous stages when testing AI Models. Models in AI systems can be subject to changes in behavior resulting from changes in users, environments or data over time. Because of this aspect, development teams are expected to develop an ongoing testing plan to evaluate the system's performance and output, and periodically run both overall performance testing for model accuracy, as well as data and model harm tests that are executed before deployment. Teams are also expected to run standard anomaly detection algorithms on key data sets to identify atypical patterns in the data that could result in AI solution performance issues in the future. The frequency of monitoring necessary and tolerance for drift is determined by the AI team after all validation is complete and before deploying the solution. Frequency is based on timeliness of data into the AI system as well as robustness and reliability results showing how the AI may perform with large data fluctuations. If appropriate, the development team makes the necessary adjustments, whether to the design or development of the system itself, the training or notices being provided, or other processes such as human review and reliance on system output for decision making. Continuous improvement of AI systems is a key component of optimizing the use case. Continuous improvement includes the creation of a set of dashboards to monitor performance, compliance, as well as data and model drift. The development team is expected to review feedback that can help identify opportunities

for continuous improvement. Even though development teams can statistically measure how well the model performs, they are expected to collect feedback from users and non-users alike to understand user perspective on how well the AI solution is performing. Development teams are expected to monitor logs and metrics to indicate system failure, vulnerability identification, data leaks and compute usage. They are also expected to create a formal response plan in the event of any unintended consequence from the use of the AI or issues related to its use which includes significant user dissatisfaction, model performance drift of a certain amount or other general system errors that may require the team to respond with retraining, code fixes or user outreach.

- We track real and categorical feature drift over time via metrics appropriate to each model, using internal dashboards.
- Ongoing model accuracy metrics are established for each phase of the development lifecycle. We monitor those data points on an ongoing basis. If we see a data point slipping, then the extraction model is retrained to address any issues identified and bring the model's responses back to the range of expected outputs.
- Yes, for in-house built models, we test for drift and retrain models approximately every six months as needed. For vendor-based models, we work with the vendor to ensure they are testing for drift and adjusting models accordingly.
- We monitor model performance metrics by tracking key metrics, using drift detection algorithms to identify relevant deviations in data distribution etc. When a drift is identified, models are updated and further evaluated to account for performance drift and changing data trends.
- Built in functionality within the Data Science tool

Question 11.7:
Does your company apply statistical methods to infer protected class characteristics?
Yes: 32 (38%), No: 52 (62%).

Question 11.8:
What protected class characteristics do you infer and what method(s) do you use to infer them?

- In internal examinations of protected class characteristics, the only protected class characteristics that we infer are Race/Ethnicity; however, the vast majority of protected class characteristics that we store do not rise from inference at all. Thus, there is an ensemble approach to identify Race/Ethnicity of which the final piece utilizes statistical inference. Our current logic to identify Race/Ethnicity in our population leverages data from several different sources. We use a 3-phase approach to identify a person's race/ethnicity.
  - Phase 1, we source race information from different administrative and clinical datasets.
  - Phase 2, for members that may not have available information or may have multiple inconsistent sources of information, we derive race/ethnicity using a person-level or family level imputation processes.
  - Phase 3, we leverage the Bayesian Improved First Name Surname Geocoding

  - Methodology to determine race/ethnicity information for members that have not been identified in first two phases. When using BIFSG, we only use results that have a confidence probability of .9 and above.
- We use Bayesian Improved Surname Geocoding (BISG) as implemented in the wru package in R. It is used descriptively to estimate race/ethnicity composition across groups.
- PVC are inferred where not available using the Bayesian Improved Surname and Geocoding (BISG) methodology developed by RAND.
- We may estimate race and ethnicity characteristics when self-reported race and ethnicity data are unavailable, using the Bayesian Improved Surname Geocoding (BISG) as the method.
- Dependent on AI use case model.
- The answer to this question is extremely use-case specific. Two broad examples of how Company may infer protected class characteristics and methods used to infer them are the use of area-based deprivation index to test model fairness when self-reported race data is not available and the use of zip codes to estimate areas with limited English proficiency when testing natural language systems.
- We impute race and ethnicity distributions (not classes) using the RAND algorithm.

Question 11.9:
Does your company conduct audits on its AI/ML models?
Yes: 59 (70%), No: 25 (30%).

Question 11.10:
Please discuss the type of audits conducted and provided the elements of the report?

- We compare and review model outputs using a post-hoc out-of-time validation process.
- Elements of the review include performance metrics such as AUROC and positive capture rate graphed over time compared to benchmark models. With respect to input data, SHAP values and other feature-importance scores are compared to assess individual contribution to the performance of the trained models over time.
- Company does not have specific AI audits at this time, but all processes using production models are subject to internal and external audit policies and practices.
- We currently conduct an initial audit as part of our AI Governance process. Additional periodic audits are planned to be added in 2025.
- The AI governance council reviews ethical bias and security
- Our AI governance framework employs a comprehensive audit approach, leveraging the three lines of defense (LOD) framework to manage risks effectively and support adherence to corporate policies, legal regulations, ethical standards, and operational efficiency.
  - Bias Audits: Bias audits are performed utilizing a risk based approach with a focus on identifying and mitigating adverse biases in AI models.
  - Performance and Drift Audits: These audits monitor and track model performance utilizing a risk based approach over time to detect any performance degradation due to data or model drift.

  - Compliance Audits: Compliance monitoring and oversight reviews are performed utilizing a risk-based approach and evaluate adherence to corporate policies, legal standards, and regulatory requirements.
  - Independent Internal Audits: The internal audit function applies a risk-based approach to auditing processes and controls across the organization. For AI systems included within the scope of internal audits, Internal Audit performs independent assessments of the AI systems' which may include compliance with corporate policies, legal regulations, and operational standards. The scope of these audits and types of testing performed vary based on risk.
- Internal audit is the third-line of defense and will perform audits on models as well as auditing of process and policy compliance.
- The team uses a quality control process to audit the models that have been used for prototypes and POCs.
- Project teams are required to conduct regular monitoring of both data and model performance. Regular evaluations for bias and fairness are conducted, helping to ensure that the model remains fair and unbiased over time, even as data distributions change.
- Our AI Policy outlines the items that can be audited internally for any high-risk AI initiative.
  - Equity Audits
    - Assesses AI solutions and workflows for fairness
    - Evaluates performance across different demographic groups
    - Plans for addressing any identified disparities
    - Documents if the AI solution could worsen/change disparities
  - Compliance Audits
    - Evaluates adherence to company's AI Policy
    - Reviews vendor compliance with contractual obligations
    - Examines compliance with privacy and data protection requirements
  - Performance Audits
    - Monitors AI system performance metrics
    - Identifies weaknesses or areas for improvement
    - Validates model performance in local populations
    - Reviews operational monitoring processes
  - Clinical/Operational Validation Audits
    - Confirms AI relevance in practical settings
    - Documents testing and verification processes
    - Validates safety for operational use
    - Evaluates workflow integration

  We assign the below documentation to standardize the audit process.
  - Program Design Document
    - Describes users, systems, scenarios and expected outcomes
    - Includes user stories and workflow diagrams
    - Visualizes how the solution will work
  - Data Concepts Document (DCD)
    - Defines population, business logic, interventions, scoring and metrics

        - Used to estimate program impact
        - Guides AI system building/evaluation
        - Supports monitoring of pilots and operations
    - AI System Performance & Requirements Reports
        - Documents performance metrics and improvement areas
        - Captures required system performance levels
        - Includes guidance for users
        - Details resource needs and risk management
    - Equity Audit Documentation
        - Assesses fairness across different groups
        - Evaluates performance disparities
        - Plans for addressing inequities
    - Validation & Pilot Documents
        - Clinical/Operational Validation Report
        - Pilot Design Document
        - Pilot Report with learnings and recommendations
        - Scaled Deployment Plan
    - Monitoring Plan
        - Defines continuous tracking of:
        - System performance
        - Program outcomes
        - Equity measures
        - Clear responsibilities for maintenance and issue response
- Internal audits are currently being conducted by AI Governance committee on an "as needed" basis at this time. We typically look to ensure that legal mandates are being followed. We also check for protected classes and methodologies used to test accuracy/validity of AI/ML model
- For the one model we have developed in-house we are checking at a regular cadence to see if there are changes in accuracy and a degradation in model quality. We are also checking for accuracy between different groups of members (new members, high-cost claimant members, etc.). For our vendored-solutions we are beginning of process of identifying which applications will need to be audited and accessing our ability to do so and what to audit.
- Our AI governance framework employs a comprehensive audit approach, leveraging the three lines of defense (LOD) framework to manage risks effectively and support adherence to corporate policies, legal regulations, ethical standards, and operational efficiency.
    - Bias Audits: Bias audits are performed utilizing a risk based approach with a focus on identifying and mitigating adverse biases in AI models.
    - Performance and Drift Audits: These audits monitor and track model performance utilizing a risk based approach over time to detect any performance degradation due to data or model drift.
    - Compliance Audits: Compliance monitoring and oversight reviews are performed utilizing a risk-based approach and evaluate adherence to corporate policies, legal standards, and regulatory requirements.

  - Independent Internal Audits: The internal audit function applies a risk-based approach to auditing processes and controls across the organization. For AI systems included within the scope of internal audits, Internal Audit performs independent assessments of the AI systems' which may include compliance with corporate policies, legal regulations, and operational standards. The scope of these audits and types of testing performed vary based on risk.
- We conducted a Consulting Review to evaluate the design of the technical and administrative controls that have been established to design, protect and manage our traditional AI tools. Other review objectives are to ensure AI governance frameworks are established, with a comprehensive inventory of the existing traditional AI models, and defined roles and responsibilities for AI system oversight.
  - AI model(s) are developed and maintained with appropriate integrity, accuracy, privacy, security and transparency of data and models used.
  - AI model(s) are developed using established policies and standards and are tested for accuracy and fairness.
  - AI model(s) designed meet the expected performance and accuracy standards.
  - Mechanisms have been established to continuously monitor the AI model's p performance and accuracy, with updates to the model as necessary.
  - End users interacting with AI models understand its capabilities and limitations.
- Models reviewed through our AI oversight and governance processes will be periodically reassessed for significant changes in use, design, operation.
- We audit our own AI applications that we build/manage. Note: The primary questions and answers on this survey relate back to 3rd party produced and managed AI models.
  Our 1st line of defense in terms of model auditing is continuous monitoring via Azure, Ai Foundry, and MSFT Sentinel tooling Data and Content Health Checks Score Model Transparency Test Model Behavior in production state against real world test scenarios.
  All of this is done under our AI Governance team which seeks to account for all organizational AI and concertedly monitors all internally developed AI applications
- Part of our AI Governance program includes auditing and assessing AI/ML Models based on model risk assessments. The model auditing and risk assessing process is conducted on an ongoing basis. Depending on the AL/ML model, audits and assessments may cover, among other things, bias, model performance, and implementation status of required controls for Generative AI use cases.
- Currently, we conduct periodic audits by subject matter experts to evaluate performance, bias, accuracy and relevance of implemented models. Findings from the audits are reviewed by key stakeholders and development teams to determine the appropriate response and risk mitigation steps. We are also working with our internal audit team to review guideline documents supporting the responsible use of AI.
- Bias: raw bias and disparate impact to protected groups
  Drift: change in input and output distribution of models. Performance: True Positive Rate, Positive Predictive Value, Area Under the Curve, Average Precision-Recall, Lift"
- All company models that go into production must be submitted to the Machine Learning (ML) Review Board (Board) for approval. This process always involves members of the Board with a wide variety of expertise (technical, clinical, legal/regulatory) reviewing the materials. The form

of this review may be an offline review of a wide variety of documented input materials, or may be a live review where Board members discuss the model (and surrounding technology and processes) with technical and business stakeholders of the project team.

- Every ML project fills out a standard form providing relevant details, including but not limited to: intended use of the model, including human oversight, end users, and potential worst-case usage scenarios; an overview of the training/testing data and open-source usage; technical metrics and process overview for performance and fairness/bias testing; and ongoing monitoring and oversight, including details of the relevant governance personnel for ongoing oversight.
- During development and before deployment, all AI/ML models undergo a rigorous review for accuracy and bias testing to ensure they meet accuracy requirements for the use-case. Company regularly tests and monitors the integrity, reliability, and performance of our models, while also soliciting feedback from the humans who are overseeing and using them, to ensure they are fulfilling their intended jobs with a high level of accuracy.
- In 2023, Company engaged a leading advisory firm to perform an independent assessment of our Responsible Use of AI/ML (RUAI) Program.
- We conduct a responsible AI risk assessment and review to ensure that AI is used responsibly and in line with organizational policies. The risk assessment questions cover various domains, including user impact, decision-making capabilities, data input and output, and compliance. The resulting report may include an assessment of the AI system's risks, including the above domains, and provide recommendations for mitigating identified risks and ensuring responsible AI use. The report aims to promote a culture of accountability and transparency in AI adoption within the organization.
- We actively audit performance of the models in use on an ongoing basis to verify classification and extraction operations are performing as expected. Daily automated audit reports are generated for production solutions leveraging AI/ML models. This daily audit determines whether the human in the loop is having to make corrections or not. If the human corrects field value, we assume the classification model was incorrect. If the models accuracy drops below a set threshold, then we retrain the model to ensure fit.
- Project teams are required to conduct regular monitoring of both data and model performance. Regular evaluations for bias and fairness are conducted,
- helping to ensure that the model remains fair and unbiased over time, even as data distributions change.
- We have established AI Governance Committee that reviews all AI use cases for compliance with our AI principles, applicable law and business & ethical principles.
- Internal audits are being conducted by AI Governance committee on an "as needed" basis.at this time. We typically look to ensure legal mandates are being followed. We also check for protected classes and methodologies used to test accuracy/validity of AI/ML Model

Question 11.11:

Does your company document the following on its AI/ML models? (Check all that apply)

- Model Validation

- Model Testing for Bias
- Model Drift
- Reliability of Model Outcomes
- Accuracy of Model Outcomes
- Error Analysis
- Unfair Discrimination

Table 50 : Document the Following on AI/ML Models

Documentation Area	Yes	No
Model Validation	64	20
Model Testing for Bias	63	21
Model Drift	60	24
Reliability of Model Outcomes	67	17
Accuracy of Model Outcomes	69	15
Error Analysis	64	20
Unfair Discrimination	53	31

GOVERNANCE

The purpose of the questions in this section is to obtain a better understanding regarding a company's awareness of specific areas tied to selected categories in the NAIC's AI Principles. While companies may consider a principle as being applied, the governance responses represent whether the company has the principles "documented" within its governance program.

Question 12.1
If you are using data, scores and/or AI/ML models aggregated or developed by a third-party, do those contracts include any conditions that would limit disclosure or otherwise limit transparency to regulators?
Yes: 11 (13%), No: 60 (71%).

Question 12.2
Do you disclose to providers, or physicians how and when AI/ML is used by the insurer or a third-party vendor?
Yes: 11 (23%), No: 37 (77%).

Question 12.3
If so, how, when, and where is it disclosed?

- Indeterminate as the use was still in a prototype stage.
- It would be disclosed on any portal or interface, at the user point of contact for any application, site or service using AI technology to operate, used by an external customer, provider, broker, etc.
- For any generative AI use cases used in our virtual medical practice, we provide training to providers before a feature is launched and such features are marked within the user interface. We have also committed to informing end users of any generative AI feature when the content generated was generated by AI and not reviewed by a human.
- We disclose where appropriate or when required by law.
- Depends on the use case.

Question 12.4
Do you have AI/ML Governance Principles in place that model the NAIC AI Principles?
Yes: 77 (92%), No: 7 (8%).

Question 12.5
Check (Yes/No) in the following areas where your AI governance principles are similar to the NAIC AI Principles.
Refer to the NAIC AI Principles for a description of each of the five NAIC AI principles reflected below and the Survey Guidance document more information regarding completing this question. PLEASE NOTE: It is expected the governance levels and maturity to be commensurate with the maturity level and risk associated with the program.

Responses were the same for all governance principles: Fair and Ethical; Accountable; Compliant; Transparent; and Secure, Safe and Robust

Table 51: AI Governance Principles Similar to the NAIC AI Principles

AI Governance Principles Similar to the NAIC AI Principles	Count	
	Yes	No
Product Pricing and Plan Design	70	7
Claims Adjudication	67	10
Prior Authorization	72	5
Utilization/Severity/Quality Management	73	4
Fraud Detection	73	4
Risk Management	67	10
Risk Adjustment	70	7
Data Processing	69	8
Sales & Marketing	74	3
Strategic Operations	69	8

AI Governance Principles Similar to the NAIC AI Principles	Percent	
	Yes	No
Product Pricing and Plan Design	91%	9%
Claims Adjudication	87%	13%
Prior Authorization	94%	6%
Utilization/Severity/Quality Management	95%	5%
Fraud Detection	95%	5%
Risk Management	87%	13%
Risk Adjustment	91%	9%
Data Processing	90%	10%
Sales & Marketing	96%	4%
Strategic Operations	90%	10%

Question 12.6

Have you adopted practices with respect to Accountability for Data Algorithms' Compliance with Laws for each operational area below?

Table 52: Adopted Practices with Respect to Accountability for Data Algorithms' Compliance with Laws for Each Operational Area

Operational Area	Yes	No
Utilization/Severity/Quality Management	64	20
Sales & Marketing	64	20
Prior Authorization	61	23
Fraud Detection	60	24

Operational Area	Yes	No
Strategic Operations	60	24
Risk Adjustment	59	25
Product Pricing and Plan Design	58	26
Data Processing	58	26
Claims Adjudication	57	27
Risk Management	57	27

Question 12.7

The next ten questions will only display if "Yes" is selected in companion areas above.

Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust with respect to Accountability for Data Algorithms' Compliance with Laws for each operational area?

All Operational Areas for Accountability for Data Algorithms' Compliance with Laws

- We have developed a Risk Assessment Framework and an AI Governance process that assesses risk in relation to regulatory compliance for specific use cases as well as compliance / conformity to our AI Guiding Principles.
- Our AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Described by our AI usage guidelines with oversight by our AI steering committee and Data Governance committee.
- Company purchases AI components or vendor solutions that utilize AI components. Company requires and assesses a vendors' and/or component providers' documentation about the AI being used specifically:
    - Algorithm information,
    - Change management processes,
    - AI lifecycle management,
    - Explanation of output
    - Testing methodology
    - Ongoing monitoring
- Data origins
    - AI Governance Program
- Our AI Governance process, applied to production use of AI algorithms and systems, includes regular review for compliance with external laws, guidelines, and requirements.
- Use cases are reviewed and approved by AI Governance Committee. Regulation changes are communicated via Compliance's Regulation Distribution Management process.
- Our AI solutions are governed by policies and procedures designed to ensure compliance with federal and state laws, regulatory mandates, client contractual obligations, and established internal policy requirements. We have established internal controls to support the required review and approval of AI systems before deployment by applicable accountable leader. We require regular monitoring of our AI systems and incorporate user feedback, as appropriate, to make improvements to maintain our high standards of accountability and integrity. We perform

various audits to test for compliance to relevant laws, regulations, and internal policy requirements.

- Our multidisciplinary Enterprise Model Governance Board (MEG) provides top-down oversight, guidance and accountability for the development, deployment, and use of organizational Models. Models can be defined as programs or algorithms that rely on training data to recognize patterns and make predictions or recommendations. Key elements of this program include risk management, testing and mitigation, governance, and documentation. We also have an Artificial Intelligence Center of Enablement (AI COE). This cross-functional team is charged with providing thoughtful, strategic oversight to ensure our GenAI solutions are ethical, defensible, and in compliance with health care privacy and security requirements, while simultaneously empowering the business to quickly incubate and apply AI capability and technologies.
- Company has a comprehensive corporate AI governance process to help manage AI developed within company and by 3rd parties that is used by our AI governance process is grounded in external standards such as the NIST AI Risk Management Framework, the NAIC Model Bulletin, and company requirements. We actively monitor new standards and requirements at the state and federal level. Our framework consists of policies and procedures to guide the transparent and responsible development and use of AI. Our governance framework reflects our corporate values and is consistent with our company Code of Ethics. It provides a lens to evaluate the ethical validity of an AI application and helps meet federal and state regulations, company rules, and other corporate policies related to data use
- Company has established processes that support the review of proposed uses of AI prior to adoption, during the implementation planning stage, as well as during the operational phase to ensure compliance with laws and regulations. Different subject matter experts spanning various departments may be involved in the review process depending upon the type of AI subject to review.
- Regardless of functional area, company AI policies require internally created and externally vended AI solutions to undergo review by dedicated resources which vet those solutions against applicable compliance standards. Specifically as it relates to accountability, company has established a dedicated AI governance committee with senior level leaders who represent a cross-functional group of individuals responsible for data science and analytics, IT, legal, privacy, compliance, and operations. This group recently launched an initiative to establish and promulgate a comprehensive AIS Program that, in addition to ensuring the company's ongoing compliance with applicable laws and regulations, is aligned with NAIC's model (as endorsed by the Pennsylvania Insurance Department in Spring 2024) for such governance programs. The group's efforts in this regard continue to mature and evolve as a reflection of company's nascent adoption of a limited set of AI-enabled solutions.
- We have an AI Policy that sets forth the practices and procedures for maintaining accountability related to the use of data algorithms. However, we are currently not using AI/ML for fraud detection.
- Our AI Steering Committee has adopted the NAIC best practices for AI use.
- Our AI Risk Management Framework ensures compliance with regulatory and legal obligations for all areas of our business where AI/ML may be used.

- We have a comprehensive corporate AI governance process to help manage AI developed within company and by 3rd parties that is used by company. Our AI governance process is grounded in external standards such as the NIST AI Risk Management Framework, the NAIC Model Bulletin, and company Association requirements.
- We actively monitor new standards and requirements at the state and federal level. Our framework consists of policies and procedures to guide the transparent and responsible development and use of AI. Our governance framework reflects our corporate values and is consistent with our company Code of Ethics. It provides a lens to evaluate the ethical validity of an AI application and helps meet federal and state regulations, company rules, and other corporate policies related to data use.
- The Plan utilizes an AI Data Governance Committee to ensure that any AI utilized meets internal and regulatory standards/laws.
- We view legal compliance as a cornerstone of AI deployment. We're committed to responsible AI practices, guided by principles of transparency, accountability, and fairness. We have established a governance structure to oversee AI initiatives, ensure responsible development and deployment, and identify and address potential risks and biases. Our approach prioritizes ethics to ensure AI systems align with our mission, vision, and values, and benefit all stakeholders. Furthermore, we maintain a comprehensive compliance program that ensures our AI systems adhere to all applicable insurance laws and regulations across jurisdictions, safeguarding against unfairly discriminatory outcomes and protecting data security and privacy. Our compliance efforts are ongoing, with regular reviews and updates to ensure alignment with evolving regulatory requirements.
- All AI models and related data algorithms that fall within the scope of our Responsible AI program are subject to a comprehensive review and approval process, the central control of which is our Machine Learning/AI Review Board. This process includes a detailed review of the applicable AI model/data algorithm against applicable legal and regulatory requirements. In addition, the Responsible AI program works closely with our regulatory affairs teams to monitor newly proposed and enacted legislation, and when new laws or regulations are put in place we review our AI inventory, maintained by the Responsible AI program, to identify and address any impacted AI models/data algorithms. The Responsible AI program includes ongoing monitoring and attestation by AI model/data algorithm owners, to help to ensure that newly enacted laws or regulations are addressed, and each model/algorithm is assigned a governance team to assist with implementation of new legal or regulatory requirements.

Specific Operational Areas

Product Pricing and Plan Design and Claim Adjudication

- Clear Governance Structure:
    - Established Artificial Intelligence Executive Steering Committee with oversight responsibilities
    - Designated Program Owners with clear accountability
    - Documented risk assessment and management processes
- Comprehensive Documentation Requirements:

  - Program Design Document requirement
  - Data Concepts Document (DCD) requirement
  - AI System Performance Report requirement
  - Pre-pilot validation reporting
  - Clear monitoring requirements post-deployment
- Equity and Bias Controls:
- Required equity assessments for high-risk AI projects
  - Documented fairness criteria requirements
  - Bias evaluation procedures
  - Required monitoring and reporting of equity KPIs
- Specific Controls Across Operational Areas:
  - For each operational area, our policy and processes require:
  - Intake risk assessment
  - Post-deployment monitoring
  - Failure reporting procedures
  - Transparency requirements
  - Human-in-the-loop requirements for high-risk systems
  - Clear accountability structures
- Policy Compliance:
  - Required adherence to all company policies including privacy, security, and data governance
  - Vendor accountability requirements
  - Regular audits and compliance reviews
  - Exception request procedures

  Most importantly, our accountability system is comprehensive across all operational areas because:
  - Each area requires documented Program Owners
  - Clear reporting lines to the AI Executive Steering Committee
  - Required risk assessments before deployment
  - Ongoing monitoring requirements
  - Incident reporting procedures
  - Fraud
  - Risk Adjustment
- Internal processes: Risk adjustment activities comply with CMS guidelines and are audited to ensure non-discrimination and adherence to industry standards. Non-FCRA data- and our use of it- is handled per state and federal privacy regulations.
- The AI/ML models started on/after the formation of the MCHS AI Governance Council have been (will be) vetted and approved for use

Data Processing

- Internal processes: We adhere to HIPAA guidelines to ensure the confidentiality, integrity, and availability of Protected Health Information (PHI) during data processing. All systems handling PHI are secured with encryption both in transit and at rest, and access is restricted based on role-

specific permissions. Regular audits and risk assessments are conducted to identify and mitigate vulnerabilities. Additionally, we maintain a robust incident response plan to address any potential data breaches swiftly and in compliance with HIPAA's breach notification requirements. For non-FCRA data, we ensure compliance with applicable privacy and security regulations, including state-specific guidelines.

Sales and Marketing

- Internal Processes: We endure that all sales and marketing practices comply with HIPAA, Model 880, and the Unfair Trade Practices Act to protect consumer data and prevent misuse. Any use of consumer data for targeted marketing purposes is strictly limited to de-identified and aggregated data, ensuring that no Protected Health Information (PHI) is exposed. All marketing and communications materials are reviewed for compliance with state and federal guidelines to prevent misleading claims or unfair practices.

Question 12.8

Have you adopted practices with respect to Accountability for Data Algorithms' Intended Impacts for each operational area below?

Table 53: Adopted Practices with Respect to Accountability for Data Algorithms' Intended Impacts for Each Operational Area

Operational Area	Yes	No
Product Pricing and Plan Design	62	22
Claims Adjudication	62	22
Prior Authorization	60	24
Utilization/Severity/Quality Management	60	24
Fraud Detection	58	26
Risk Management	58	26
Risk Adjustment	57	27
Data Processing	57	27
Sales & Marketing	56	28
Strategic Operations	56	28

Question 12.9

The next ten questions will only display if "Yes" is selected in companion areas above.

Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust with respect to Accountability for Data Algorithms' Intended Impact for each operational area?

All Operational Areas for Accountability for Data Algorithms' Intended Impact

- We have developed a Risk Assessment Framework and an AI Governance process that assesses risk in relation to regulatory compliance for specific use cases as well as compliance / conformity to our AI Guiding Principles.
- Our AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.

- Described by our AI usage guidelines with oversight by our AI steering committee and Data Governance committee.
- Use cases are reviewed and approved by AI Governance Committee. Regulation changes are communicated via Compliance's Regulation Distribution Management process.
- Company requires investments in new technology and technical attributes to have
    - Clearly documented goals and objectives
    - Clearly documented goals and objectives for each AI use case.
    - Bias and ethical review of each AI use case
    - Testing/validation of the solution
- Company AI review includes feedback based on the risks to the ethical, fairness, and security of AI functionality
- We have embedded responsible and ethical practices into our software development lifecycle, operationalized a risk management framework, and perform monitoring and oversight activities on a risk-informed basis to ensure solutions are designed, developed, deployed, and used consistently with our AI guiding principles: Fair & Inclusive, Private & Secure, Robust, Accountable, and Explainable & Transparent.
- Our risk management framework includes an assessment tool utilized to evaluate an AI model or system for risk and impact. The assessment tool is a series of questions that consider the implications of a model or system on our members, providers, community, applicable state and federal law and regulation, and operational impact. The assessment tool helps us to best match the model or system with the appropriate governance.
- Our AI Governance process requires approval by a cross-functional committee for any use of AI algorithms and systems in production. Part of that approval process is ensuring compliance with Enterprise AI, risk, and data use policies.
- We have an AI Policy that sets forth the general practices with respect to accountability for data algorithms' intended impacts. However, we are currently not using AI/ML for product pricing and plan design.
- Company AI Governance program evaluates all AI solution’s alignment with our core principles. Intended impacts of data algorithms are guided by our core principle of validity and reliability, meaning our AI solutions are accurate, reliable and monitored. We employ rigorous oversight measures including regular monitoring, reporting, and auditing on all AI solutions deployed at company.
- For the models we build and control, we have transparency and reporting around our models use and performance
- Our design of any product or service is done in compliance with applicable guidance and laws
- Our AI program and risk management framework is designed to ensure compliance with accountability principles for data algorithms’ intended impacts including, among other things, establishing defined roles for AI actors and maintaining oversight. Our AI systems are designed to adhere to legal requirements governing the use of data and algorithms and we have implemented policies and safeguards that align with Responsible AI principles and guard against potential risks posed by AI. We have processes in place to identify and flag latent incentives that may contribute to negative impacts. We test solutions before deployment and have proactive monitoring in place when our solutions are live. Additionally, we maintain human oversight where appropriate to ensure responsible use and address any potential risks or issues.

- Company-wide AI compliance policies include a requirement to review any AI implementation for any bias and impact in outcomes. Third-party vendors are required to attest their compliance with applicable regulations and additional review is being operationalized.
- All AI models and related data algorithms that fall within the scope of our Responsible AI program are brought into the purview of the program through an initial intake procedure. This procedure is standardized and applied across the enterprise to all AI models/data algorithms. One of the intake fields requires the AI model/data model owner to identify the intended impacts of the AI model/data algorithm. These intended impacts are then reviewed, first by the Responsible AI program team and then by the broader Machine Learning/AI Review Board, to ensure that the intended impacts are consistent with our principles for the responsible use of AI, our corporate mission, applicable legal and regulatory requirements, contractual commitments to third parties, internal procedures related to privacy, data security, and similar areas, and other relevant requirements. Where the intended impacts are inconsistent with these requirements or commitments, the Machine Learning/AI Review Board has the authority to approve the use case for the AI model/data algorithm, approve subject to modifications, temporarily withhold approval until modifications are made, or withhold approval completely where modification will not be sufficient.
- We view accountability for intended impacts as a cornerstone of AI deployment. We're committed to responsible AI practices, guided by principles of transparency, accountability, and fairness. We have established a governance structure to oversee AI initiatives, ensure responsible development and deployment, and identify and address potential risks and biases. Our approach prioritizes ethics to ensure AI systems align with our mission, vision, and values, and benefit all stakeholders. We maintain detailed records of AI processes, retaining data that supports final outcomes in accordance with applicable insurance laws and regulations, and implement ongoing monitoring and review mechanisms to ensure compliance with relevant laws and regulations, including human intervention when necessary.
- Our multidisciplinary Enterprise Model Governance Board (MEG) provides top-down oversight, guidance and accountability for the development, deployment, and use of organizational Models. Models can be defined as programs or algorithms that rely on training data to recognize patterns and make predictions or recommendations. Key elements of this program include risk management, testing and mitigation, governance, and documentation. We also have an Artificial Intelligence Center of Enablement (AI COE). This cross-functional team is charged with providing thoughtful, strategic oversight to ensure our GenAI solutions are ethical, defensible, and in compliance with health care privacy and security requirements, while simultaneously empowering the business to quickly incubate and apply AI capability and technologies.
- Regardless of functional area, company health options AI policies require internally created and externally vended AI solutions to undergo review by dedicated resources which vet those solutions against applicable compliance standards. Specifically as it relates to accountability, company has established a dedicated AI governance committee with senior level leaders who represent a cross-functional group of individuals responsible for data science and analytics, IT, legal, privacy, compliance, and operations. This group recently launched an initiative to establish and promulgate a comprehensive AIS Program that, in addition to ensuring the company's ongoing compliance with applicable laws and regulations, is aligned with NAIC's model (as endorsed by the Pennsylvania Insurance Department in Spring 2024) for such governance programs. The group's efforts in this

regard continue to mature and evolve as a reflection of company's nascent adoption of a limited set of AI-enabled solutions.
- Our AI Steering Committee has adopted the NAIC best practices for AI use.
- Our AI Risk Management Framework ensures compliance with regulatory and legal obligations for all areas of our business where AI/ML may be used.
- The Plan utilizes an AI Data Governance Committee to ensure that any AI utilized meets internal and regulatory standards/laws.

Specific Operations Areas

Product Pricing and Plan Design

- Clear Governance Structure:
    - Established Artificial Intelligence Executive Steering Committee with oversight responsibilities
    - Designated Program Owners with clear accountability
    - Documented risk assessment and management processes
- Comprehensive Documentation Requirements:
    - Program Design Document requirement
    - Data Concepts Document (DCD) requirement
    - AI System Performance Report requirement
    - Pre-pilot validation reporting
    - Clear monitoring requirements post-deployment
- Equity and Bias Controls:
    - Required equity assessments for high-risk AI projects
    - Documented fairness criteria requirements
    - Bias evaluation procedures
    - Required monitoring and reporting of equity KPIs
- Specific Controls Across Operational Areas:
    - For each operational area, our policy and processes require:
    - Intake risk assessment
    - Post-deployment monitoring
    - Failure reporting procedures
    - Transparency requirements
    - Human-in-the-loop requirements for high-risk systems
    - Clear accountability structures
    - Policy Compliance:
- Required adherence to all company policies including privacy, security, and data governance
    - Vendor accountability requirements
    - Regular audits and compliance reviews
    - Exception request procedures
- Most importantly, our accountability system is comprehensive across all operational areas because:
    - Each area requires documented Program Owners
    - Clear reporting lines to the AI Executive Steering Committee
    - Required risk assessments before deployment
    - Ongoing monitoring requirements

  - Incident reporting procedures"
  - Fraud
- Vendor has attested that they adhere to NAIC principles.

Question 12.10
Have you adopted practices with respect to Accountability for Data Algorithms' Unintended Impacts for each operational area below?

Table 54: Adopted Practices with Respect to Accountability for Data Algorithms' Unintended Impacts For Each Operational Area

Operational Area	Yes	No
Product Pricing and Plan Design	62	22
Claims Adjudication	61	23
Prior Authorization	60	24
Utilization/Severity/Quality Management	60	24
Fraud Detection	58	26
Risk Management	58	26
Risk Adjustment	57	27
Data Processing	56	28
Sales & Marketing	56	28
Strategic Operations	56	28

Question 12.11
The next ten questions will only display if “Yes” is selected in companion areas above.
Briefly describe your practices with respect to Accountability for Data Algorithms' Unintended Impact for each operational area?

All Operational Areas for Accountability for Data Algorithms' Unintended Impact

- Our AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Described by our AI usage guidelines with oversight by our AI steering committee and Data Governance committee.
- Use cases are reviewed and approved by AI Governance Committee. Regulation changes are communicated via Compliance's Regulation Distribution Management process.
- We have embedded responsible and ethical practices into our software development lifecycle, operationalized a risk management framework, and perform monitoring and oversight activities on a risk-informed basis to ensure solutions are designed, developed, deployed, and used consistently with our AI guiding principles: Fair & Inclusive, Private & Secure, Robust, Accountable, and Explainable & Transparent.
- We have developed an AI Governance process that assesses risk and involved discussing potential unintended impacts of specific use cases. If needed, mitigation strategies are recommended, and

implementation is required to move forward with a given use case, including periodic review to assess for unintended impacts.

- Company has a robust incident response process and requires human intervention before utilization of AI driven output. The practices and programs used for accountability of unintended Impacts include:
    - AI Governance Program with roles, regular committee meetings, policies/procedures, and risk assessments.
    - Incident identification and reporting including incident reporting channels and rapid response teams.
    - Clearly documented goals and objectives for each AI use case.
    - Bias and ethical review of each AI use case
    - Testing/validation of the solution
    - Evidence of bias analysis and confirmation of bias testing
    - Company AI review includes feedback based on the risks to the ethical, fairness, and security of AI functionality
- Our AI solutions are governed by policies and procedures designed to ensure compliance with federal and state laws, regulatory mandates, client contractual obligations, and established internal policy requirements. We have established internal controls to support the required review and approval of AI systems before deployment by applicable accountable leader. Teams are responsible for working cross-functionally to review, interpret and understand applicable laws and regulations; review AI systems and business application of those AI systems; and ensure the AI systems meet applicable standards. These teams include individuals with diverse backgrounds and expertise in the law, AI, and compliance.
- Our AI Governance program evaluates all AI solution's alignment with our core principles. Intended impacts of data algorithms are guided by our core principle of validity and reliability, meaning our AI solutions are accurate, reliable and monitored. We employ rigorous oversight measures including regular monitoring, reporting, and auditing on all AI solutions deployed at company.
- Our AI program and risk management framework includes oversight and testing to ensure accountability for data algorithms' unintended impacts. We have processes in place to identify and flag latent incentives that may contribute to negative impacts. We test solutions before deployment and have proactive monitoring in place when our solutions are live, including testing for bias and discrimination. We maintain human oversight where appropriate to ensure responsible use and address potential risks or any issues that may arise. Our AI systems are designed to adhere to legal requirements governing the use of data and algorithms and we have implemented policies and safeguards that align with Responsible AI principles and guard against potential risks posed by AI.
- Company-wide AI compliance policies include a requirement to review any AI implementation for any bias and impact in outcomes. Third-party vendors are required to attest their compliance with applicable regulations and additional review is being operationalized.
- Our risk management framework includes an assessment tool utilized to evaluate an AI model or system for risk and impact. The assessment tool is a series of questions that consider the implications of a model or system on our members, providers, community, applicable state and federal law and regulation, and operational impact. The assessment tool helps us to best match the model or system with the appropriate governance.

- Our AI Governance process requires approval by a cross-functional committee for any use of AI algorithms and systems in production. Part of that approval process is ensuring compliance with Enterprise AI, risk, and data use policies.
- We have an AI Policy that sets forth the general practices with respect to accountability for data algorithms' intended impacts. However, we are currently not using AI/ML for product pricing and plan design.
- Company AI Governance program evaluates all AI solution's alignment with our core principles. Intended impacts of data algorithms are guided by our core principle of validity and reliability, meaning our AI solutions are accurate, reliable and monitored. We employ rigorous oversight measures including regular monitoring, reporting, and auditing on all AI solutions deployed at company.
- Our design of any product or service is done in compliance with applicable guidance and laws
- Our AI program and risk management framework is designed to ensure compliance with accountability principles for data algorithms' intended impacts including, among other things, establishing defined roles for AI actors and maintaining oversight. Our AI systems are designed to adhere to legal requirements governing the use of data and algorithms and we have implemented policies and safeguards that align with Responsible AI principals and guard against potential risks posed by AI. We have processes in place to identify and flag latent incentives that may contribute to negative impacts. We test solutions before deployment and have proactive monitoring in place when our solutions are live. Additionally, we maintain human oversight where appropriate to ensure responsible use and address any potential risks or issues.
- Company-wide AI compliance policies include a requirement to review any AI implementation for any bias and impact in outcomes. Third-party vendors are required to attest their compliance with applicable regulations and additional review is being operationalized.
- All AI models and related data algorithms that fall within the scope of our Responsible AI program are brought into the purview of the program through an initial intake procedure. This procedure is standardized and applied across the enterprise to all AI models/data algorithms. One of the intake fields requires the AI model/data model owner to identify the intended impacts of the AI model/data algorithm. These intended impacts are then reviewed, first by the Responsible AI program team and then by the broader Machine Learning/AI Review Board, to ensure that the intended impacts are consistent with our principles for the responsible use of AI, our corporate mission, applicable legal and regulatory requirements, contractual commitments to third parties, internal procedures related to privacy, data security, and similar areas, and other relevant requirements. Where the intended impacts are inconsistent with these requirements or commitments, the Machine Learning/AI Review Board has the authority to approve the use case for the AI model/data algorithm, approve subject to modifications, temporarily withhold approval until modifications are made, or withhold approval completely where modification will not be sufficient.
- We view accountability for intended impacts as a cornerstone of AI deployment. We're committed to responsible AI practices, guided by principles of transparency, accountability, and fairness. We have established a governance structure to oversee AI initiatives, ensure responsible development and deployment, and identify and address potential risks and biases. Our approach prioritizes ethics to ensure AI systems align with our mission, vision, and values, and benefit all stakeholders. We maintain detailed records of AI processes, retaining data that supports final outcomes in accordance with applicable insurance laws and regulations, and implement ongoing monitoring

and review mechanisms to ensure compliance with relevant laws and regulations, including human intervention when necessary.

- Our multidisciplinary Enterprise Model Governance Board (MEG) provides top-down oversight, guidance and accountability for the development, deployment, and use of organizational Models. Models can be defined as programs or algorithms that rely on training data to recognize patterns and make predictions or recommendations. Key elements of this program include risk management, testing and mitigation, governance, and documentation. We also have an Artificial Intelligence Center of Enablement (AI COE). This cross-functional team is charged with providing thoughtful, strategic oversight to ensure our GenAI solutions are ethical, defensible, and in compliance with health care privacy and security requirements, while simultaneously empowering the business to quickly incubate and apply AI capability and technologies.
- Regardless of functional area, company health options AI policies require internally created and externally vended AI solutions to undergo review by dedicated resources which vet those solutions against applicable compliance standards. Specifically as it relates to accountability, company has established a dedicated AI governance committee with senior level leaders who represent a cross-functional group of individuals responsible for data science and analytics, IT, legal, privacy, compliance, and operations. This group recently launched an initiative to establish and promulgate a comprehensive AIS Program that, in addition to ensuring the company's ongoing compliance with applicable laws and regulations, is aligned with NAIC's model (as endorsed by the Pennsylvania Insurance Department in Spring 2024) for such governance programs. The group's efforts in this regard continue to mature and evolve as a reflection of company's nascent adoption of a limited set of AI-enabled solutions.
- Our AI Steering Committee has adopted the NAIC best practices for AI use.
- Our AI Risk Management Framework ensures compliance with regulatory and legal obligations for all areas of our business where AI/ML may be used.
- The Plan utilizes an AI Data Governance Committee to ensure that any AI utilized meets internal and regulatory standards/laws.
- Clear Governance Structure:
    - Established Artificial Intelligence Executive Steering Committee with oversight responsibilities
    - Designated Program Owners with clear accountability
    - Documented risk assessment and management processes
- Comprehensive Documentation Requirements:
    - Program Design Document requirement
    - Data Concepts Document (DCD) requirement
    - AI System Performance Report requirement
    - Pre-pilot validation reporting
    - Clear monitoring requirements post-deployment
- Equity and Bias Controls:
    - Required equity assessments for high-risk AI projects
    - Documented fairness criteria requirements
    - Bias evaluation procedures
    - Required monitoring and reporting of equity KPIs
- Specific Controls Across Operational Areas:
    - For each operational area, our policy and processes require:

  - Intake risk assessment
  - Post-deployment monitoring
  - Failure reporting procedures
  - Transparency requirements
  - Human-in-the-loop requirements for high-risk systems
  - Clear accountability structures
  - Policy Compliance:
- Required adherence to all company policies including privacy, security, and data governance
  - Vendor accountability requirements
  - Regular audits and compliance reviews
  - Exception request procedures
- Most importantly, our accountability system is comprehensive across all operational areas because:
  - Each area requires documented Program Owners
  - Clear reporting lines to the AI Executive Steering Committee
  - Required risk assessments before deployment
  - Ongoing monitoring requirements
  - Incident reporting procedures"
  - Fraud
- Vendor has attested that they adhere to NAIC principles.

Question 12.12

Have you adopted practices with respect to Accountability for Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination for each operational area below?

Table 55: Adopted Practices with Respect to Accountability for Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including Those Related to Unfair Discrimination for Each Operational Area

Operational Area	Yes	No
Product Pricing and Plan Design	67	17
Claims Adjudication	66	18
Prior Authorization	65	19
Utilization/Severity/Quality Management	65	19
Fraud Detection	63	21
Risk Management	63	21
Risk Adjustment	62	22
Data Processing	62	22
Sales & Marketing	61	23
Strategic Operations	61	23

Question 12.13

The next ten questions will only display if “Yes” is selected in companion areas above.

Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust s with respect to Accountability for Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination for each operational area below?

All Operational Areas for Accountability for Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination

- Our AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Described by our AI usage guidelines with oversight by our AI steering committee and Data Governance committee.
- The company has a robust process for identifying new and revised regulations, disseminating this information to the appropriate stakeholders, and then reviewing/monitoring for compliance. The company is currently addressing compliance with the updated 1557 Nondiscrimination rule
- Company AI Governance committee and AI Technical Subcommittee include members from
- All requests for AI utilization go through a Technical Onboarding workflow that includes review from IT Risk and Compliance as well as IT Cybersecurity. If there are risks or an issue the request is reviewed by the AI Technical Subcommittee. IT Risk and Compliance as well as IT Cybersecurity work across Company Law Department, Government Relations, and Integrity and Compliance to assess regulatory requirements, adapt and remediate changes, and ensure compliance
- Annual compliance training, covering these and other topics, is required of all employees.
- Company has adopted a governance model that incorporates the NAIC principles. The approval process for Use Cases discerns each principle and provides guidance upon an approval of specific processes or practices to ensure compliance to these principles. Company encourages “first line of defense” model with the business area assuming primary accountability. Compliance, Internal Audit, Information Security, Program Integrity and Legal support the business area to ensure compliance and appropriateness.
- Company multidisciplinary Enterprise Model Governance Board (MEG) provides top-down oversight, guidance and accountability for the development, deployment, and use of organizational Models. Models can be defined as programs or algorithms that rely on training data to recognize patterns and make predictions or recommendations. Key elements of this program include risk management, testing and mitigation, governance, and documentation. We also have an Artificial Intelligence Center of Enablement (AI COE). This cross-functional team is charged with providing thoughtful, strategic oversight to ensure our GenAI solutions are ethical, defensible, and in compliance with health care privacy and security requirements, while simultaneously empowering the business to quickly incubate and apply AI capability and technologies.
- Regardless of functional area, company AI policies require internally created and externally vended AI solutions to undergo review by dedicated resources which vet those solutions against applicable compliance standards. Specifically as it relates to accountability, company has established a dedicated AI governance committee with senior level leaders who represent a cross-functional group of individuals responsible for data science and analytics, IT, legal, privacy, compliance, and operations. This group recently launched an initiative to establish and promulgate a comprehensive AIS Program that, in addition to ensuring the company’s ongoing compliance with applicable laws and regulations, is aligned with NAIC’s model (as endorsed by the Pennsylvania Insurance Department in Spring 2024) for such governance programs. The group’s efforts in this

regard continue to mature and evolve as a reflection of company's nascent adoption of a limited set of AI-enabled solutions.

- Our AI Risk Management Framework ensures compliance with regulatory and legal obligations for all areas of our business where AI/ML may be used.
- The Plan utilizes an AI Data Governance Committee to ensure that any AI utilized meets internal and regulatory standards/laws.
- We view legal compliance as a cornerstone of AI deployment. We're committed to responsible AI practices, guided by principles of transparency, accountability, and fairness. We have established a governance structure to oversee AI initiatives, ensure responsible development and deployment, and identify and address potential risks and biases. Our approach prioritizes ethics to ensure AI systems align with our mission, vision, and values, and benefit all stakeholders. Furthermore, we maintain a comprehensive compliance program that ensures our AI systems adhere to all applicable insurance laws and regulations across jurisdictions, safeguarding against unfairly discriminatory outcomes and protecting data security and privacy. Our compliance efforts are ongoing, with regular reviews and updates to ensure alignment with evolving regulatory requirements.
- We have an AI Policy that sets forth the general practices with respect to accountability for appropriate resources and knowledge involved to ensure compliance with laws (including this related to unfair discrimination). However, we are currently not using AI/ML for product pricing and plan design.
- Company has adopted practices to ensure accountability for appropriate resources and knowledge to comply with laws. Company has established a Responsible AI Committee composed of experts from various fields, including legal compliance, risk management, data science, and privacy. This committee is responsible for overseeing AI initiatives and ensuring they align with legal and regulatory standards. Company conducts training programs to equip its workforce with the necessary skills and knowledge to manage AI technologies responsibly. This includes understanding and adhering to legal and ethical guidelines related to AI use. Finally, Company's legal team is responsible for reviewing AI-related contracts and regulations to ensure compliance with applicable laws. This oversight helps prevent legal liabilities and ensures ethical data practices.
- Our AI solutions are governed by policies and procedures designed to ensure compliance with federal and state laws, regulatory mandates, client contractual obligations, and established internal policy requirements. We have established internal controls to support the required review and approval of AI systems before deployment by applicable accountable leader. Teams are responsible for working cross-functionally to review, interpret and understand applicable laws and regulations; review AI systems and business application of those AI systems; and ensure the AI systems meet applicable standards. These teams include individuals with diverse backgrounds and expertise in the law, AI, and compliance. Established Artificial Intelligence. Executive Steering Committee with oversight responsibilities. Designated Program Owners with clear accountability. Documented risk assessment and management processes

  The roles and responsibilities include ensuring Equity and Bias Controls:
  - Required equity assessments for high-risk AI projects
  - Documented fairness criteria requirements
  - Bias evaluation procedures
  - Required monitoring and reporting of equity KPIs

- We perform an AI Review regularly of all AI Products at the company, during that review for high-risk AI applications we do an additional review to identify and confirm that the model is not biased against any particular groups and in compliance with laws. This review is still in its foundational period, and we are still doing a retroactive review of our AI inventory.
- Enterprise Model Governance policy prescribes model testing standards and oversees the development and deployment of analytical tools, making certain that they are consistent, efficient, safe, fair, accurate, transparent, and reliable, and thus serve our customers effectively and efficiently
- Company has a Government Affairs team which proactively monitors changes in laws, regulations, and sub-regulatory guidance from federal and state policymakers. Company has been tracking developments in AI regulations, including voluntary commitments and principles. Our AI features and use cases are reviewed against applicable laws and regulations to ensure compliance, particularly with respect to privacy and discrimination.
- Our design of any product or service is done in compliance with applicable guidance and laws and takes in unfair discriminations practices with respect to Accountability for Appropriate Resources and Knowledge
- Our AI Governance function further conducts Responsible AI trainings to educate colleagues on various topics related to AI, model limitations and applicable risks, including, but not limited to, bias/unfairness, hallucination, and toxicity, among others. These trainings also teach colleagues how to conduct applicable Responsible AI risk assessments for AI and GenAI use cases.
- We believe that AI is at an inflection point and has the potential to enable a transformation of the healthcare industry at scale. For this transformation to be successful, all parties need to trust the output of the technology and how it is deployed. To preserve the trust of our consumers and clients, we have set up rigorous monitoring of and governance around the use of new technologies. We have dedicated resources to create a centralized AI Governance program to ensure sufficient and appropriate oversight over our use of AI and to ensure compliance with applicable laws and regulations, including the NAIC Model Bulletin: Use of Artificial Intelligence Systems by Insurers. This includes policies related to bias and discrimination and dedicated resources to test and monitor for bias.
- Our AI Governance function further conducts Responsible AI trainings to educate colleagues on various topics related to AI, model limitations and applicable risks, including, but not limited to, bias/unfairness, hallucination, and toxicity, among others. These trainings also teach colleagues how to conduct applicable Responsible AI risk assessments for AI and GenAI use cases
- Company has established processes that support the review of proposed uses of AL prior to adoption, during the implementation planning state, as well as during the operational phase to ensure compliance with laws and regulations. Different subject matter experts spanning various departments may be involved in the review process depending upon the type of AI subject to review.
- Company-wide AI compliance policies include a requirement to review any AI implementation for any bias and potential discrimination in outcomes. Third-party vendors are required to attest their compliance with policies and applicable regulations and additional review is being operationalized. Any AI that, after review, demonstrates bias in its modeling will no longer be utilized.

Question 12.14
Have you adopted practices with respect to Ensuring Transparency with Appropriate Disclosures Including Notice to Consumers Specific to Data Being Used and Methods for Appeal and Recourse Related to Inaccurate Data for each operational area below?

Table 56: Practices With Respect to Ensuring Transparency with Appropriate Disclosures Including Notice to Consumers Specific to Data Being Used and Methods for Appeal and Recourse Related to Inaccurate Data for Each Operational Area

Operational Area	Yes	No
Product Pricing and Plan Design	53	31
Claims Adjudication	53	31
Prior Authorization	51	33
Utilization/Severity/Quality Management	51	33
Fraud Detection	51	33
Risk Management	49	35
Risk Adjustment	49	35
Data Processing	49	35
Sales & Marketing	48	36
Strategic Operations	48	36

Question 12.15
The next ten questions will only display if "Yes" is selected in companion areas above.
Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust with respect Ensuring Transparency with Appropriate Disclosures Including Notice to Consumers Specific to Data Being Used and Methods for Appeal and Recourse Related to Inaccurate Data for each operational area below?

All Operational Areas for Ensuring Transparency with Appropriate Disclosures Including Notice to Consumers Specific to Data Being Used and Methods for Appeal and Recourse Related to Inaccurate Data

- We have developed a Risk Assessment Framework and an AI Governance process that assesses transparency in relation to regulatory compliance for specific use cases as well as compliance & conformity to our AI Guiding Principles.
- Company's AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Company does publicly provide information about how consumer data is used and decisions made about the utilization. Company user design and marketing team review publications to ensure language and content simplification.
  We inform our consumers of their right to:
  - Obtain an electronic or paper copy of their information
  - Correct information
  - Request data sharing limitation
  - Request confidential communications
  - Obtain a listing of who has received their information
  - File a complaint if the consumer feels privacy rights have been violated.

We have opted out capabilities for consumers regarding their data for services or administration that is not viable for their insurance management or Company administration. Opt-out information is tracked across health plan functions.

- As required by law.
- We regularly monitor legislation to stay abreast of applicable requirements. In addition, when our AI is used to support decision making in consumer facing decisions, our AI systems operate in manners in which existing recourse and appeal processes exist and would be utilized for any questions or concerns. Additionally, our AI model inventory catalog is used to support regulator, client and consumer requests as appropriate regarding where and how AI is operating in our system and is managed by our Office of Responsible AI
- Company ensures the security, safety, and robustness of our AI systems in various operational areas involves implementing a comprehensive set of practices aimed at decision traceability and security and privacy risk protections. We adhere to NIST AI RMF and GenAI RMF and various industry AI cybersecurity standards and have several AI teams in house to review AI applications.
- Our AI Steering Committee has adopted the NAIC best practices for AI use.
- Privacy, consent and right to appeal policies in accordance with all applicable regulations. Policies are posted on corporate website with links to additional information and contacts.
- We have an AI Policy, in conjunction with other policy manuals, that sets forth the general practices to ensure transparency with appropriate disclosures including notice to consumers specific to data being used and methods for appeal and recourse related to inaccurate data. However, we are currently not using AI/ML for product pricing and plan design.
- The company's Notice of Privacy Practices and website notices provide consumers with information regarding data collection and use. We maintain a "human in the loop" approach that focuses efforts on using AI to augment human judgment but not to displace it. The Company maintains a sustaining compliance program that addresses applicable regulatory requirements, which depending on the operation at issue, may include consumer appeal.
- Specific Controls Across Operational Areas:
  For each operational area, our policy and processes require:
  - Intake risk assessment
  - Post-deployment monitoring
  - Failure reporting procedures
  - Transparency requirements to stakeholders
  - Human-in-the-loop requirements for high-risk systems
  - Clear accountability structures
- To the extent if now or in the future we utilize this function, our Responsible Use of AI Policy aligns with applicable laws governing such disclosures. Additionally, the Policy currently mandates disclaimers when unedited AI content is shared with end-users.
- Our practices with respect to Ensuring Transparency with Appropriate Disclosures Including Notice to Consumers Specific to Data Being Used and Methods for Appeal and Recourse Related to Inaccurate Data for each operational area meet all areas and requirements by design
- We have incorporated AI disclosure requirements into our policy framework and remain in compliance comply with all applicable laws and regulations related to required disclosures, including HIPAA.
- Company provides detailed explanation of use and disclosure of individually identifiable health information in our notice of privacy practices in accordance with the law.

- At this time, company is not deploying AI in a way that directly impacts eligibility or coverage decisions for consumers. While the company's AI Governance committee with oversight of the evolving AIS Program is in the process of evaluating appropriate transparency parameters given our limited use of AI, plan members are fully informed regarding their ability to file appeals or complaints regarding both benefit-related decisions and other plan activities, as required under various State and Federal laws and regulations.
- Where disclosures or notices to consumers are required by applicable laws or regulations, these requirements are addressed in the same manner as any other legal or regulatory requirements discussed above. Namely, the requirements are identified and tracked, and the Responsible AI program works to ensure that these requirements are being met and continue to be met across the lifecycle of the model, through our ongoing monitoring and governance requirements. In addition, we provide broader descriptions of the way in which we use and govern the use of AI in publications such as our annual Sustainability Report. Because the law is changing rapidly in this area, our regulatory affairs team closely monitor this issue at the state and federal level. When new notification requirements emerge, such as Utah SB 149, the requirements are summarized by experts from our regulatory affairs and technology/AI legal teams. We then review our existing AI inventory for AI models that may be impacted by the new requirement, and we publish updated guidance to our business and AI developer teams, to help to ensure these requirements are designed into new AI models or tools. Where existing AI models might be impacted by new notification requirements, the AI Responsible Use program works with the AI model governance team to meet the new requirements.
- The Company's Notice of Privacy Practices and website notices provide consumers with information regarding data collection and use. We maintain a "human in the loop" approach that focuses efforts on using AI to augment human judgment but not to displace it. The Company maintains a sustaining compliance program that addresses applicable regulatory requirements, which depending on the operation at issue, may include consumer appeal
- The Plan utilizes an AI Data Governance Committee to ensure that any AI utilized meets internal and regulatory standards/laws.

Question 12.16

Have you adopted practices with respect to AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections for each operational area below?

Table 57: Adopted Practices with Respect to AI Systems are Secure, Safe and Robust Including Decision Traceability and Security and Privacy Risk Protections for Each Operational Area

Operational Area	Yes	No
Product Pricing and Plan Design	66	18
Claims Adjudication	65	19
Prior Authorization	62	22
Utilization/Severity/Quality Management	62	22
Fraud Detection	61	23
Risk Management	60	24
Risk Adjustment	60	24
Data Processing	59	25

Operational Area	Yes	No
Sales & Marketing	58	26
Strategic Operations	58	26

Question 12.17
The next ten questions will only display if "Yes" is selected in companion areas above.
Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections.

All Operational Areas for AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections

- We have developed a Risk Assessment Framework and an AI Governance process that assesses risk, including all of these elements, for specific use cases as well as compliance / conformity to our AI Guiding Principles. If needed mitigation strategies are recommended, and implementation is required to move forward with a given use case.
- Company's AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Described by our AI usage guidelines with oversight by our AI steering committee and Data Governance committee.
- Company has a robust security architecture that aligns with NIST 800-53 across Identity and account management, patching, encryption, and application security. Company infrastructure is designed for redundancy and resilience. Company ensures that all third parties that provide AI components or services that include AI capabilities including monitoring and logging of coding changes as well has documentation that describes the decision-making processes of the AI clearly and transparently. Company currently requires that only de-identified or aggregated data is used to train third party AI systems, any identifiable data is not used to train models. Company requires that all AI components, systems, and services identify and report on error tolerance thresholds. AI systems do not directly interact with insurers or provide decisions without human intervention.
- Our AI Governance process requires approval by a cross-functional committee for any use of AI algorithms and systems in production. Part of that approval process is ensuring compliance with Enterprise AI, risk, and data use policies.
- Company has adopted a governance model that incorporates the NAIC principles. The approval process for Use Cases discerns each principle and provides guidance upon an approval of specific processes or practices to ensure compliance to these principles. AI Governance Committee requires "human in the loop" for all current use cases. Security and privacy risk is reviewed for each use case, including a detailed technical architecture review, with input from subject matter experts prior to use case approval.
- Vendor has attested they follow NAIC principles
- Company ensures the security, safety, and robustness of our AI systems in various operational areas involves implementing a comprehensive set of practices aimed at decision traceability and security and privacy risk protections. We adhere to NIST AI RMF and GenAI RMF and various industry AI cybersecurity standards and have several AI teams in house to review AI applications.
- A hybrid of internally developed and third-party components
- Our AI Steering Committee has adopted the NAIC best practices for AI use.

- Policies covering privacy, data protection and security, model governance and AI guardrails and audit and traceability of AI are in place with appropriate controls, oversight and ongoing testing to ensure compliance.
- We have an AI Policy, in conjunction with other policy manuals, that sets forth the general practices to ensure any AI systems are secure, safe and robust, including decision traceability and security and privacy risk protections. However, we are not currently using any AI/ML for product pricing and plan design.
- Our AI Risk Management Framework ensures that we enable best practices with respect to decision traceability, security, and privacy risk protections for all areas of our business where AI/ML may be used
- AI tools are required to meet the corporate AI Governance framework and are subject to the same privacy and information security controls as any other technical platforms.
- Specific Controls Across Operational Areas:
  For each operational area, our policy and processes require:
    - Intake risk assessment
    - Post-deployment monitoring
    - Failure reporting procedures
    - Transparency requirements
    - Human-in-the-loop requirements for high-risk systems
    - Clear accountability structures
- Prior to the implementation of any technology or tool, company reviews the efficacy and security of all such initiatives, to ensure all appropriate safeguards are in place, as dictated by law or industry standard. To the extent if now or in the future we apply AI/ML to the highlight business areas, our approach to prioritize security will remain the same.
- All of our generative AI use cases involve use of a vendor model. We have a business associate agreement with that vendor, and our vendor contract provides that the vendor may not retain any of our data, and as a result may not use our data to train its models. We ensure that we only use the vendor's data retention features. We keep logs of activity using generative AI models for auditability and traceability.
- Our AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections by design
- Our AI Governance program includes Standards for Model Explainability and Model Lifecycle to address transparency related to AI systems and models, and provide guidelines and best practices to ensure model robustness, traceability, reliability and safety.
- Company-wide AI compliance policies have been written and implemented that outline requirements to protect PHI and other company data with any AI use. No internal AI use is permitted without review and approval by Information Security, and employees are undergoing annual education and training on potential data security risks with AI.
    - The Model Explainability Standard promotes transparency in AI systems and allows modelers, developers, and technical auditors to understand how an AI system works, including how a model is trained and evaluated, what its decision boundaries are, what inputs go into the model, and why it made a specific prediction. Model Explainability goes a step further by also offering human-readable explanations or justifications for the results produced by the AI system. By providing explanations of model outcomes, we can reduce operational risks and, and foster a culture of trust, accountability, and innovation.

  - The Model Lifecycle Standard outlines the essential stages and components of the model lifecycle, focuses on building trust in our AI-driven solutions and products, enhancing customer experience, prioritizing patient and member safety, and supporting the commitment of our company to best practices and industry standards in Responsible AI, and AI & Machine Learning (ML) system operations.
- We have structures and processes in place
- Our AI Governance program includes Standards for Model Explainability and Model Lifecycle to address transparency related to AI systems and models, and provide guidelines and best practices to ensure model robustness, traceability, reliability and safety. The Model Explainability Standard promotes transparency in AI systems and allows modelers, developers, and technical auditors to understand how an AI system works, including how a model is trained and evaluated, what its decision boundaries are, what inputs go into the model, and why it made a specific prediction. Model Explainability goes a step further by also offering human-readable explanations or justifications for the results produced by the AI system. By providing explanations of model outcomes, we can reduce operational risks and, and foster a culture of trust, accountability, and innovation. The Model Lifecycle Standard outlines the essential stages and components of the model lifecycle, focuses on building trust in our AI-driven solutions and products, enhancing customer experience, prioritizing patient and member safety, and supporting the commitment of our company to best practices and industry standards in Responsible AI, and AI Machine Learning (ML) system operations. We have further established controls to ensure that AI technology is used in a manner that is compliant with regulatory requirements, including privacy and security. Our controls include model inventorying, risk assessment and bias testing. Data may be processed through both machine learning and generative AI models consistent with HIPAA privacy restrictions and client-and-member data sharing agreements and permissions. We've implemented additional controls for generative AI in particular, including restricting access to public generative AI sites and contracting directly for private licenses of generative AI services. There are additional controls defined for safe handling of sensitive data, such as personal health information and personally identifiable information.
- Regardless of functional area, prior to deployment, Company AI policies require internally created and externally vended AI solutions to undergo extensive technical review by a cross-functional committee that includes company data architects. Such reviews follow detailed technical review and include additional controls for AI systems, which require all AI solutions to inherit required security and privacy controls, including a prohibition against using member data to teach an AI model.
- All AI systems are subject to the same security and privacy requirements as any other software system. In addition, the Machine Learning/AI Review Board includes security and privacy professionals, who review the systems and have broad authority to examine and review these issues. These Machine Learning/AI Review Board members are independent in the sense that they do not report in to the Responsible AI program or the impacted businesses. With respect to decision traceability, our procedures and guidance documents require that AI based processes retain the same documentation and data as their manual (or non-AI) counterparts. For example, for where an AI chatbot to be deployed to a call center to interact directly with consumers, the content of those chats are required to be retained in the same manner as the call would be recorded and retained were it with a human call center agent. The same requirements apply to data or documentation used by AI models that, for example, present data to medical directors for

utilization management decisions. The availability and retention of data inputs and system outputs is intended to support traceability of decisions, consistent with our AI guiding principle of Transparency.

- We view safety and security as a cornerstone of AI deployment. We're committed to responsible AI practices, guided by principles of transparency, accountability, and fairness. We've established a governance structure to oversee AI initiatives, ensure responsible development and deployment, and identify and address potential risks and biases. Our approach prioritizes ethics to ensure AI systems align with our mission, vision, and values, and benefit all stakeholders. We maintain transparent and proactive disclosure practices, providing clear and easy-to-understand information to stakeholders about our AI systems, including the data used, purpose, and potential consequences, while also ensuring confidentiality of proprietary algorithms in accordance with applicable state laws and regulations. Additionally, we have established a process for stakeholders to inquire about, review, and seek recourse for insurance decisions, ensuring accountability and fairness in our processes.
- AI tools are required to meet the corporate AI Governance framework and are subject to the same privacy and information security controls as any other technical platforms.
- We do not currently have an AI use case in Product Pricing and Plan Design, but in the future will establish practices with respect to AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections in Product Pricing and Plan Design.
- The Plan utilizes an AI Data Governance Committee to ensure that any AI utilized meets internal and regulatory standards/laws.

Question 12.18

1. Do you follow some other existing standards or guidance in regard to governance framework?

Table 58: Follow Some Other Existing Standards or Guidance in Regard to Governance Framework

Do you follow some other existing standards or guidance in regard to governance framework?					
Standard	Yes	No	Total	% Yes	% No
Product Pricing and Plan Design	58	26	84	69%	31%
Claims Adjudication	58	26	84	69%	31%
Prior Authorization	63	21	84	75%	25%
Utilization/Severity/Quality Management	63	21	84	75%	25%
Fraud Detection	62	22	84	74%	26%
Risk Management	59	25	84	70%	30%
Risk Adjustment	60	24	84	71%	29%
Data Processing	58	26	84	69%	31%
Sales & Marketing	63	21	84	75%	25%
Strategic Operations	61	23	84	73%	27%

2. If yes, were the standards or guidance developed internally, provided by a third party, or a hybrid of internally developed and third-party components?

Table 59: Standards or Guidance Developed Internally, Provided by a Third Party, or a Hybrid of Internally Developed and Third-Party Components

Were the standards or guidance developed internally, provided by a third party, or a hybrid of internally developed and third-party components?						
Both internally & with 3rd-Party	Developed internally	Provided by third-party	Total	% Both internally & with 3rd-Party	% Developed internally	% Provided by a third-party
42	16	0	58	72%	28%	0%
42	16	0	58	72%	28%	0%
42	20	1	63	67%	32%	2%
42	20	1	63	67%	32%	2%
42	20	0	62	68%	32%	0%
42	16	1	59	71%	27%	2%
42	17	1	60	70%	28%	2%
42	16	0	58	72%	28%	0%
42	21	0	63	67%	33%	0%
43	18	0	61	70%	30%	0%

Question 12.19
If any standards or guidance are provided by a third party, please provide the following:
Name of the Third-Party and Components of the Governance Framework provided by Third-Party

Table 60 : Name of the Third-Party Providing Standards or Guidance

Third-Party Name
InfoTech
N/A
NIST RMF 01, NAIC
NIST
National Institute of Standards and Technology
BLDS, LLC
NA
NIST
PA Bulletin
Partnered with an AI Consultant
White House Healthcare AI Commitments
NIST; NAIC; OTHERS
Accenture

Components of the Governance Framework provided by Third-Party—All Operations Areas

- Provided a core framework which we modified through a months' long process to fit our organization.
- Received guidance from NIST and NAIC- aligned the standards together and adjusted for our utilization of Artificial Intelligence.
- Many and diverse
- GOVERN, MAP, Measure, Manage, Applicable Laws and Regulations.
- Legal advice and review of policies and procedures
- Our AI Policy was developed to align with regulatory expectations outlined in PA Notice 2024-04. Here's how we incorporated key elements from the Notice into our policy:
    - Governance Framework
      We implemented the Notice's governance requirements by establishing:
        - Formal governance structures with senior management oversight through our AI Executive Steering Committee
        - Executive-level accountability through regular reporting and oversight mechanisms
        - Comprehensive documentation requirements for policies, procedures, and controls
    - Risk Management
      Following the Notice's risk management framework, we incorporated:
        - A structured risk assessment and mitigation approach
        - Risk-proportionate controls based on potential consumer impact
        - Continuous monitoring and testing protocols
        - Detailed documentation requirements for model development and validation
        - Strict protection standards for non-public information
    - Third Party Oversight
      We aligned with the Notice's vendor management expectations by requiring:
        - Comprehensive due diligence processes for AI vendors
        - Specific contractual provisions ensuring audit rights
        - Ongoing vendor monitoring programs
        - Detailed documentation of vendor assessments and oversight activities
    - Equity and Fairness
      We embedded the Notice's fairness principles through:
        - Mandatory bias testing protocols
        - Documented fairness criteria for all AI systems
        - Regular monitoring for disparate impacts
        - Transparency requirements regarding AI use
- Ethical Accountability, Human-Centric Design, Privacy Protection, Bias Mitigation, Explainability and Interpretability, Continuous Improvement, Socioeconomic Impact, Alignment with Standards, and Responsible AI
- Our internally developed governance framework was guided in part by the commitment we made to adhere to fundamental principles of AI development - safety, security, and trust - by signing on to the White House Healthcare AI Commitments.
- Our overall AI governance framework was designed internally and many components predate the release of formal guidance from organizations such as NIST. We have and continue to evaluate our AI governance framework against emerging guidance and best practices. At the program level our AI governance framework were designed or modified to be compliant with applicable NIST

standards and recommendations and recommendations from NAIC (such as the AI principles). In addition to the program level AI governance, each AI model is assigned a model-level governance team. Model level governance is informed by, and includes requirements from, legal and regulatory guidelines applicable to the specific model, e.g., state level rules on pertaining to prior authorization. The governance components apply at different phases. Some governance components apply at the design and development phase, others at the testing phase, and others at implementation, as the results of the AI model are actually applied. Our AI governance program is continually monitoring emerging guidance and adapting appropriately.

- AI Risk Management Framework
- Guidance related to Policy, Principles, Responsible AI Risk Screening & Mitigation

Question 12.20

1. What is the process, if any, that your company has for providing consumers with the data elements used in consumer impact models?

All Operations Areas

- Company follows regulatory requirements by disclosing key factors that influence premium calculations, such as age, geographic location, and plan tier. We do not provide raw data to consumers but explain methodologies in compliance with state and federal regulations.
- We regularly monitor legislation to stay abreast of applicable requirements. In addition, when our AI is used to support decision making in consumer facing decisions, our AI systems operate in manners in which existing recourse and appeal processes exist and would be utilized for any questions or concerns. Additionally, our AI model inventory catalog is used to support regulator, client and consumer requests as appropriate regarding where and how AI is operating in our system and is managed by our Office of Responsible.
- We are exploring the use of AI/ML and leveraging it when we feel like it best supports our consumers' needs. The applicability of AI/ML for any solution is carefully reviewed and considered, and validated and tested.
- We adhere to HIPPA and all regulations. We have privacy policies posted on our website inclusive of forms and means to request personal information.
- The company’s Notice of Privacy Practices and website notices provide consumers with information regarding collection and use of data.
- Consumer data elements are not used in consumer impact models. All use of member data is subject to the plan's Notice of Privacy Practices.
- Company complies with all laws related to the disclosure and use of member information and does not have specific processes solely for disclosing data elements used in AI/ML-driven consumer impact models.
- We comply with our member Notices of Privacy Practices with respect to uses of member information. They are made available to our members in multiple channels.

2. What do you do to ensure compliance with regulatory frameworks, such as Model 880 and the Unfair Trade Practices Act, when using non-FCRA data?

All Operations Areas

- Company's AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Our approach to ensuring compliance with regulatory frameworks, such as Model 880 and the Unfair Trade Practices Act, is structured around the three lines of defense framework, involving various teams across the organization. At the forefront, our regulatory affairs team is instrumental in understanding and anticipating changes in regulatory landscapes, providing strategic guidance to align our operations with industry-specific requirements. The legal team plays a vital role, offering critical interpretations of these regulations and ensuring that aspects of our operation remains legally sound and compliant. The compliance team distributes new regulations or updates to the business, partners to ensure strategies are developed, implemented, and maintained in adherence with the requirements, and monitors compliance across our operations. Compliance also partners with Internal Audit and Enterprise Risk Management to assess and review areas of risk, ensuring monitoring processes are in place, and evaluating the effectiveness of mitigation and remediation plans, as well as implementing corrective action plans arising from performance deficiencies. They conduct ongoing assessments of compliance and regulatory risks, making adjustments as necessary based on evolving factors. Complementing these efforts, data governance including the information security and privacy teams ensures our data handling practices comply with privacy laws and standards, which is essential when dealing with non-FCRA data. Together, these teams create a robust framework for regulatory compliance, safeguarding the integrity and legality of our operations through a comprehensive and well-structured defense strategy.
- We require regular monitoring of our AI systems and incorporate user feedback, as appropriate, to make improvements to maintain our high standards of accountability and integrity.
- We follow all regulations and have policies and controls in place to ensure appropriate regulations are adhered to.
- The Company maintains a sustaining compliance program that addresses applicable regulatory frameworks.
- The plan complies with all aspects of HIPAA and any use is limited Treatment, Payment, and Operations (as defined by HIPAA)
- To ensure compliance with regulatory frameworks like Model 880 and the Unfair Trade Practices Act when using non-FCRA data, we have a variety of steps:
    - We carefully vet our data sources to ensure they do not contain data elements that could lead to unfair or discriminatory outcomes.
    - We use an AI Review process to maintain an inventory of all AI products in the company and to document the tests for bias and fairness that have been used.
    - We collaborate with our legal and compliance teams in setting our AI practices and procedures
    - We are continuing to develop practices to ensure ongoing compliance with emerging standards.
- We maintain a compliance program that governs our data practices. This includes data selection and usage controls, risk assessments, ongoing training, and regular monitoring and auditing to ensure adherence to all applicable legal and ethical standards.
- All generative AI use cases are tested and reviewed before launch to ensure they are working as intended and do not display unlawful bias or discrimination.

- The company has policies and procedures that prohibit discrimination based on state and federal laws. All new laws are managed by the Business Compliance Office and each business area is responsible for taking the necessary steps to comply with such requirements.
- Language is included in Company-wide policies that protect member rights to privacy regarding PHI data and is operationalized through the Compliance Program; these rights include obligation to disclose data use to members upon request. Company has prohibited the use of data in most AI models and LLM systems and will operationalize additional protocols for disclosure as needed.
- Company provides detailed explanation of use and disclosure of individually identifiable health information in our notice of privacy practices in accordance with the law.
- All AI models and related data algorithms that fall within the scope of our Responsible AI program are subject to a comprehensive review and approval process, the central control of which is our Machine Learning/AI Review Board. This process includes a detailed review of the applicable AI model/data algorithm against applicable legal and regulatory requirements. In addition, the Responsible AI program works closely with our regulatory affairs teams to monitor newly proposed and enacted legislation, and when new laws or regulations are put in place we review our AI inventory, maintained by the Responsible AI program, to identify and address any impacted AI models/data algorithms. The Responsible AI program includes ongoing monitoring and attestation by AI model/data algorithm owners, to help to ensure that newly enacted laws or regulations are addressed, and each model/algorithm is assigned a governance team to assist with implementation of new legal or regulatory requirements.
- To ensure compliance with applicable regulatory frameworks, we take a proactive and multi-faceted approach. Annually, we conduct a comprehensive risk assessment to identify potential areas of vulnerability and develop a tailored audit and monitoring plan that is approved by our Compliance Committee. To ensure that we address new or emerging risks, we routinely review regulatory requirements and will update our risk assessment and audit and monitoring plan, as necessary.
- The Plan utilizes an AI Data Governance Committee to ensure that any AI utilized meets internal and regulatory standards/laws.

Question 12.21
Non-FCRA Data Disclosure
Are the consumers made aware of what non-FCRA data is collected, when it is used, and how it is used?

Table 61: Consumers ae Made Aware of What Non-FCRA Data Is Collected, When it Is Used, and How it Is Used

Operational Area	Yes	No
Product Pricing and Plan Design	30	54
Claims Adjudication	30	54
Prior Authorization	30	54
Utilization/Severity/Quality Management	30	54
Fraud Detection	30	54
Risk Management	30	54
Risk Adjustment	30	54
Data Processing	30	54

Operational Area	Yes	No
Sales & Marketing	28	56
Strategic Operations	28	56

Question 12.22
FCRA Data
If you are using data not included in FCRA, do consumers have an opportunity to correct?

Table 62: If Using Data Not Included in FCRA, Do Consumers Have an Opportunity to Correct

Operational Area	Yes	No
Product Pricing and Plan Design	37	4
Claims Adjudication	35	4
Prior Authorization	37	4
Utilization/Severity/Quality Management	37	4
Fraud Detection	37	4
Risk Management	37	4
Risk Adjustment	37	4
Data Processing	37	4
Sales & Marketing	38	4
Strategic Operations	38	4

Question 12.23
AI/ML Decision Making Influence
How does human intelligence influence the decision making based on the AI/ML results? How much human intervention is involved?

All Operations Areas

- Company's Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Analytics algorithm produces report that allows benefit comparison. This report supports company's decisions.
- We are exploring the use of AI/ML and leveraging it when we feel like it best supports our consumers' needs. The applicability of AI/ML for any solution is carefully reviewed and considered, and validated and tested. We require regular monitoring of our AI systems and incorporate user feedback, as appropriate, to make improvements to maintain our high standards of accountability and integrity.
- Human intervention is involved in the actuarial quoting process. By policy, for AI/ML projects with a significant risk of adversely impacting patients or members, the program owners ensure a human review occurs before any AI/ML generated output is acted upon.
- The amount of human intelligence influence and intervention is based on the specific use case and dependent on numerous factors. As part of our AI Governance framework, we have implemented a human agency standard that addresses when human involvement is required, based on risk.

- One of our principles and guardrails is that AI can be used to support and inform human decision-making, but should not replace human decision-making, particularly in any context that might impact member or patient care. The nature and degree of human intervention varies by the specific AI model and use case. One of the key factors captured in the AI model review process is the degree and manner of human in the loop. This is reviewed by the AI/Machine Learning Review Board, and is customized based on risk, regulatory guidance or requirements, and best practices, and is monitoring through our standard ongoing monitoring processes.

Risk Adjustment/Sales & Marketing/Strategic Operations

- AI in this space is to create efficiency but does not replace human decision-making

How are results monitored?

All Operations Areas

- Company's AI/ML Governance Committee provides guidance for AI/ML usage to internal business areas to help achieve short- and long-term objectives.
- Anomalous results are identified real time and investigated.
- We require regular monitoring of our AI systems and incorporate user feedback, as appropriate, to make improvements to maintain our high standards of accountability and integrity.
- The respective program owner is accountable for ensuring that all aspects of the AI/ML projects comply AI policy and ethics standards, which includes active monitoring of the AI system and impacts. These programs are subject to internal audit reviews.
- We are exploring the use of AI/ML and leveraging it when we feel like it best supports our consumers' needs. The applicability of AI/ML for any solution is carefully reviewed and considered, and validated and tested. We require regular monitoring of our AI systems and incorporate user feedback, as appropriate, to make improvements to maintain our high standards of accountability and integrity.
- In addition to building and testing our AI solutions for safety, we test solutions before deploying them, we have proactive monitoring in place when our solutions are live, and we maintain human touch points when appropriate. AI teams are required by policy to regularly collect and evaluate feedback from use case owners and end users to ensure ongoing model effectiveness.
- Results are monitored through a general ongoing monitoring and attestation process administered by the Responsible AI program and implemented at the model governance team level. This general monitoring process focuses on monitoring for changes in use cases, changes in data inputs, anomalous results, and ongoing periodic testing, all based on the potential risk posed by the AI model in question. In addition, model-specific monitoring requirements may be implemented based on the specific model use case and risk. These monitoring requirements can range from requiring call center agents to confirm answers provided by AI chatbots against legacy information sources to decision timing monitoring tools designed to detect potential automation bias by decisionmakers relying on information provided by AI tools. We frequently reevaluate these monitoring techniques against regulatory requirements, professional recommendations, best practices, and newly emerging technology tools.
- We require regular monitoring of our AI systems and incorporate user feedback, as appropriate, to make improvements to maintain our high standards of accountability and integrity.

Question 12.24
Do you have a process for applicants for health insurance to contest an adverse underwriting decision?
Yes: 24 (29%), No: 60 (71%).

Question 12.25
Do you keep a log of the number of contested underwriting decisions?
Yes: 19 (23%), No: 65 (77%).

Question 12.26
Does AI/ML delivery, testing, monitoring, or governance differ based online of business, state, or region?
Yes: 17 (20%), No: 67 (80%).

Question 12.27
How does the use or governance of AI/ML differ by line of business, state, or region?

- Adherence to state/regional laws as applicable.
- Our deployment of AI solutions takes applicable law and regulation, and required regulatory approvals, into account in solution design, development, deployment, and ongoing use. In some instances, for example, to meet state requirements, we may need to implement more stringent governance to support these requirements. We regularly monitor legislation to stay abreast of applicable requirements.
- Not at the high-level governance and oversight perspective, but testing processes may differ depending on area of the company developing, operating solutions, primarily between ML and Gen AI/LLM uses.
- Certain lines of business are regulated differently by state or federal agencies.

Question 12.28
This question is concerned with the extent to which your AI/ML processes fall on the spectrum from complete automated decision making to aiding human decision making. Please indicate the percentage of AI/ML algorithms exclusive of Generalized Linear Models that reflect how AI/ML are used in decision making. Enter percentage where indicated. All percentages should add to 100%

1 - Automation (No human intervention on execution)
2 - Augmentation (Model advises human who makes decision - model suggests answer)
3 - Support (Model provides information but does not suggest decision or action
4 – Other

Table 63: Extent to Which Your AI/ML Processes Fall on the Spectrum from Complete Automated Decision Making to Aiding Human Decision Making

Automation	Count		Augmentation	Count		Support	Count		Other	Count
0.0%	54		0.0%	27		0.0%	19		0.0%	66
0.1%	4		0.1%	1		1.0%	3		49.9%	1
3.0%	2		5.0%	1		5.0%	2		99.0%	3
5.0%	21		10.0%	1		25.0%	4		100%	14

Automation	Count		Augmentation	Count		Support	Count		Other	Count
20.0%	1		20.0%	8		30.0%	2			
75.0%	2		25.0%	5		35.0%	1			
			30.0%	1		40.0%	2			
			40.0%	1		49.9%	3			
			44.0%	2		50.0%	22			
			45.0%	13		56.0%	2			
			49.9%	1		70.0%	1			
			50.0%	10		75.0%	9			
			60.0%	2		80.0%	2			
			67.0%	2		90.0%	1			
			70.0%	3		95.0%	1			
			75.0%	1		100%	10			
			100%	5						

Question 12.29

If you provided a percentage for "Other" in the previous question, please explain what the "Other" decision types are. Enter N/A if there are no "Other" decision types.

- We are in discovery mode related to all aspects of AI.
- N/A –the company is not using AI/ML for decision making.
- Honestly that is a very poorly worded inquiry. All kinds of decisions? Spelling algorithms for Outlook? Business decisions? Insurance decisions? By count of decisions or by impact of decisions?
- Today the vast majority of everything we decide directly that is an insurance business decision has at this point in time, practically no AI/ML involvement.
- Risk assessments and requisite risk-informed testing and monitoring are conducted on a regular basis.
- The company does not currently employ AI solutions that are capable of decision-making in a way that impacts member eligibility or coverage.
- AI/ML is not used for decision making purposes.

Question 12.30

If you are contracting with third-party vendors, third-party administrators, medical coders, billing vendors, external reviewers, or providers please explain the governance in place for these vendors to ensure that they are meeting at least the same standards as outlined in the NAIC AI Principles.

Third-Party Vendors

- Our established risk assessment process includes evaluation of a third party's AI Governance process, whereby we are able to determine if their AI Principles conform to our established AI Guiding Principles
- Company has a third-party oversight program that includes additional AI questions when within the scope of services.
- Currently in prototype stage only and not approved to use in production. Applicable governance TBD.
- Company aligns its AI governance platform around the standards and practices defined in NIST RMF 01 and NAIC; ensuring third parties align with the same controls and structure.

RFI/RFP questions ensuring that technology or service is a viable option that will comply with AI Governance standards. Contractual requirements specifically for AI utilization. AI review of third party responses and documentation, assessing our risk as it pertains to Company AI Standards, Vendor Risk Assessment of controls and practices of third parties. Vendor solutions are subject to the same AI Governance protocols and approvals as internally developed solutions.

- The vendors are contacted and complete surveys covering governance topics as part of AI Governance Council
- Our health's standards apply to all applications of artificial intelligence within Company, including, but not limited to, internal development and deployment, and third party-vendors.
- We are in the midst of defining this.
- Ensure NAIC AI is followed
- Third party vendor oversight for AI/ML use is covered by our AI policy and the company's Enterprise Risk Management team is responsible for all third-party vendor and third-party administrator oversight.
- Our Information Security Questionnaire, Business Associates Agreements, and Master Services Agreements enforce our 3rd Party vendors to have the same standards as us and as applicable to all regulatory requirements.
- All AI solutions at company whether developed internally or procured via a third party or external vendor are subject to the same AI Governance structure in place that ensures compliance with legal and regulatory requirements, privacy and security standards, and maintains alignment with company AI principles
- All third parties are required to comply with the plan's AI/ML policy and procedures. The program owner is responsible for assuring compliance.
- Evolving Process
- All Third-Party vendors are reviewed as part of the procurement process to identify if they use AI in their products and if so, they go through our AI review process which ensures that the AI product meets the company's standards
- Follow NAIC AI Principles
- To extent that vendors are currently providing services that leverage AI/ML, Company's current governance and relationship management processes would help ensure appropriate vetting of any AI/ML service. Company provides a questionnaire to potential vendors who may provide AI/ML services, and vets those who plan to leverage AI/ML through the organization's AI Center of Excellence.
- Any third-party contracted with to provide services go through a compliance, privacy, AI practices assessment managed by our TPRM (Third Party Risk Management) function which has included AI Governance and Oversight content that aligns with internal framework.
- Company has written contracts with all vendors performing insurance functions, and such contracts contain clauses requiring the vendor to comply with law. For any new vendor or when a vendor contract is being renegotiated, our procurement process has been augmented to add questions concerning use of artificial intelligence. For any vendor that would like to use artificial intelligence, we require that the vendor provide an explanation of how AI will be used and to provide a copy of the vendor's AI Acceptable Use Policy. For all other vendors, we have added language to our standard contract to prohibit the use of artificial intelligence to provide administrative services to Company without company's express written consent. We reserve the right to have its AI Governance Committee review use cases of generative AI by its vendors.
- IT and AI Gov review of each. Also working on building into contracting.

- This is governed via the contract process to include that the vendor must meet the same or similar standards being performed by us
- Third party oversight is incorporated into our AI Governance framework. Our process includes assessments of third-parties that are providing AI services on our behalf and is consistent with the guidance in the NAIC Model Bulletin: Use of Artificial Intelligence Systems by Insurers.
- Vendors attest to follow our AI policies based on NAIC AI Principles and provide descriptions of AI use. AI use is monitored by company and additional review is implemented as warranted.
- Company has adopted industry standard procurement processes for its review of company vendors' responsible AI practices, and has implemented standard contract language to help ensure such compliance by its vendors.
- Company requires all vendors to comply with applicable laws, regulations, and controlling guidance, including but not limited to that applicable to use and governance of AI solutions. Company anticipates enhancement of this oversight in connection with the ongoing evolution of the company's AIS Program, which is being scaled commensurately with the company's currently limited but potentially increasing adoption of AI-enabled solutions.
- We are in the process of maturing our governance and oversight processes of vendors that use AI/ML to support contracted services. This involves identifying vendors using AI and evaluating their use cases, including contract language that obligates the vendor similar standards in the NAIC AI model bulletin. Where applicable based on the services performed and how AI or ML tools are used by the vendor, AI Compliance will be included as part of our vendor oversight reviews.
- Our Responsible AI policies apply to vendors as well as internally developed AI models and systems. AI vendors are identified at the procurement stage, and our contracts with those vendors require the vendors to participate in our Machine Learning/AI Review Board review process, and to address issues that might be uncovered during that review. We have developed a subset of review board members (generally excluding product developers) in order to avoid potential intellectual property issues. In addition, we periodically survey vendors to identify AI vendors who may have come into our environment via acquisition, added AI functionality later, or been inadvertently missed during the procurement stage. We are in the process of redesigning our processes with respect to vendor AI to streamline the process. We will further streamline this process if and when broadly accepted third party standards and certifications, akin to HITRUST for example, emerge. In terms of ensuring these vendors are meeting at least the same standards as outlined in the NAIC AI Principles, the vendor AI models are reviewed against the same criteria as internal models. In addition, contracts with vendors who provide AI tools include clauses to require vendors to participate in this review process as well as maintain their own governance program consistent with all relevant regulatory requirements and principles, including those promulgated by NAIC.
- We're committed to responsible AI practices, guided by principles of transparency, accountability, and fairness. We've established a governance structure to oversee AI initiatives, ensure responsible development and deployment, and identify and address potential risks and biases. Our approach prioritizes ethics to ensure AI systems align with our mission, vision, and values, and benefit all stakeholders. This governance structure is embedded into our technology review & onboarding process. All vendors and vendor modules with AI are reviewed by governance before being permitted to be used.
- All proposed uses cases for AI, whether originating from internal development or use of third-party applications, are reviewed and assessed for the level of risk. This risk assessment applies the NAIC AI

Principles, including fairness, reliability and safety, privacy and security, inclusiveness, transparency, and accountability.
- Standard contracting terms, conditions and procedures
- All AI solutions at company whether developed internally or procured via a third party or external vendor are subject to the same AI Governance structure in place that ensures compliance with legal and regulatory requirements, privacy and security standards, and maintains alignment with company AI principles
- Company vendors and providers are required contractually to comply with all applicable laws, including those applicable to artificial intelligence (AI) and the use of AI tools. Company reviews and evaluates any artificial intelligence tools that are proposed to be used by vendors to provide services to company. Company prohibits providers from using AI for any functions that result in a denial, delay reduction, or modification of covered services to company members including, but not limited to: utilization management, prior authorizations, complaints, appeals and grievances, and quality of care services, without review of the denial, delay, reduction or modification by a qualified clinician. Further, company requires providers to give advance written notice to company (for any AI used by a provider that may impact the provision of covered services to company members) that describes (i) providers' use of the AI Tool(s) and (ii) how the provider oversees, monitors and evaluates the performance and legal compliance of such AI tool(s).
- This is an evolving process
- The Plan utilizes an AI Data Governance Committee to ensure that any AI utilized meets internal and regulatory standards/laws.

Third-Party Administrators
- Our established risk assessment process includes evaluation of a third party's AI Governance process, whereby we are able to determine if their AI Principles conform to our established AI Guiding Principles
- Company has a third-party oversight program that includes additional AI questions when within the scope of services.
- Company aligned its AI governance platform around the standards and practices defined in NIST RMF 01 and NAIC; ensuring third parties align with the same controls and structure.
    - RFI/RFP questions ensuring that technology or service is a viable option that will comply with AI Governance standards.
    - Contractual requirements specifically for AI utilization.
    - AI review of third party responses and documentation, assessing Company risk as it pertains to Company AI Standards
    - Vendor Risk Assessment of controls and practices of third parties.
- Vendor solutions are subject to the same AI Governance protocols and approvals as internally developed solutions.
- Company's Health's Standards apply to all applications of artificial intelligence within Company, including, but not limited to, internal development and deployment, and third party-vendors.
- Third party administrator oversight for AI/ML use is covered by our AI policy and the company's Enterprise Risk Management team is responsible for all third-party vendor and third-party administrator oversight.
- Company's Health's Standards apply to all applications of artificial intelligence within Company, including, but not limited to, internal development and deployment, and third party-vendors.
- Evolving Process

- To extent that vendors are currently providing services that leverage AI/ML, Company's current governance and relationship management processes would help ensure appropriate vetting of any AI/ML service. Company provides a questionnaire to potential vendors who may provide AI/ML services, and vets those who plan to leverage AI/ML through the organization's AI Center of Excellence.
- Any third-party contracted with to provide services go through a compliance, privacy, AI practices assessment managed by our TPRM (Third Party Risk Management) function which has included AI Governance and Oversight content that aligns with internal framework.
- This is governed via the contract process to include that the vendor must meet the same or similar standards being performed by us
- Third party oversight is incorporated into our AI Governance framework. Our process includes assessments of third-parties that are providing AI services on our behalf and is consistent with the guidance in the NAIC Model Bulletin: Use of Artificial Intelligence Systems by Insurers.
- Company requires all third-party administrators to comply with applicable laws, regulations, and controlling guidance, including but not limited to that applicable to use and governance of AI solutions. Company anticipates enhancement of this oversight in connection with the ongoing evolution of the company's AIS Program, which is being scaled commensurately with the company's currently limited but potentially increasing adoption of AI-enabled solutions.
- Our Responsible AI policies apply to vendors as well as internally developed AI models and systems. AI vendors are identified at the procurement stage, and our contracts with those vendors require the vendors to participate in our Machine Learning/AI Review Board review process, and to address issues that might be uncovered during that review. We have developed a subset of review board members (generally excluding product developers) in order to avoid potential intellectual property issues. In addition, we periodically survey vendors to identify AI vendors who may have come into our environment via acquisition, added AI functionality later, or been inadvertently missed during the procurement stage. We are in the process of redesigning our processes with respect to vendor AI to streamline the process. We will further streamline this process if and when broadly accepted third party standards and certifications, akin to HITRUST for example, emerge. In terms of ensuring these vendors are meeting at least the same standards as outlined in the NAIC AI Principles, the vendor AI models are reviewed against the same criteria as internal models. In addition, contracts with vendors who provide AI tools include clauses to require vendors to participate in this review process as well as maintain their own governance program consistent with all relevant regulatory requirements and principles, including those promulgated by NAIC.
- We're committed to responsible AI practices, guided by principles of transparency, accountability, and fairness. We've established a governance structure to oversee AI initiatives, ensure responsible development and deployment, and identify and address potential risks and biases. Our approach prioritizes ethics to ensure AI systems align with our mission, vision, and values, and benefit all stakeholders. This governance structure is embedded into our technology review & onboarding process. All vendors and vendor modules with AI are reviewed by governance before being permitted to be used.
- Standard contracting terms, conditions and procedures
- Company's vendors and providers are required contractually to comply with all applicable laws, including those applicable to artificial intelligence (AI) and the use of AI tools. Company reviews and evaluates any artificial intelligence tools that are proposed to be used by vendors to provide services to company. Company prohibits providers from using AI for any functions that result in a denial, delay, reduction, or modification of covered services to company members including, but not limited to:

utilization management, prior authorizations, complaints, appeals and grievances, and quality of care services, without review of the denial, delay, reduction or modification by a qualified clinician. Further, company requires providers to give advance written notice to company (for any AI used by a provider that may impact the provision of covered services to company members) that describes (i) providers' use of the AI Tool(s) and (ii) how the provider oversees, monitors and evaluates the performance and legal compliance of such AI tool(s).

Medical Coders

- Company aligned its AI governance platform around the standards and practices defined in NIST RMF 01 and NAIC; ensuring third parties align with the same controls and structure.
  - RFI/RFP questions ensuring that technology or service is a viable option that will comply with AI Governance standards.
  - Contractual requirements specifically for AI utilization.
  - AI review of third party responses and documentation, assessing Company risk as it pertains to Company AI Standards
  - Vendor Risk Assessment of controls and practices of third parties.
- Vendor solutions are subject to the same AI Governance protocols and approvals as internally developed solutions.
- Company Health's Standards apply to all applications of artificial intelligence within Company, including, but not limited to, internal development and deployment, and third party-vendors.
- Evolving Process
- To extent that vendors are currently providing services that leverage AI/ML, company's current governance and relationship management processes would help ensure appropriate vetting of any AI/ML service. Company provides a questionnaire to potential vendors who may provide AI/ML services, and vets those who plan to leverage AI/ML through the organization's AI Center of Excellence.
- Any third-party contracted with to provide services go through a compliance, privacy, AI practices assessment managed by our third party risk management function which has included AI Governance and Oversight content that aligns with internal framework.
- IT and AI Gov review of each. Also working on building into contracting.
- This is governed via the contract process to include that the vendor must meet the same or similar standards being performed by us
- Third party oversight is incorporated into our AI Governance framework. Our process includes assessments of third-parties that are providing AI services on our behalf and is consistent with the guidance in the NAIC Model Bulletin: Use of Artificial Intelligence Systems by Insurers.
- We are in the process of maturing our governance and oversight processes of vendors that use AI/ML to support contracted services. This involves identifying vendors using AI and evaluating their use cases, including contract language that obligates the vendor similar standards in the NAIC AI model bulletin. Where applicable based on the services performed and how AI or ML tools are used by the vendor, AI Compliance will be included as part of our vendor oversight reviews.
- Our Responsible AI policies apply to vendors as well as internally developed AI models and systems. AI vendors are identified at the procurement stage, and our contracts with those vendors require the vendors to participate in our Machine Learning/AI Review Board review process, and to address issues that might be uncovered during that review. We have developed a subset of review board members (generally excluding product developers) in order to avoid potential intellectual property issues. In

addition, we periodically survey vendors to identify AI vendors who may have come into our environment via acquisition, added AI functionality later, or been inadvertently missed during the procurement stage. We are in the process of redesigning our processes with respect to vendor AI to streamline the process. We will further streamline this process if and when broadly accepted third party standards and certifications, akin to HITRUST for example, emerge. In terms of ensuring these vendors are meeting at least the same standards as outlined in the NAIC AI Principles, the vendor AI models are reviewed against the same criteria as internal models. In addition, contracts with vendors who provide AI tools include clauses to require vendors to participate in this review process as well as maintain their own governance program consistent with all relevant regulatory requirements and principles, including those promulgated by NAIC.

- Standard Contracting terms and conditions
- Company's vendors and providers are required contractually to comply with all applicable laws, including those applicable to artificial intelligence (AI) and the use of AI tools. Company reviews and evaluates any artificial intelligence tools that are proposed to be used by vendors to provide services to company. Company prohibits providers from using AI for any functions that result in a denial, delay, reduction, or modification of covered services to company members including, but not limited to: utilization management, prior authorizations, complaints, appeals and grievances, and quality of care services, without review of the denial, delay, reduction or modification by a qualified clinician. Further, company requires providers to give advance written notice to company (for any AI used by a provider that may impact the provision of covered services to company members) that describes (i) providers' use of the AI Tool(s) and (ii) how the provider oversees, monitors and evaluates the performance and legal compliance of such AI tool(s).

External Reviewers

- Our established risk assessment process includes evaluation of a third party's AI Governance process, whereby we are able to determine if their AI Principles conform to our established AI Guiding Principles
- Company has a third-party oversight program that includes additional AI questions when within the scope of services.
- Company aligned its AI governance platform around the standards and practices defined in NIST RMF 01 and NAIC; ensuring third parties align with the same controls and structure.
  - RFI/RFP questions ensuring that technology or service is a viable option that will comply with AI Governance standards.
  - Contractual requirements specifically for AI utilization.
  - AI review of third party responses and documentation, assessing Company risk as it pertains to Company AI Standards
  - Vendor Risk Assessment of controls and practices of third parties.
- Vendor solutions are subject to the same AI Governance protocols and approvals as internally developed solutions.
- Company Health's Standards apply to all applications of artificial intelligence within Company, including, but not limited to, internal development and deployment, and third party-vendors.
- Evolving Process
- To extent that vendors are currently providing services that leverage AI/ML, Company's current governance and relationship management processes would help ensure appropriate vetting of any AI/ML service. Company provides a questionnaire to potential vendors who may provide AI/ML services, and vets those who plan to leverage AI/ML through the organization's AI Center of Excellence.

- Any third-party contracted with to provide services go through a compliance, privacy, AI practices assessment managed by our TPRM (Third Party Risk Management) function which has included AI Governance and Oversight content that aligns with internal framework.
- This is governed via the contract process to include that the vendor must meet the same or similar standards being performed by us
- Third party oversight is incorporated into our AI Governance framework. Our process includes assessments of third-parties that are providing AI services on our behalf and is consistent with the guidance in the NAIC Model Bulletin: Use of Artificial Intelligence Systems by Insurers.
- We are in the process of maturing our governance and oversight processes of vendors that use AI/ML to support contracted services. This involves identifying vendors using AI and evaluating their use cases, including contract language that obligates the vendor similar standards in the NAIC AI model bulletin. Where applicable based on the services performed and how AI or ML tools are used by the vendor, AI Compliance will be included as part of our vendor oversight reviews.
- Our Responsible AI policies apply to vendors as well as internally developed AI models and systems. AI vendors are identified at the procurement stage, and our contracts with those vendors require the vendors to participate in our Machine Learning/AI Review Board review process, and to address issues that might be uncovered during that review. We have developed a subset of review board members (generally excluding product developers) in order to avoid potential intellectual property issues. In addition, we periodically survey vendors to identify AI vendors who may have come into our environment via acquisition, added AI functionality later, or been inadvertently missed during the procurement stage. We are in the process of redesigning our processes with respect to vendor AI to streamline the process. We will further streamline this process if and when broadly accepted third party standards and certifications, akin to HITRUST for example, emerge. In terms of ensuring these vendors are meeting at least the same standards as outlined in the NAIC AI Principles, the vendor AI models are reviewed against the same criteria as internal models. In addition, contracts with vendors who provide AI tools include clauses to require vendors to participate in this review process as well as maintain their own governance program consistent with all relevant regulatory requirements and principles, including those promulgated by NAIC.
- We're committed to responsible AI practices, guided by principles of transparency, accountability, and fairness. We've established a governance structure to oversee AI initiatives, ensure responsible development and deployment, and identify and address potential risks and biases. Our approach prioritizes ethics to ensure AI systems align with our mission, vision, and values, and benefit all stakeholders. This governance structure is embedded into our technology review & onboarding process. All vendors and vendor modules with AI are reviewed by governance before being permitted to be used.
- Standard contracting terms, conditions and procedures
- Company’s vendors and providers are required contractually to comply with all applicable laws, including those applicable to artificial intelligence (AI) and the use of AI tools. Company reviews and evaluates any artificial intelligence tools that are proposed to be used by vendors to provide services to company. Company prohibits providers from using AI for any functions that result in a denial, delay, reduction, or modification of covered services to company members including, but not limited to: utilization management, prior authorizations, complaints, appeals and grievances, and quality of care services, without review of the denial, delay, reduction or modification by a qualified clinician. Further, company requires providers to give advance written notice to company (for any AI used by a provider that may impact the provision of covered services to company members) that describes (i) providers’

use of the AI Tool(s) and (ii) how the provider oversees, monitors and evaluates the performance and legal compliance of such AI tool(s).

Providers

- Our established risk assessment process includes evaluation of a third party's AI Governance process, whereby we are able to determine if their AI Principles conform to our established AI Guiding Principles
- Company has a third-party oversight program that includes additional AI questions when within the scope of services.
- Vendor solutions are subject to the same AI Governance protocols and approvals as internally developed solutions.
- Company aligned its AI governance platform around the standards and practices defined in NIST RMF 01 and NAIC; ensuring third parties align with the same controls and structure.
    - RFI/RFP questions ensuring that technology or service is a viable option that will comply with AI Governance standards.
    - Contractual requirements specifically for AI utilization.
    - AI review of third party responses and documentation, assessing Company risk as it pertains to Company AI Standards
    - Vendor Risk Assessment of controls and practices of third parties.
- We are in the midst of defining this.
- Our provider contracts ensure that our providers have the same standards as us and as applicable to all regulatory requirements
- All AI solutions at company whether developed internally or procured via a third party or external vendor are subject to the same AI Governance structure in place that ensures compliance with legal and regulatory requirements, privacy and security standards, and maintains alignment with company AI principles
- Company Health's Standards apply to all applications of artificial intelligence within Company, including, but not limited to, internal development and deployment, and third party-vendors.
- All third parties are required to comply with the plan's AI/ML policy and procedures. The program owner is responsible for assuring compliance.
- Evolving Process
- IT and AI Gov review of each. Also working on building into contracting.
- This is governed via the contract process to include that the vendor must meet the same or similar standards being performed by us
- Third party oversight is incorporated into our AI Governance framework. Our process includes assessments of third-parties that are providing AI services on our behalf and is consistent with the guidance in the NAIC Model Bulletin: Use of Artificial Intelligence Systems by Insurers.
- AI Governance evaluation processes for contracted providers is still in the development phase.
- Our Responsible AI policies apply to vendors as well as internally developed AI models and systems. AI vendors are identified at the procurement stage, and our contracts with those vendors require the vendors to participate in our Machine Learning/AI Review Board review process, and to address issues that might be uncovered during that review. We have developed a subset of review board members (generally excluding product developers) in order to avoid potential intellectual property issues. In addition, we periodically survey vendors to identify AI vendors who may have come into our environment via acquisition, added AI functionality later, or been inadvertently missed during the procurement stage. We are in the process of redesigning our processes with respect to vendor AI to

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CONCLUSION/NEXT STEPS

As requested by the SME group, the NAIC's technical team completed an analysis of the data submitted in the Health AI/ML survey. Insight was gained around the general use of AI/ML by insurance companies, uses of AI/ML in insurance company operations, data elements and sources used in insurance company operations, governance frameworks and documentation, consumer data recourse, and third-party sources for AI/ML models and/or data.

The insight gained from the survey will be used to supplement regulators' knowledge of the current regulatory framework around AI/ML, governance, consumers, and third parties and to evaluate whether any changes should be made to the regulatory frameworks.

The SME group, other regulators, and NAIC staff have identified some potential next steps, including many activities already in progress. The following list of next steps is not intended to be complete, but it may be helpful as a starting point for discussions and decision-making about what next steps to take at the NAIC:

- Evaluate the survey analysis and determine whether to further explore the following subjects:
    - Company AI/ML model usage and the level of decision-making (i.e., the amount of human involvement in decision-making)
    - Company data elements
    - Companies' governance frameworks and the documentation of such
    - Consumer data recourse
    - Third-party regulatory framework
- Create a risk hierarchy to prioritize the need for more model governance and company oversight. The general concept is that more oversight of a model will be needed as the consumer risk or impact increases from the modeling or models.
- Evaluate consumer data recourse. Companies report a wide variety of methods for consumers to evaluate and correct data used by companies. Some methods are short and easy, such as using an app to correct data, and other methods are more time consuming and require personal contact with the agent or company. In some cases, consumers may not even know about their data being used, so consumer transparency is a priority. (Privacy Protections (H) Working Group)
- Evaluate the regulatory framework around the use of third-party models and third-party data. Evaluate the ability of companies and regulators to obtain needed information from third parties and for regulators to oversee this work either through the companies or third parties in some way. (Workstream Two of the Big Data and Artificial Intelligence (H) Working Group)
- Evaluate concerns about third-party concentration by company use. *(Workstream Two of the Big Data and Artificial Intelligence (H) Working Group)*
- Determine whether additional training for regulators along with best-practices white papers would be useful on subjects in the AI/ML space.

APPENDIX A: AI/ML Deployment

The following question is asked as a follow-up question when a "yes" response is given to many of the survey's questions: "If yes, what is the current level of AI/ML Deployment? (Select the highest level of deployment)." Two of the options for answers are "Proof of Concept (POC)" and "Prototype." The difference between a Proof of Concept (POC) and a Prototype is discussed below.

- **Proof of Concept (POC):** A small exercise to test the design idea or assumption. The main purpose of developing a POC is to demonstrate functionality and to verify a certain concept or theory that can be achieved in development.
- **Prototype**: Prototyping is a valuable exercise that allows the innovator to visualize how the product will function. A prototype is a working interactive model of the end-product that gives an idea of the design, navigation, and layout.
- **Difference between POC and Prototype**: While a POC shows that a product or feature can be developed, a prototype shows how it will be developed.

APPENDIX B: AI/ML Model Category Types

For each of the AI/ML operational areas, there is a question asking the respondent to select whether a listed model is AI or a specific type of ML. If the model employs more than one type, mark all types that apply for the named model.

When selecting an appropriate category(ies) to describe a model, use the taxonomy provided below to determine which category(ies) applies. If the method being used is not specifically listed in the taxonomy, use expert judgment to select the best category(ies). If no category applies, enter your method in the "Other" column. You may select more than one method.

1. DL – Deep Learning
    - Deep Boltzmann Machine (DBM)
    - Deep Belief Network (DBN)
    - Convolutional Neural Network (CNN)
    - Stacked Auto-Encoder
2. ENS – Ensemble
    - Random Forest
    - Gradient Boosting Machine (GBM)
    - Bootstrapped Aggregation (Bagging)
    - AdaBoost
    - Stacked Generalization (Blending)
    - Gradient Boosted Regression Trees
3. NN – Neural Network
    - Radial Basis Function Network (RBFN)
    - Perceptron
    - Back-propagation
    - Hopfield Network
4. REG – Regularization
    - Ridge Regression
    - Least Absolute Shrinkage and Selection Operator (LASSO)
    - Elastic Net
    - Least Angle Regression (LARS)
5. RS – Rule System
    - Cubist
    - One Rule (OneR)
    - Zero Rule (ZeroR)
    - Repeated Incremental Pruning to Produce Error Reduction (RIPPER)
6. RGS – Regression (Note: Only applies if used in conjunction with a method defined as "AI/ML" for purposes of this survey.)
    - Linear Regression
    - Ordinary Least Squares Regression (OLSR)
    - Stepwise Regression
    - Multivariate Adaptive Regression Splines (MARS)

- Locally Estimated Scatterplot Smoothing (LOESS) Logistic Regression

7. BAY – Bayesian Methods
   - Naïve Bayes
   - Averaged One-Dependence Estimators (AODE)
   - Bayesian Belief Network (BBN)
   - Gaussian Naïve Bayes
   - Multinomial Naïve Bayes
   - Bayesian Network (BN)
8. DT – Decision Trees
   - Classification and Regression Tree (CART)
   - Iterative Dichotomiser (ID3)
   - C4.5
   - C5.0
   - Chi-square Automatic Interaction Detection (CHAID)
   - Decision Stump
   - Conditional Decision Trees
   - M5
9. DR – Dimensionality Reduction
   - Principal Component Analysis (PCA)
   - Partial Least Square Regression (PLSR)
   - Sammon Mapping
   - Multidimensional Scaling (MDS)
   - Project Pursuit
   - Principal Component Regression (PCR)
   - Partial Least Squares Discriminant Analysis
   - Mixture Discriminant Analysis (MDA)
   - Quadratic Discriminant Analysis (QDA)
   - Regularized Discriminant Analysis (RDA)
   - Flexible Discriminate Analysis (FDA)
   - Linear Discriminant Analysis (LDA)
10. IB – Instance-Based
    - k-Nearest Neighbor (KNN)
    - Learning Vector Quantization (LVQ)
    - Self-Organizing Map (SOM)
    - Locally Weighted Learning (LWL)
11. CLU – Clustering
    - k-Means
    - k-Medians
    - Expectation Maximization
    - Hierarchical Clustering
12. AI – AI that is not categorized as ML
13. Any Other that meets the definition of AI/ML selected for this survey.

Note: Please make sure that any model supplied by an external vendor is also appropriately identified as one or more of the above model category types.

APPENDIX C: Definitions by Insurer Function

Product Pricing and Plan Design

- **Provider:** A doctor, hospital, health care professional, or health care facility.
- **Affiliated Provider:** A health care provider or facility that is paid by a health plan to give service to plan members.

Claims Adjudication

- **Step Therapy:** A process by which insurers (public or private) require patients to take one or more alternative medications before they can access the medicine prescribed by their provider, and refusing to pay for a higher-cost therapy until it is shown that a lower-cost therapy is not effective (commonly known as "step therapy protocols" or "fail-first policies")

Risk Management

- **Wearable Devices**: Wearable devices refer to smart electronic devices with sensors that collect and deliver biometric information. The technology includes devices that are worn on the wrist and other forms such as jewelry, glasses, clothing, shoes, and implanted devices. The main category of wearables in the market are fitness trackers and smartwatches, which gather metrics associated with physical activity: step count, activity minutes, distance traveled, floors climbed, calories burned, heart rate, and sleep patterns.
- **Wellness Initiatives**: A program intended to improve and promote health and fitness that's usually offered through the workplace, although insurance plans can offer them directly to their enrollees. The program allows employers or plans to offer premium discounts, cash rewards, gym memberships, and other incentives to participate. Some examples of wellness programs include smoking cessation, diabetes management programs, weight loss programs, and preventative health screenings.
- **Discount Medical Programs**: Programs that provide a discount on medical services or prescription drugs.
- **Technology to Detect Smoking:** Wearable sensor technology used to detect and help people quit smoking.
- **Disease Detection:** AI and ML programs designed to diagnose disease using training data— such as the patient's history, lab results, scans, symptoms, and images of confirmed and susceptible cases—or real-time facial recognition images.

Risk Adjustment

- **Risk Adjustment:** The way that payments to health plans are changed to take into account a person's health status.

Data Processing

- **Accuracy:** A measure of the extent to which data represents the true value of the attribute it is intended to measure.

- **Validity:** The correctness and appropriateness of data for a specific use.

Sales & Marketing

- **Targeted Online Advertising**: Determination of which individuals on the internet should receive or see advertisements from the insurer.
- **Identification of Recipients of Mail or Phone Advertising**: Determination of which individuals would be desirable recipients of an insurer's advertisements via the telephone or physical mail.
- **Provision of Offers to Existing Customers**: Determination of which customers should be notified of new insurance products, discounts, options to be written in a different book of business, or any other benefit or favorable treatment that the insurer seeks to extend.
- **Identification of Potential Customer Groups**: Determination regarding which consumer sub-populations could likely become additional customers of the insurer and/or benefit from the insurer's products and services.
- **Demand Modeling**: Identification of consumers' needs for and interest in specific types of insurance and insurance products that the insurer is offering or whose development or sale the insurer may be considering or exploring.
- **Direct Online Sales**: Selling insurance policies to consumers through a direct internet-based channel in a manner that does not rely solely on preprogrammed decision rules.

APPENDIX D: Model Governance Definitions

The purpose of the questions related to model governance is to obtain a better understanding of a company's awareness of specific risk areas tied to the NAIC Artificial Intelligence Principles. In addition, the survey seeks information to understand if guidelines and/or best practices are documented. Specifically, if the company is involved in using AI/ML models, **does the company have a documented process in place** that addresses:

- Fairness and Ethics Considerations: Ensuring responsible adherence to fairness and ethical considerations. It is clear there is debate regarding the definition of "fairness and ethics", so for the purposes of this survey, and assuming a general understanding of the terms, the response should be consistent with how the company defines those terms. Common principles that fall under this category include Transparency, Justice and Fairness, Non-Maleficence, and Responsibility and Privacy. Generally, respect the rule of law and implement trustworthy solutions designed to benefit consumers in a manner that avoids harmful or unintended consequences including unfair or proxy discrimination.
- Accountability for Data Algorithms' Compliance with Laws as well as Intended and Unintended Impacts: Ensuring the data used and the algorithms/models within the scope of the AI/ML system are delivering the intended benefit, and there are proactive processes in place to ensure there is no unacceptable unintended impact. Simply put, be responsible for the creation, implementation, and impacts of any AI system.
- Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination.
- Ensure Transparency with Appropriate Disclosures Including Notice to Consumers Specific to Data Being Used and Methods for Appeal and Recourse Related to Inaccurate Data: Ensuring documented processes and best practices are in place that govern and actively address the issue of transparency, ensuring adequate and complete/understandable consumer disclosure regarding the data being used and how the data are used, as well as providing a way for consumers to appeal or correct inaccurate data. This is intended to be specific for data not already protected by legislation such as the Fair Credit Reporting Act (FCRA), as the assumption is all companies would be compliant with that law. This pertains to consumer data NOT specified in the FCRA.
- AI Systems are Secure, Safe, and Robust including Decision Traceability and Security and Privacy Risk Protections: Ensuring an appropriate governance process is in place and documented specific to the company's AI/ML activity or program that focuses on protecting security, in terms of its data and intellectual property, from potentially compromising interference or risk and relevant and necessary privacy protections are in place; and ensuring the data and the AI/ML models are Ensuring the requisite and appropriate resources, skillsets and knowledge needed to ensure compliance with laws, including those related to unfair discrimination, are actively involved in these programs and decision-making – including oversight of third parties understanding and competence related to compliance with relevant laws and the issue of unfair discrimination. Sufficiently transparent and explainable so that they can be reviewed for compliance with laws and best practices and proven to not be unfairly discriminatory or used for an unethical purpose.

It is understood that governance models vary in terms of components and terms used to describe these risk areas. However, there is a common thread across most governance models, and this language was specifically used in this survey as it ties directly to the NAIC's adopted AI Principles. Where there may be

concerns about overlap, the intention is for this additional information to clarify the unique intent of each. The company should reply to each component as specifically as possible.

Governance, for the purpose of this survey, includes both controls within the data science group as well as controls at the higher level of Enterprise Risk Management (ERM). Governance should include situations where 3rd parties are used (e.g., audits).