Health Insurance AI/ML Survey Questions Documentation

Contents

Health Insurance AI/ML Survey

This document is a blueprint for the online survey. It may look a little different on the screen than in this document because of formatting differences between the online version and this document, but all the question content is the same. Appendix A contains a listing of the machine learning acronyms and their meanings that you will see in the survey. You should also use this document along with the "Survey Filing Guidance and Definitions" document which provides definitions and detailed instructions on how to fill out the survey. This document is purely the blueprint for the survey and may be less robust than the "Survey Filing Guidance and Definitions" document.

THIS INSTRUCTION IS VERY IMPORTANT!
The survey is designed so that different sections of the survey may be assigned to individuals with the subject matter knowledge to fill out sections of the survey relevant to them. The survey is designed in blocks for this specific reason. **Survey blocks 2 and 3 must be completed by the primary contact who received the survey link from the NAIC before sending the survey link to subject matter experts to complete their assigned sections.** The information in survey block 2 is basic company information, and general information on AI/ML use in survey block 3. There is required information in survey blocks 2 and 3 that must be completed before the operational sections of the survey can be completed. When subject matter experts receive the link, they will be able to use the "Next Page" key to advance past survey block 3 and get to the table of contents for the remaining questions in the survey. The table of contents is discussed further below and appended as Appendix B.

It is important for you to keep a copy of all the data you entered into the survey in a separate source. At the end of the survey, you will be allowed to download a PDF version of your survey responses. However, some of the questions have a wide landscape format and will not completely print in the PDF document.

The rest of this document describes the content of the survey blocks.

Survey Question Sequencing – Survey Block 1

Please be advised survey questions are numbered using a "Block" question number scheme, Q[Survey Block Number].[Question Number Within Block]. Because there are dependencies among questions, meaning if you answer a question "Yes," you may see a dependent question that you would not see if you had answered the question "No." For "No" answers, a related dependent question may appear. Don't be alarmed if you do not see all the questions in a sequence. The dependencies affect which questions in a block sequence you will see. You should see all blocks of questions if you are currently using AI/ML in your health insurance operations.

Respondent Information – Survey Block 2

These are fill-in-the-blank questions.

1. NAIC Company Code _____
2. Company Name _____
3. Contact Name _____
4. Contact Title _____
5. Contact Phone Number _____
6. Contact Email Address _____
7. Comments _____

General Information on AI/ML Use – Survey Block 3

These are the screener questions. These questions determine how much of the operational and governance questions you need to complete. If you are NOT currently using AI/ML, then the only questions you are required to address are the "Planned to Use Questions." If you have no immediate plans to use AL/ML, then you will be directed to the "Exploring to Use Questions."

Current Use Question

1. Does your company currently use Artificial Intelligence/Machine Learning as defined for this survey? (Y/N) _____

2. Which reason best describes why you are not using Artificial Intelligence/Machine Learning as described in this survey:
    a. No compelling business reason at this time.
    b. Waiting for regulatory guidance.
    c. Lack of resources and expertise.
    d. Lack of reliable data.
    e. Lack of associated security risk.
    f. Reliance on legacy systems requiring IT, data and technology system upgrade before starting AI/ML initiatives.
    g. Waiting on the availability of a third-party vendor product/service.
    h. Risk is not commensurate with current strategy or appetite.
    i. Other.

    You will only see this question if you answered "No" to question 1.

3. Provide additional reasons, if any, for not using Artificial Intelligence/Machine Learning as defined in this survey. You will only see this question if you answered "No" to question 1.

4. Do you develop Artificial Intelligence (AI)/Machine Learning (ML) systems internally or use vendors, or both internally with input from vendors?
    Select an option below.
    - N/A
    - Develop Internally
    - Develop by a Third-Party
    - Develop Internally with a Third-Party
    - Develop Internally with Third-Party Components

    You will only see this question if you answered "Yes" to question 1.

5. Additional Commentary (There is space to add additional comments.) You will only see this question if you answered "Yes" to question 1.

Planned Use Questions

6. Does your company plan to use Artificial Intelligence/Machine Learning as defined for this survey? (Y/N)

7. Do you plan to develop Artificial Intelligence (AI)/Machine Learning (ML) systems internally or use vendors, or both internally with input from vendors?
    Select an option below.
    - N/A
    - Develop Internally
    - Develop by a Third-Party
    - Develop Internally with a Third-Party
    - Develop Internally with Third-Party Components

    This question appears if you answered "Yes" to Question 6

8. Additional Commentary (There is space to add additional comments.)

Exploring Use Questions

9. Is your company exploring the use of Artificial Intelligence/Machine Learning as defined for this survey? (Y/N)

10. Do you plan to develop Artificial Intelligence (AI)/Machine Learning (ML) systems internally or use vendors, or both internally with input from vendors?

    Select an option below.
    - N/A
    - Develop Internally
    - Develop by a Third-Party
    - Develop Internally with a Third-Party
    - Develop Internally with Third-Party Components

    You will only see this question if you answered "Yes" to question 9.

11. Additional Commentary (There is space to add additional comments.) You will only see this question if you answered "Yes" to question 9.

12. Indicate the implementation status or plan for each of the listed areas. This should be answered in the context of whether currently implementing or planning to implement. Indicate N/A if you do not use AI/ML for the area and do not plan to use AI/ML for the area.
    There are radio buttons to assist in selecting an option.

	NA	Already in Production	< 1 Year	1 - 3 Years	> 3 Years
Product Pricing and Plan Design					
Claims Adjudication					
Prior Authorization					
Utilization/Severity/Quality Management					
Risk Management					

	NA	Already in Production	< 1 Year	1 - 3 Years	> 3 Years
Risk Adjustment					
Fraud Detection					
Data Processing Issues					
Sales & Marketing					
Operations					

(Space is provided to provide commentary for selections above)

13. Product Pricing and Plan Design Additional Commentary – Product Pricing and Plan Design

14. Claims Adjudication Additional Commentary – Claims Adjudication

15. Prior Authorization Additional Commentary - Prior Authorization

16. Utilization/Severity/Quality Management Additional Commentary - Utilization/Severity Management

17. Risk Management Additional Commentary - Risk Management

18. Risk Adjustment Additional Commentary - Risk Adjustment

19. Fraud Detection Additional Commentary - Fraud Detection

20. Data Processing Issues Additional Commentary – Data Processing Issues

21. Sales & Marketing Additional Commentary – Sales & Marketing

22. Please list additional areas (up to 10) where you are using or may potentially use AI/ML.

	N/A	< 1 Year	1 - 3 Years	> 3 Years
Enter Additional Area 1				
Enter Additional Area 2				
Enter Additional Area 3				
Enter Additional Area 4				
Enter Additional Area 5				
Enter Additional Area 6				
Enter Additional Area 7				
Enter Additional Area 8				
Enter Additional Area 9				
Enter Additional Area 10				

23. Additional Commentary

Survey End – Survey Block 4

This block terminates the survey if the company is not currently using, not planning to use, or not exploring the use of AI/ML.

AI/ML Definitions and Taxonomy – Survey Block 5

This block does not contain any questions, only definitions and the ML Taxonomy.

Definition of Artificial Intelligence/Machine Learning for This Survey – Applicable to All Sections
For purposes of this survey, AI is defined as models that can simulate learning in performing tasks. ML is a subset of algorithms that facilitate 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.

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 ML Taxonomy below for an expanded list of ML techniques.

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

1. Static "scorecards" that deterministically map consumer or other risk characteristics to treatments or decisions. (However, an AI/ML system may use the output of such static "scorecards" as input data for the AI/ML system to consider.)
2. Systems with solely preprogrammed decision rules. (e.g., "If A, then B" applied invariably in all situations).
3. Tables of point or factor assignments in risk classes.
4. Deterministic "phone trees" that navigate consumers through prerecorded voice prompts.

Other definitions for purpose of this survey:

1. Automated Decision-Making: A process of making a decision by automated means with little to no human involvement.
2. Automated Machine Learning: Also referred to as automated ML or AutoML, is the process of automating machine learning functions such that little computer programming language development is required on the part of the user.
3. Vendor: A party usually external to the organization that provides third-party data or AI/ML models that are used by the insurance organization.

See Appendix A for ML Taxonomy.

Market Participation – Survey Block 6

This block of questions asks the company which markets it operates in. The responses will determine which block of questions are presented and show up in the table of contents. The question is depicted below. Markets are defined in the *Health Survey Filings Guidance and Definitions* document.

Question 6.1

Which markets do you write business in?

	Select all that apply.
Individual Major Medical	☐
Group Major Medical - Single Employer	☐
Group Major Medical - Other Employer	☐
Student Plans	☐

Table of Contents - Navigational

The table of contents is navigational and allows respondents to jump to different parts of the survey. This feature is very useful for assigning sections of the survey to different subject matter experts to fill out. It will appear after the product matrix questions. It is important that the primary contact for the company has complete survey blocks 1 through 4 before sending the survey link to assignees to complete their sections. The elements of the table of contents are delineated below.

Use this TOC to jump around in the survey.

Individual Major Medical – Survey Block 7

Question 7.1 - General Survey Instructions

This section of the survey asks you to discuss the AI/ML techniques you deploy in your Individual Major Medical block(s). The functions are:

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 issues
9. Sales & Marketing

You will also be asked to indicate the machine-learning techniques that are used in functional areas 1 – 8 at the end of the Individual Major Medical section.

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? (Y/N) If yes, which of the following rating factors are developed using AI?

    - Geography
    - Tobacco – do you screen for tobacco usage and price accordingly?
    - Age
    - Risk adjustment analysis
    - Social determinants of health
    - Claims history
    - PBM rebates
    - Trend – utilization, cost, and severity
    - Benefit relativity – Actuarial Value, cost-sharing, etc.
    - Network factors
    - Morbidity
    - Projected enrollment
    - State-sponsored subsidized programs
    - Other: Please list, i.e. biometrics, wearables, etc.

2. What is the current level of AI/ML Deployment? (Select the highest level of deployment)
    - Research
    - Proof of Concept
    - Prototype
    - Implemented in Production

    This question appears if you answered "Yes" to Question 1.

Question 7.3
For the "Other" response above, please list (i.e. biometrics, wearables, etc.)

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.? (Y/N)

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?

Question 7.6
If yes, what is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪   Research
▪   Proof of Concept
▪   Prototype
▪   Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.7
Does your company own provider groups? (Y/N)

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? If so, how is it being used?

Question 7.9
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪   Research
▪   Proof of Concept
▪   Prototype
▪   Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.10
Is your company owned by a provider group? (Y/N)

Question 7.11
If yes, 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?

Question 7.12
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪   Research

- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.13
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? (Y/N)

Question 7.14
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.15
If yes, provide details to include how AI is used to monitor adherence by the health plan, provider, and/or consumer.

Question 7.16
Does your company currently use, plan to use, or is exploring the use of AI/ML to analyze any of the following coding areas? (Y/N)

Question 7.17
If yes, please check all that apply (drop down with choices Rx inpatient, Rx outpatient, Behavioral Health inpatient, Behavioral Health outpatient, Medical Health inpatient, Medical Health outpatient)

Individual Major Medical - Claims Adjudication
Please check all coding areas where your company is currently use, plan to use, or is exploring to apply AI/ML.

	Yes	No
Rx Inpatient	○	○
Rx Outpatient	○	○
Behavioral Health Inpatient	○	○
Behavioral Health Outpatient	○	○
Medical Inpatient	○	○
Medical Outpatient	○	○

Question 7.18
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.19
Does your company currently use, plan to use, or is exploring the use of AI/ML for benefit eligibility determination? (Y/N)

Question 7.20
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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)? (Y/N)

Question 7.22
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.24
If yes, is human intervention required? (Y/N)

Question 7.25
If yes to 7.23, does the reimbursement amount change based on the negotiation results? (Y/N)

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? (Y/N)?

Question 7.27
If yes, please explain.

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? (Y/N)

Question 7.29

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.31

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.32

If yes, please check all that apply (drop down with choices Rx inpatient, Rx outpatient, Behavioral Health inpatient, Behavioral Health outpatient, Medical Health inpatient, Medical Health outpatient).

Individual Major Medical - Claims Adjudication
Please check all coding areas where your company is currently use, plan to use, or is exploring to apply AI/ML.

	Yes	No
Rx Inpatient	○	○
Rx Outpatient	○	○
Behavioral Health Inpatient	○	○
Behavioral Health Outpatient	○	○
Medical Inpatient	○	○
Medical Outpatient	○	○

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? (Y/N)

Question 7.34

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research

- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.35
If yes, please check all that apply (drop down with choices Rx inpatient, Rx outpatient, Behavioral Health inpatient, Behavioral Health outpatient, Medical Health inpatient, Medical Health outpatient).

Individual Major Medical - Claims Adjudication
Please check all coding areas where your company is currently use, plan to use, or is exploring to apply AI/ML.

	Yes	No
Rx Inpatient	○	○
Rx Outpatient	○	○
Behavioral Health Inpatient	○	○
Behavioral Health Outpatient	○	○
Medical Inpatient	○	○
Medical Outpatient	○	○

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? (Y/N)

Question 7.37
If yes, please elaborate.

Question 7.38
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.40
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.41
Does your company currently use, plan to use, or is exploring the use of AI/ML in your utilization management practices? (Y/N)

Question 7.42
If yes, please check all that apply (drop down with choices activities for improving health outcomes, activities to prevent hospital readmissions, activities to improve patient safety and reduce medical errors, activities for wellness and health promotions, activities to reduce health and health care disparities, formulary management, concurrent review, downcoding, prepayment review, clinical standards review, prospective review, and retrospective review.)

	Yes	No
Activities for improving health outcomes		
Activities to prevent hospital readmissions		
Activities to improve patient safety		
Activities to reduce medical errors		
Activities for wellness		
Activities for health promotions		
Activities to reduce health disparities		
Activities to reduce healthcare disparities		
Formulary management		
Concurrent review		
Downcoding		
Prepayment review		
Clinical standards review		
Prospective review		
Retrospective review		

Question 7.43
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research
▪ Proof of Concept
▪ Prototype
▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.45
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research

- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.47
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.48
Does your company currently use, plan to use, or is exploring the use of AI/ML to administer step therapy programs? (Y/N)

Question 7.49
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

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

Question 7.52
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.54
If so, what system/service/software is required and for what purpose?

Question 7.55
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research
▪ Proof of Concept
▪ Prototype
▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.57
If so, what system/service/software is required and for what purpose?

Question 7.58
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research
▪ Proof of Concept
▪ Prototype
▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.60
If so, what automated decisions are made by the vendors?

Question 7.61
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research
▪ Proof of Concept

- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.63
If yes, please elaborate.

Question 7.64
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.65
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wearable Devices? (Y/N)

Question 7.66
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.67
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wellness Initiatives? (Y/N)

Question 7.68
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.69

Does your company currently use, plan to use, or is exploring the use of AI/ML for Discount Medical Programs? (Y/N)

Question 7.70

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.71

Does your company currently use, plan to use, or is exploring the use of AI/ML for Technology to Detect Smoking? (Y/N)

Question 7.72

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.73

Does your company currently use, plan to use, or is exploring the use of AI/ML for Disease Detection? (Y/N)

Question 7.74

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.75

Does your company currently use, plan to use, or is exploring the use of AI/ML for Other Risk Management Functions? (Y/N)

Question 7.76

If yes, please elaborate.

Question 7.77
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.79
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.80
Does your company currently use, plan to use, or is exploring the use of AI/ML to model risk adjustment factors? (Y/N)

Question 7.81
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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)? (Y/N)

Question 7.83
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.85
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.86
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect medical provider fraud? (Y/N)

Question 7.87
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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)? (Y/N)

Question 7.89
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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 organized crime, but similar issues)? (Y/N)

Question 7.91
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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.)? (Y/N)

Question 7.93
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.95
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.96
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect prescription drug misuse? (Y/N)

Question 7.97
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.99
If yes, please elaborate.

Question 7.100
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N) If yes, please explain.

Question 7.102
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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?

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?

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.

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?

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.

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? (Y/N)

Question 7.109
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪   Research
▪   Proof of Concept
▪   Prototype
▪   Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.111
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪   Research
▪   Proof of Concept
▪   Prototype
▪   Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.113
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪   Research
▪   Proof of Concept
▪   Prototype

- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.115
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 7.116
Does your company currently use, plan to use, or is exploring the use of AI/ML for Demand Modeling? (Y/N)

Question 7.117
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 7.119
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

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.

Question 7.122
What percentage of your business reflects Generalized Linear Model?
- 0 to 25%
- More than 25% to 50%
- More than 50% to 75%
- More than 75% to 100%

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.

Functions	Machine Learning Techniques												
	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	COX	Other
Product Pricing and Plan Design	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Claims Adjudication	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Prior Authorization	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Utilization/Severity/Quality Management	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fraud Detection	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Risk Management	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Risk Adjustment	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Data Processing Issues	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Sales & Marketing	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Operations													

Question 7.124

Functions	List the Names of AI\ML Model in Use for Each Functional Areas
Product Pricing and Plan Design	
Claims Adjudication	
Prior Authorization	
Utilization/Severity/Quality Management	
Fraud Detection	
Risk Management	
Risk Adjustment	
Data Processing Issues	
Sales & Marketing	
Operations	

Question 7.125

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

Group Major Medical- Single Employer-Small Employer – Survey Block 8

Question 8.1 – General Survey Instructions

This section of the survey asks you to discuss the AI/ML techniques you deploy in your Group Major Medical - Single Employer - Small Employer block(s). The functions are:

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 issues
9. Sales & Marketing

You will also be asked to indicate the machine-learning techniques that are used in functional areas 1 – 8 at the end of the Group Major Medical - Single Employer - Small Employer section.

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? (Y/N) If yes, which of the following rating factors are developed using AI?

   - Geography
   - Tobacco – do you screen for tobacco usage and price accordingly?
   - Age
   - Risk adjustment analysis
   - Social determinants of health
   - Claims history
   - PBM rebates
   - Trend – utilization, cost, and severity
   - Benefit relativity – Actuarial Value, cost-sharing, etc.
   - Network factors
   - Morbidity
   - Projected enrollment
   - State-sponsored subsidized programs
   - Other: please list, i.e. biometrics, wearables, etc.

2. What is the current level of AI/ML Deployment? (Select the highest level of deployment)
   - Research
   - Proof of Concept
   - Prototype
   - Implemented in Production

Question 8.3

Additional Commentary

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.? (Y/N)

Question 8.5

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?

Question 8.6

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.7

Does your company own provider groups? (Y/N) If yes, for the areas in your business where AI/ML is in use, does that AI/ML process use data from these providers?

Question 8.8

If so, how is it being used?

Question 8.9

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.10

Is your company owned by a provider group? (Y/N)

Question 8.11

If yes, 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?

Question 8.12

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype

- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.13
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? (Y/N)

Question 8.14
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.15
If yes, provide details to include how AI is used to monitor adherence by the health plan, provider, and/or consumer.

Question 8.16
Does your company currently use, plan to use, or is exploring the use of AI/ML to analyze any of the following coding areas? (Y/N)

Question 8.17
If yes, please check all that apply (drop down with choices Rx inpatient, Rx outpatient, Behavioral Health inpatient, Behavioral Health outpatient, Medical Health inpatient, Medical Health outpatient)

	Yes	No
Rx Inpatient		
Rx Outpatient		
Behavioral Health Inpatient		
Behavioral Health Outpatient		
Medical Inpatient		
Medical Outpatient		

Question 8.18
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.19
Does your company currently use, plan to use, or is exploring the use of AI/ML for benefit eligibility determination? (Y/N)

Question 8.20
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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)? (Y/N)

Question 8.22
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.24
If yes, is human intervention required? (Y/N)

Question 8.25
If yes to 8.23, does the reimbursement amount change based on the negotiation results? (Y/N)

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? (Y/N)?

Question 8.27
If yes, please explain.

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? (Y/N)

Question 8.29

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.31

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.32

If yes, please check all that apply (drop down with choices Rx inpatient, Rx outpatient, Behavioral Health inpatient, Behavioral Health outpatient, Medical Health inpatient, Medical Health outpatient).

	Yes	No
Rx Inpatient		
Rx Outpatient		
Behavioral Health Inpatient		
Behavioral Health Outpatient		
Medical Inpatient		
Medical Outpatient		

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? (Y/N)

Question 8.34

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.35

If yes, please check all that apply (drop down with choices Rx inpatient, Rx outpatient, Behavioral Health inpatient, Behavioral Health outpatient, Medical Health inpatient, Medical Health outpatient).

	Yes	No
Rx Inpatient		
Rx Outpatient		
Behavioral Health Inpatient		
Behavioral Health Outpatient		
Medical Inpatient		
Medical Outpatient		

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? (Y/N)

Question 8.37

If yes, please elaborate.

Question 8.38

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.40

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.41

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

Question 8.42

If yes, please check all that apply (drop down with choices activities for improving health outcomes, activities to prevent hospital readmissions, activities to improve patient safety and reduce medical

errors, activities for wellness and health promotions, activities to reduce health and health care disparities, formulary management, concurrent review, downcoding, prepayment review, clinical standards review, prospective review, and retrospective review.)

	Yes	No
Activities for improving health outcomes		
Activities to prevent hospital readmissions		
Activities to improve patient safety		
Activities to reduce medical errors		
Activities for wellness		
Activities for health promotions		
Activities to reduce health disparities		
Activities to reduce healthcare disparities		
Formulary management		
Concurrent review		
Downcoding		
Prepayment review		
Clinical standards review		
Prospective review		
Retrospective review		

Question 8.43

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.45

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.47
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.48
Does your company currently use, plan to use, or is exploring the use of AI/ML to administer step therapy programs? (Y/N)

Question 8.49
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

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

Question 8.52
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.54
If so, what system/service/software is required and for what purpose?

Question 8.55
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.57
If so, what system/service/software is required and for what purpose?

Question 8.58
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.60
If so, what automated decisions are made by the vendors?

Question 8.61
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.63
If yes, please elaborate.

Question 8.64
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.65
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wearable Devices? (Y/N)

Question 8.66
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.67
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wellness Initiatives? (Y/N)

Question 8.68
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.69
Does your company currently use, plan to use, or is exploring the use of AI/ML for Discount Medical Programs? (Y/N)

Question 8.70
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept

- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.71
Does your company currently use, plan to use, or is exploring the use of AI/ML for Technology to Detect Smoking? (Y/N)

Question 8.72
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.73
Does your company currently use, plan to use, or is exploring the use of AI/ML for Disease Detection? (Y/N)

Question 8.74
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.75
Does your company currently use, plan to use, or is exploring the use of AI/ML for Other Risk Management Functions? (Y/N)

Question 8.76
If yes, please elaborate.

Question 8.77
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.79
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.80
Does your company currently use, plan to use, or is exploring the use of AI/ML to model risk adjustment factors? (Y/N)

Question 8.81
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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)? (Y/N)

Question 8.83
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.85
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research

- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.86
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect medical provider fraud? (Y/N)

Question 8.87
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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)? (Y/N)

Question 8.89
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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 organized crime, but similar issues)? (Y/N)

Question 8.91
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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.)? (Y/N)

Question 8.93

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.95

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.96

Does your company currently use, plan to use, or is exploring the use of AI/ML to detect prescription drug misuse? (Y/N)

Question 8.97

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N)

Question 8.99

If yes, please elaborate.

Question 8.100
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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? (Y/N) If yes, please explain.

Question 8.102
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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?

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?
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.

Question 8.105
Does your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for validity?

Question 8.106
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.

Question 8.107
Does your company currently use, plan to use, or is exploring the use of AI/ML for online advertising targeted towards consumers? (Y/N)

Question 8.108
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.109
Does your company currently use, plan to use, or is exploring the use of AI/ML to identify sales opportunities? (Y/N)

Question 8.110
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.111
Does your company currently use, plan to use, or is exploring the use of AI/ML to structure broker compensation? (Y/N)

Question 8.112
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.113
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? (Y/N)

Question 8.114
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research

- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.115
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? (Y/N)

Question 8.116
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.117
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? (Y/N)

Question 8.118
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.119
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? (Y/N)

Question 8.120
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.121
Does your company currently use, plan to use, or is exploring the use of AI/ML for Identification of Potential Customer Groups? (Y/N)

Question 8.122
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.123
Does your company currently use, plan to use, or is exploring the use of AI/ML for Demand Modeling? (Y/N)

Question 8.124
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.125
Does your company currently use, plan to use, or is exploring the use of AI/ML for online sales, quoting, or shopping experience? (Y/N)

Question 8.126
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.127
Does your company currently use, plan to use, or is exploring the use of AI/ML for other marketing-related solutions? (Y/N)

Question 8.128
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.

	Research	Proof of Concept	Prototype	Implemented in Production
Enter Additional Area 1	○	○	○	○
Enter Additional Area 2	○	○	○	○
Enter Additional Area 3	○	○	○	○
Enter Additional Area 4	○	○	○	○
Enter Additional Area 5	○	○	○	○
Enter Additional Area 6	○	○	○	○
Enter Additional Area 7	○	○	○	○
Enter Additional Area 8	○	○	○	○
Enter Additional Area 9	○	○	○	○
Enter Additional Area 10	○	○	○	○

Question 8.129

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 8.130

What percentage of your business reflects Generalized Linear Model?

- 0 to 25%
- More than 25% to 50%
- More than 50% to 75%
- More than 75% to 100%

Question 8.131

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.

Functions	Machine Learning Techniques												
	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	COX	Other
Product Pricing and Plan Design	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Claims Adjudication	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Prior Authorization	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Utilization/Severity/Quality Management	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fraud Detection	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Risk Management	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Risk Adjustment	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Functions	Machine Learning Techniques												
	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	COX	Other
Data Processing Issues	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Sales & Marketing	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Operations													

Question 8.132

Functions	List the Names of AI\ML Model in Use for Each Functional Areas
Product Pricing and Plan Design	
Claims Adjudication	
Prior Authorization	
Utilization/Severity/Quality Management	
Fraud Detection	
Risk Management	
Risk Adjustment	
Data Processing Issues	
Sales & Marketing Operations	

Question 8.133

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

Group Major Medical Single Employer - Other Employer – Survey Block 9

Question 9.1

This section of the survey asks you to discuss the AI/ML techniques you deploy in your Group Major Medical - Single Employer - Other Employer block(s). The functions are:

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 issues
9. Marketing

You will also be asked to indicate the machine-learning techniques that are used in functional areas 1 – 8 at the end of the Group Major Medical - Single Employer - Other Employer section.

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? (Y/N) If yes, which of the following rating factors are developed using AI?

   - Geography
   - Tobacco – do you screen for tobacco usage and price accordingly?
   - Age
   - Risk adjustment analysis
   - Social determinants of health
   - Claims history
   - PBM rebates
   - Trend – utilization, cost, and severity
   - Benefit relativity – Actuarial Value, cost-sharing, etc.
   - Network factors
   - Morbidity
   - Projected enrollment
   - State-sponsored subsidized programs
   - Other: please list, i.e. biometrics, wearables, etc.

2. What is the current level of AI/ML Deployment? (Select the highest level of deployment)
   - Research
   - Proof of Concept
   - Prototype
   - Implemented in Production

Question 9.3

Additional Commentary

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.? (Y/N)

Question 9.5
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?

Question 9.6
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.7
Does your company own provider groups? (Y/N) If yes, for the areas in your business where AI/ML is in use, does that AI/ML process use data from these providers?

Question 9.8
If so, how is it being used?

Question 9.9
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.10
Is your company owned by a provider group? (Y/N)

Question 9.11
If yes, 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?

Question 9.12
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.13
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? (Y/N)

Question 9.14
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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

Question 9.16
Does your company currently use, plan to use, or is exploring the use of AI/ML to analyze any of the following coding areas? (Y/N)

Question 9.17
If yes, please check all that apply (drop down with choices Rx inpatient, Rx outpatient, Behavioral Health inpatient, Behavioral Health outpatient, Medical Health inpatient, Medical Health outpatient).

	Yes	No
Rx Inpatient		
Rx Outpatient		
Behavioral Health Inpatient		
Behavioral Health Outpatient		
Medical Inpatient		
Medical Outpatient		

Question 9.18
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.19
Does your company currently use, plan to use, or is exploring the use of AI/ML for benefit eligibility determination? (Y/N)

Question 9.20

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.21

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)? (Y/N)

Question 9.22

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.23

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? (Y/N)

Question 9.24

If yes, is human intervention required? (Y/N)

Question 9.25

If yes to 9.23, does the reimbursement amount change based on the negotiation results? (Y/N)

Question 9.26

Does your company currently use, plan to use, or is exploring the use of AI/ML for any other claims adjudication functions? (Y/N)?

Question 9.27

If yes, please explain.

Question 9.28

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

Question 9.29

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research

- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.30
Does your company currently use, plan to use, or is exploring the use of AI/ML to review prior authorizations for approval? (Y/N)

Question 9.31
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.32
If yes, please check all that apply (drop down with choices Rx inpatient, Rx outpatient, Behavioral Health inpatient, Behavioral Health outpatient, Medical Health inpatient, Medical Health outpatient).

	Yes	No
Rx Inpatient		
Rx Outpatient		
Behavioral Health Inpatient		
Behavioral Health Outpatient		
Medical Inpatient		
Medical Outpatient		

Question 9.33
Does your company currently use, plan to use, or is exploring the use of AI/ML to review prior authorizations for denial? (Y/N)

Question 9.34
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.35
If yes, please check all that apply (drop down with choices Rx inpatient, Rx outpatient, Behavioral Health inpatient, Behavioral Health outpatient, Medical Health inpatient, Medical Health outpatient).

	Yes	No
Rx Inpatient		
Rx Outpatient		
Behavioral Health Inpatient		
Behavioral Health Outpatient		
Medical Inpatient		
Medical Outpatient		

Question 9.36

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

Question 9.37

If yes, please elaborate.

Question 9.38

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.39

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

Question 9.40

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.41

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

Question 9.42

If yes, please check all that apply (drop down with choices activities for improving health outcomes, activities to prevent hospital readmissions, activities to improve patient safety and reduce medical errors, activities for wellness and health promotions, activities to reduce health and health care disparities, formulary management, concurrent review, downcoding, prepayment review, clinical standards review, prospective review, and retrospective review).

	Yes	No
Activities for improving health outcomes		
Activities to prevent hospital readmissions		
Activities to improve patient safety		
Activities to reduce medical errors		
Activities for wellness		
Activities for health promotions		
Activities to reduce health disparities		
Activities to reduce healthcare disparities		
Formulary management		
Concurrent review		
Downcoding		
Prepayment review		
Clinical standards review		
Prospective review		
Retrospective review		

Question 9.43
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.44
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? (Y/N)

Question 9.45
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.46
Does your company currently use, plan to use, or is exploring the use of AI/ML to design or develop step therapy requirements? (Y/N)

Question 9.47
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research

- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.48
Does your company currently use, plan to use, or is exploring the use of AI/ML to administer step therapy programs? (Y/N)

Question 9.49
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.50
Does your company currently use, plan to use, or is exploring the use of AI/ML in any way in your provider contracting process? (Y/N)

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

Question 9.52
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.53
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? (Y/N)

Question 9.54
If so, what system/service/software is required and for what purpose?

Question 9.55
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept

- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.56

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? (Y/N)

Question 9.57

If so, what system/service/software is required and for what purpose?

Question 9.58

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.59

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? (Y/N)

Question 9.60

If so, what automated decisions are made by the vendors?

Question 9.61

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.62

Does your company currently use, plan to use, or is exploring use AI/ML for other utilization/severity/quality management related functions? (Y/N)

Question 9.63

If yes, please elaborate.

Question 9.64

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research

- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.65
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wearable Devices? (Y/N)

Question 9.66
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.67
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wellness Initiatives? (Y/N)

Question 9.68
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.69
Does your company currently use, plan to use, or is exploring the use of AI/ML for Discount Medical Programs? (Y/N)

Question 9.70
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.71

Does your company currently use, plan to use, or is exploring the use of AI/ML for Technology to Detect Smoking? (Y/N)

Question 9.72

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.73

Does your company currently use, plan to use, or is exploring the use of AI/ML for Disease Detection? (Y/N)

Question 9.74

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.75

Does your company currently use, plan to use, or is exploring the use of AI/ML for Other Risk Management Functions? (Y/N)

Question 9.76

If yes, please elaborate.

Question 9.77

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.78

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

Question 9.79

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.80

Does your company currently use, plan to use, or is exploring the use of AI/ML to model risk adjustment factors? (Y/N)

Question 9.81

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.82

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)? (Y/N)

Question 9.83

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.84

Does your company currently use, plan to use, or is exploring the use of AI/ML to detect and refer claims for potential fraud? (Y/N)

Question 9.85

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.86
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect medical provider fraud? (Y/N)

Question 9.87
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.88
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)? (Y/N)

Question 9.89
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.90
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect social network fraud (less sophisticated than organized crime, but similar issues)? (Y/N)

Question 9.91
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.92
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.)? (Y/N)

Question 9.93
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.94
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? (Y/N)

Question 9.95
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.96
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect prescription drug misuse? (Y/N)

Question 9.97
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.98
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect fraud other than those mentioned above? (Y/N)

Question 9.99
If yes, please elaborate.

Question 9.100
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype

- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.101
Does your company currently use, plan to use, or is exploring the use of AI/ML to impute race or any other data values? (Y/N) If yes, please explain.

Question 9.102
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.103
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?

Question 9.104
Does your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for accuracy?
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.

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 validity?

Question 9.106
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.

Question 9.107
Does your company currently use, plan to use, or is exploring the use of AI/ML for online advertising targeted towards consumers? (Y/N)

Question 9.108
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.109
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? (Y/N)

Question 9.110
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.111
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? (Y/N)

Question 9.112
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.113
Does your company currently use, plan to use, or is exploring the use of AI/ML to identify sales opportunities? (Y/N)

Question 9.114
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.115
Does your company currently use, plan to use, or is exploring the use of AI/ML to structure broker compensation? (Y/N)

Question 9.116
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.117
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? (Y/N)

Question 9.118
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.119
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? (Y/N)

Question 9.120
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.121
Does your company currently use, plan to use, or is exploring the use of AI/ML for Identification of Potential Customer Groups? (Y/N)

Question 9.122
What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.123
Does your company currently use, plan to use, or is exploring the use of AI/ML for Demand Modeling? (Y/N)

Question 9.124
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.125
Does your company currently use, plan to use, or is exploring the use of AI/ML for online sales, quoting, or shopping experience? (Y/N)

Question 9.126
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 9.127
Does your company currently use, plan to use, or is exploring the use of AI/ML for other sales & marketing-related solutions? (Y/N)

Question 9.128
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.

	⊘ Research	Proof of Concept	Prototype	Implemented in Production
Enter Additional Area 1	○	○	○	○
Enter Additional Area 2	○	○	○	○
Enter Additional Area 3	○	○	○	○
Enter Additional Area 4	○	○	○	○
Enter Additional Area 5	○	○	○	○
Enter Additional Area 6	○	○	○	○
Enter Additional Area 7	○	○	○	○
Enter Additional Area 8	○	○	○	○
Enter Additional Area 9	○	○	○	○
Enter Additional Area 10	○	○	○	○

This question appears if you answered "Yes" to the previous question.

Question 9.129

What percentage of your business reflects Generalized Linear Model?
- 0 to 25%
- More than 25% to 50%
- More than 50% to 75%
- More than 75% to 100%

Question 9.130

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.

Functions	Machine Learning Techniques												
	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	COX	Other
Product Pricing and Plan Design	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Claims Adjudication	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Prior Authorization	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Utilization/Severity/Quality Management	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fraud Detection	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Risk Management	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Risk Adjustment	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Data Processing Issues	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Sales & Marketing	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Operations													

Question 9.131

Functions	List the Names of AI\ML Model in Use for Each Functional Areas
Product Pricing and Plan Design	
Claims Adjudication	
Prior Authorization	
Utilization/Severity/Quality Management	
Fraud Detection	
Risk Management	
Risk Adjustment	
Data Processing Issues	
Sales & Marketing Operations	

Question 9.132

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

Student Plans – Survey Block 10

Question 10.1

This section of the survey asks you to discuss the AI/ML techniques you deploy in your Student block(s). The functions are:

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 issues
9. Marketing

You will also be asked to indicate the machine-learning techniques that are used in functional areas 1 – 8 at the end of the Student section.

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? (Y/N) If yes, which of the following rating factors are developed using AI?

   - Geography
   - Tobacco – do you screen for tobacco usage and price accordingly?
   - Age
   - Risk adjustment analysis
   - Social determinants of health
   - Claims history
   - PBM rebates
   - Trend – utilization, cost, and severity
   - Benefit relativity – Actuarial Value, cost-sharing, etc.
   - Network factors
   - Morbidity
   - Projected enrollment
   - State-sponsored subsidized programs
   - Other: please list, i.e. biometrics, wearables, etc.

2. What is the current level of AI/ML Deployment? (Select the highest level of deployment)
   - Research
   - Proof of Concept
   - Prototype
   - Implemented in Production

This question appears if you answered "Yes" to Question 1

Question 10.3
Additional Commentary.

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.? (Y/N)

Question 10.5
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?

Question 10.6
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research
▪ Proof of Concept
▪ Prototype
▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.7
Does your company own provider groups? (Y/N)

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? If so, how is it being used?

Question 10.9
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research
▪ Proof of Concept
▪ Prototype
▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.10
Is your company owned by a provider group? (Y/N)

Question 10.11
If yes, 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?

Question 10.12
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research

- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.13
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? (Y/N)

Question 10.14
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

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

Question 10.16
Does your company currently use, plan to use, or is exploring the use of AI/ML to analyze any of the following coding areas? (Y/N)

Question 10.17
Please check all coding areas where your company is currently use, plan to use, or is exploring to apply AI/ML.

	Yes	No
Rx Inpatient	○	○
Rx Outpatient	○	○
Behavioral Health Inpatient	○	○
Behavioral Health Outpatient	○	○
Medical Inpatient	○	○
Medical Outpatient	○	○

Question 10.18
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.19
Does your company currently use, plan to use, or is exploring the use of AI/ML for benefit eligibility determination? (Y/N)

Question 10.20
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.21
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)? (Y/N)

Question 10.22
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.23
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? (Y/N)

Question 10.24
If yes, is human intervention required? (Y/N)

Question 10.25
If yes to 10.23, does the reimbursement amount change based on the negotiation results? (Y/N)

Question 10.26
Does your company currently use, plan to use, or is exploring the use of AI/ML for any other claims adjudication functions? (Y/N)?

Question 10.27
If yes, please explain.

Question 10.28
Does your company currently use, plan to use, or is exploring the use of AI/ML to determine whether prior authorization is required? (Y/N)

Question 10.29

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.30

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

Question 10.31

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.32

If yes, please check all that apply (drop down with choices Rx inpatient, Rx outpatient, Behavioral Health inpatient, Behavioral Health outpatient, Medical Health inpatient, Medical Health outpatient).

	Yes	No
Rx Inpatient		
Rx Outpatient		
Behavioral Health Inpatient		
Behavioral Health Outpatient		
Medical Inpatient		
Medical Outpatient		

Question 10.33

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

Question 10.34

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.35

If yes, please check all that apply (drop down with choices Rx inpatient, Rx outpatient, Behavioral Health inpatient, Behavioral Health outpatient, Medical Health inpatient, Medical Health outpatient).

	Yes	No
Rx Inpatient		
Rx Outpatient		
Behavioral Health Inpatient		
Behavioral Health Outpatient		
Medical Inpatient		
Medical Outpatient		

Question 10.36

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

Question 10.37

If yes, please elaborate.

Question 10.38

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.39

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

Question 10.40

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.41

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

Question 10.42

If yes, please check all that apply (drop down with choices activities for improving health outcomes, activities to prevent hospital readmissions, activities to improve patient safety and reduce medical errors, activities for wellness and health promotions, activities to reduce health and health care disparities, formulary management, concurrent review, downcoding, prepayment review, clinical standards review, prospective review, and retrospective review.)

	Yes	No
Activities for improving health outcomes		
Activities to prevent hospital readmissions		
Activities to improve patient safety		
Activities to reduce medical errors		
Activities for wellness		
Activities for health promotions		
Activities to reduce health disparities		
Activities to reduce healthcare disparities		
Formulary management		
Concurrent review		
Downcoding		
Prepayment review		
Clinical standards review		
Prospective review		
Retrospective review		

Question 10.43

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.44

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? (Y/N)

Question 10.45

What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.46

Does your company currently use, plan to use, or is exploring the use of AI/ML to design or develop step therapy requirements? (Y/N)

Question 10.47

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.48

Does your company currently use, plan to use, or is exploring the use of AI/ML to administer step therapy programs? (Y/N)

Question 10.49

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.50

Does your company currently use, plan to use, or is exploring the use of AI/ML in any way in your provider contracting process? (Y/N)

Question 10.51

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

Question 10.52

What is the current level of AI/ML Deployment? (Select the highest level of deployment)

- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.53

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? (Y/N)

Question 10.54
If so, what system/service/software is required and for what purpose?

Question 10.55
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.56
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? (Y/N)

Question 10.57
If so, what system/service/software is required and for what purpose?

Question 10.58
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.59
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? (Y/N)

Question 10.60
If so, what automated decisions are made by the vendors?

Question 10.61
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production
This question appears if you answered "Yes" to the previous question.

Question 10.62
Does your company currently use, plan to use, or is exploring use AI/ML for other utilization/severity/ quality management related functions? (Y/N)

Question 10.63
If yes, please elaborate.

Question 10.64
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.65
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wearable Devices? (Y/N)

Question 10.66
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.67
Does your company currently use, plan to use, or is exploring the use of AI/ML for Wellness Initiatives? (Y/N)

Question 10.68
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.69
Does your company currently use, plan to use, or is exploring the use of AI/ML for Discount Medical Programs? (Y/N)

Question 10.70
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.71
Does your company currently use, plan to use, or is exploring the use of AI/ML for Technology to Detect Smoking? (Y/N)

Question 10.72
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.73
Does your company currently use, plan to use, or is exploring the use of AI/ML for Disease Detection? (Y/N)

Question 10.74
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.75
Does your company currently use, plan to use, or is exploring the use of AI/ML for Other Risk Management Functions? (Y/N)

Question 10.76
If yes, please elaborate.

Question 10.77
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept

- ▪ Prototype
- ▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.78
Does your company currently use, plan to use, or is exploring the use of AI/ML to inform methodologies around risk adjustment? (Y/N)

Question 10.79
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- ▪ Research
- ▪ Proof of Concept
- ▪ Prototype
- ▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.80
Does your company currently use, plan to use, or is exploring the use of AI/ML to model risk adjustment factors? (Y/N)

Question 10.81
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- ▪ Research
- ▪ Proof of Concept
- ▪ Prototype
- ▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.82
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)? (Y/N)

Question 10.83
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- ▪ Research
- ▪ Proof of Concept
- ▪ Prototype
- ▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.84

Does your company currently use, plan to use, or is exploring the use of AI/ML to detect and refer claims for potential fraud? (Y/N)

Question 10.85
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research
▪ Proof of Concept
▪ Prototype
▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.86
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect medical provider fraud? (Y/N)

Question 10.87
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research
▪ Proof of Concept
▪ Prototype
▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.88
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)? (Y/N)

Question 10.89
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research
▪ Proof of Concept
▪ Prototype
▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.90
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect social network fraud (less sophisticated than organized crime, but similar issues)? (Y/N)

Question 10.91
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.92
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.)? (Y/N)

Question 10.93
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.94
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? (Y/N)

Question 10.95
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.96
Does your company currently use, plan to use, or is exploring the use of AI/ML to detect prescription drug misuse? (Y/N)

Question 10.97
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.98

Does your company currently use, plan to use, or is exploring the use of AI/ML to detect fraud other than those mentioned above? (Y/N)

Question 10.99
If yes, please elaborate.

Question 10.100
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.101
Does your company currently use, plan to use, or is exploring the use of AI/ML to impute race or any other data values? (Y/N) If yes, please explain.

Question 10.102
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.103
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?

Question 10.104
Does your company test any of the following types of data (internal, external, algorithmic outcomes) used in modeling or resulting from modeling for accuracy?

Question 10.105
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.

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 validity?

Question 10.107
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.

Question 10.108
Does your company currently use, plan to use, or is exploring the use of AI/ML for online advertising targeted towards consumers? (Y/N)

Question 10.109
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research
▪ Proof of Concept
▪ Prototype
▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.110
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? (Y/N)

Question 10.111
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research
▪ Proof of Concept
▪ Prototype
▪ Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.112
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? (Y/N)

Question 10.113
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
▪ Research
▪ Proof of Concept
▪ Prototype

- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.114
Does your company currently use, plan to use, or is exploring the use of AI/ML to identify sales opportunities? (Y/N)

Question 10.115
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.116
Does your company currently use, plan to use, or is exploring the use of AI/ML to structure broker compensation? (Y/N)

Question 10.117
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.118
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? (Y/N)

Question 10.119
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.120
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? (Y/N)

Question 10.121
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.122
Does your company currently use, plan to use, or is exploring the use of AI/ML for Identification of Potential Customer Groups? (Y/N)

Question 10.123
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.124
Does your company currently use, plan to use, or is exploring the use of AI/ML for Demand Modeling? (Y/N)

Question 10.125
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.126
Does your company currently use, plan to use, or is exploring the use of AI/ML for online sales, quoting, or shopping experience? (Y/N)

Question 10.127
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.128
Does your company currently use, plan to use, or is exploring the use of AI/ML for other sales & marketing-related solutions? (Y/N)

Question 10.129
What is the current level of AI/ML Deployment? (Select the highest level of deployment)
- Research
- Proof of Concept
- Prototype
- Implemented in Production

This question appears if you answered "Yes" to the previous question.

Question 10.130
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.

	Research	Proof of Concept	Prototype	Implemented in Production
Enter Additional Area 1	○	○	○	○
Enter Additional Area 2	○	○	○	○
Enter Additional Area 3	○	○	○	○
Enter Additional Area 4	○	○	○	○
Enter Additional Area 5	○	○	○	○
Enter Additional Area 6	○	○	○	○
Enter Additional Area 7	○	○	○	○
Enter Additional Area 8	○	○	○	○
Enter Additional Area 9	○	○	○	○
Enter Additional Area 10	○	○	○	○

Question 10.131
What percentage of your business reflects Generalized Linear Model?
- 0 to 25%
- More than 25% to 50%
- More than 50% to 75%
- More than 75% to 100%

Question 10.132
Indicate by checking the boxes below for the machine-learning techniques that are used in each of the listed functional areas for Student.

Functions	Machine Learning Techniques												
	DL	ENS	NN	LLM	RS	RGS	BAY	DT	DR	IB	CLU	COX	Other
Product Pricing and Plan Design	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Claims Adjudication	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Prior Authorization	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Utilization/Severity/Quality Management	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fraud Detection	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Risk Management	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Risk Adjustment	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Data Processing Issues	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Sales & Marketing	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Operations													

Question 10.133

Functions	List the Names of AI\ML Model in Use for Each Functional Areas
Product Pricing and Plan Design	
Claims Adjudication	
Prior Authorization	
Utilization/Severity/Quality Management	
Fraud Detection	
Risk Management	
Risk Adjustment	
Data Processing Issues	
Sales & Marketing	
Operations	

Question 10.134
Please provide any additional comments related to the use of AI/ML in Student.

AI Testing – Survey Block 11

Question 11.1: Does your company test for bias in modeling data?

- Yes
- No

Question 11.1A: Discuss how you test for bias in modeling data

Question 11.2: Does your company test for bias in algorithmic outcomes?

- Yes
- No

Question 11.2A: Discuss how you test for bias ins algorithmic outcomes.

Question 11.3: Does your company test for model drift?

- Yes
- No

Question 11.3A: Discuss how you test for model drift.

Question 11.3B: How do you ensure your model has not drifted over time? Describe the methodologies you apply to track model drift.

Question 11.4: Does your company apply statistical methods to infer protected class characteristics?

- Yes
- No

Question 11.4A: What protected class characteristics do you infer and what do you use to in them?

Question 11.5: Does you company conduct audits on its AI/ML models?

Question 11.5A: Please discuss the type of audits conducted and provided the elements of the report?

Question 11.6: Does you 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

AI Governance - NAIC AI Principles Compliance – Survey Block 12

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?

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? (Y/N). If so, how, when, and where is it disclosed?

Question 12.3

If model governance is in place, please check (Yes/No) if the following areas are documented in your governance program. 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 for the governance levels and maturity to be commensurate with the maturity level and risk associated with the program.

	Fair and Ethical		Accountable		Compliant		Transparent		Secure, Safe and Robust	
Select the appropriate radio	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Product Pricing and Plan Design	o	o	o	o	o	o	o	o	o	o
Claims Adjudication	o	o	o	o	o	o	o	o	o	o
Prior Authorization	o	o	o	o	o	o	o	o	o	o
Utilization/Severity/Quality Management	o	o	o	o	o	o	o	o	o	o
Fraud Detection	o	o	o	o	o	o	o	o	o	o
Risk Management	o	o	o	o	o	o	o	o	o	o
Risk Adjustment	o	o	o	o	o	o	o	o	o	o
Data Processing Issues	o	o	o	o	o	o	o	o	o	o
Sales & Marketing	o	o	o	o	o	o	o	o	o	o
Operations										

Question 12.4

Have you adopted practices with respect to Accountability for Data Algorithms' Compliance with Laws for each operational area below?

Select the appropriate radio	Yes	No
Product Pricing and Plan Design	o	o
Claims Adjudication	o	o
Prior Authorization	o	o
Utilization/Severity/Quality Management		o
Fraud Detection	o	o
Risk Management	o	o
Risk Adjustment	o	o
Data Processing Issues	o	o
Sales & Marketing	o	o
Operations		

Question 12.5

The next ten questions will only display if "Yes" is selected in companion areas above.

1. Briefly describe your practices with respect to Accountability for Data Algorithms' Compliance with Laws in Product Pricing and Plan Design.

2. Briefly describe your practices with respect to Accountability for Data Algorithms' Compliance with Laws in Claims Adjudication.

3. Briefly describe your practices with respect to Accountability for Data Algorithms' Compliance with Laws in Prior Authorization.

4. Briefly describe your practices with respect to Accountability for Data Algorithms' Compliance with Laws in Utilization/Severity/Quality Management.

5. Briefly describe your practices with respect to Accountability for Data Algorithms' Compliance with Laws in Fraud Detection.
6. Briefly describe your practices with respect to Accountability for Data Algorithms' Compliance with Laws in Risk Management.

7. Briefly describe your practices with respect to Accountability for Data Algorithms' Compliance with Laws in Risk Adjustment.

8. Briefly describe your practices with respect to Accountability for Data Algorithms' Compliance with Laws in Data Processing Issues.

9. Briefly describe your practices with respect to Accountability for Data Algorithms' Compliance with Laws in Sales & Marketing.

10. Briefly describe your practices with respect to Accountability for Data Algorithms' Compliance with Laws in Operations.

Question 12.6

Have you adopted practices with respect to Accountability for Data Algorithms' Intended Impacts for each operational area below?

Select the appropriate radio	Yes	No
Product Pricing and Plan Design	o	o
Claims Adjudication	o	o
Prior Authorization	o	o
Utilization/Severity/Quality Management		o
Fraud Detection	o	o
Risk Management	o	o
Risk Adjustment	o	o
Data Processing Issues	o	o
Sales & Marketing	o	o
Operations		

Question 12.7

The next ten questions will only display if "Yes" is selected in companion areas above.

1. Briefly describe your practices with respect to Accountability for Data Algorithms' Intended Impacts in Product Pricing and Plan Design.

2. Briefly describe your practices with respect to Accountability for Data Algorithms' Intended Impacts in Claims Adjudication.

3. Briefly describe your practices with respect to Accountability for Data Algorithms' Intended Impacts in Prior Authorization.

4. Briefly describe your practices with respect to Accountability for Data Algorithms' Intended Impacts in Utilization/Severity/Quality Management.

5. Briefly describe your practices with respect to Accountability for Data Algorithms' Intended Impacts in Fraud Detection.

6. Briefly describe your practices with respect to Accountability for Data Algorithms' Intended Impacts in Risk Management.
7. Briefly describe your practices with respect to Accountability for Data Algorithms' Intended Impacts in Risk Adjustment.

8. Briefly describe your practices with respect to Accountability for Data Algorithms' Intended Impacts in Data Processing Issues.

9. Briefly describe your practices with respect to Accountability for Data Algorithms' Intended Impacts in Sales & Marketing.

10. Briefly describe your practices with respect to Accountability for Data Algorithms' Intended Impacts in Operations.

Question 12.8
Have you adopted practices with respect to Accountability for Data Algorithms' Unintended Impacts for each operational area below?

Select the appropriate radio	Yes	No
Product Pricing and Plan Design	o	o
Claims Adjudication	o	o
Prior Authorization	o	o
Utilization/Severity/Quality Management		o
Fraud Detection	o	o
Risk Management	o	o

Select the appropriate radio	Yes	No
Risk Adjustment	o	o
Data Processing Issues	o	o
Sales & Marketing	o	o
Operations		

Question 12.9
The next ten questions will only display if "Yes" is selected in companion areas above.

1. Briefly describe your practices with respect to Accountability for Data Algorithms' Untended Impacts in Product Pricing and Plan Design.

2. Briefly describe your practices with respect to Accountability for Data Algorithms' Untended Impacts in Claims Adjudication.

3. Briefly describe your practices with respect to Accountability for Data Algorithms' Untended Impacts in Prior Authorization.
4. Briefly describe your practices with respect to Accountability for Data Algorithms' Untended Impacts in Utilization/Severity/Quality Management.

5. Briefly describe your practices with respect to Accountability for Data Algorithms' Untended Impacts in Fraud Detection.

6. Briefly describe your practices with respect to Accountability for Data Algorithms' Untended Impacts in Risk Management.

7. Briefly describe your practices with respect to Accountability for Data Algorithms' Untended Impacts in Risk Adjustment.

8. Briefly describe your practices with respect to Accountability for Data Algorithms' Untended Impacts in Data Processing Issues.

9. Briefly describe your practices with respect to Accountability for Data Algorithms' Untended Impacts in Sales & Marketing.

10. Briefly describe your practices with respect to Accountability for Data Algorithms' Untended Impacts in Operations.

Question 12.10

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?

Select the appropriate radio	Yes	No
Product Pricing and Plan Design	o	o
Claims Adjudication	o	o
Prior Authorization	o	o
Utilization/Severity/Quality Management		o
Fraud Detection	o	o
Risk Management	o	o
Risk Adjustment	o	o
Data Processing Issues	o	o
Sales & Marketing	o	o
Operations		

Question 12.11

The next ten questions will only display if "Yes" is selected in companion areas above.

1. Briefly describe your practices with respect to Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination in Product Pricing and Plan Design.

2. Briefly describe your practices with respect to Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination in Claims Adjudication.

3. Briefly describe your practices with respect to Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination in Prior Authorization.

4. Briefly describe your practices with respect to Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination in Utilization/Severity/Quality Management

5. Briefly describe your practices with respect to Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination in Fraud Detection.

6. Briefly describe your practices with respect to Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination in Risk Management.

7. Briefly describe your practices with respect to Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination in Risk Adjustment.

8. Briefly describe your practices with respect to Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination in Data Processing Issues.

9. Briefly describe your practices with respect to Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination in Sales & Marketing.

10. Briefly describe your practices with respect to Appropriate Resources and Knowledge Involved to Ensure Compliance with Laws Including those Related to Unfair Discrimination in Operations.

Question 12.12
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?

Select the appropriate radio	Yes	No
Product Pricing and Plan Design	o	o
Claims Adjudication	o	o
Prior Authorization	o	o
Utilization/Severity/Quality Management		o
Fraud Detection	o	o

Select the appropriate radio	Yes	No
Risk Management	o	o
Risk Adjustment	o	o
Data Processing Issues	o	o
Sales & Marketing	o	o
Operations		

Question 12.13

The next ten questions will only display if "Yes" is selected in companion areas above.

1. Briefly describe your practices with respect 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 in Product Pricing and Plan Design.

2. Briefly describe your practices with respect 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 in Claims Adjudication.

3. Briefly describe your practices with respect 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 in Prior Authorization.

4. Briefly describe your practices with respect 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 in Utilization/Severity/Quality Management.

5. Briefly describe your practices with respect 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 in Fraud Detection.

6. Briefly describe your practices with respect 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 in Risk Management.

7. Briefly describe your practices with respect 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 in Risk Adjustment.

8. Briefly describe your practices with respect 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 in Data Processing Issues.

9. Briefly describe your practices with respect 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 in Sales & Marketing.

10. Briefly describe your practices with respect 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 in Operations.

Question 12.14

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?

Select the appropriate radio	Yes	No
Product Pricing and Plan Design	o	o
Claims Adjudication	o	o
Prior Authorization	o	o
Utilization/Severity/Quality Management		o
Fraud Detection	o	o
Risk Management	o	o
Risk Adjustment	o	o
Data Processing Issues	o	o
Sales & Marketing	o	o
Operations		

Question 12.15

The next ten questions will only display if "Yes" is selected in companion areas above.

1. Briefly describe your 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.

2. Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections in Claims Adjudication.

3. Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections in Prior Authorization.

4. Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections in Utilization/Severity/Quality Management.

5. Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections in Fraud Detection.

6. Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections in Risk Management.

7. Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections in Risk Adjustment.

8. Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections in Data Processing Issues.

9. Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections in Sales & Marketing.

10. Briefly describe your practices with respect to AI Systems are Secure, Safe and Robust including Decision Traceability and Security and Privacy Risk Protections in Operations.

Question 12.16

Select the appropriate radio

Enter your response in space	1. Do you follow some other existing standards or guidance in regard to governance framework?	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?
Product Pricing and Plan Design		
Claims Adjudication		
Prior Authorization		
Utilization/Severity/Quality Management		
Fraud Detection		
Risk Management		

Enter your response in space	1. Do you follow some other existing standards or guidance in regard to governance framework?	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?
Risk Adjustment		
Data Processing Issues		
Sales & Marketing		
Operations		

The three options for the radio button are:
- Developed internally.
- Provided by a third-party
- A hybrid of internally developed and third-party components

Question 12.17

If any standards or guidance are provided by a third party, please provide the following:

Enter your response in space	Name of the Third-Party	Components of the Governance Framework provided by Third-Party
Product Pricing and Plan Design		
Claims Adjudication		
Prior Authorization		
Utilization/Severity/Quality Management		
Fraud Detection		
Risk Management		
Risk Adjustment		
Data Processing Issues		
Sales & Marketing		
Operations		

Question 12.18

Enter your response in space	1. What is the process, if any, that your company has for providing consumers with the data elements used in consumer impact models?	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?
Product Pricing and Plan Design		
Claims Adjudication		
Prior Authorization		
Utilization/Severity/Quality Management		
Fraud Detection		
Risk Management		
Risk Adjustment		
Data Processing Issues		
Sales & Marketing		
Operations		

Question 12.19

Non-FCRA Data Disclosure

Select the appropriate radio	Are the consumers made aware of what non-FCRA data is collected, when it is used, and how it is used?	
	Yes	No
Product Pricing and Plan Design	o	o
Claims Adjudication	o	o
Prior Authorization	o	o
Utilization/Severity/Quality Management	o	o
Fraud Detection	o	o
Risk Management	o	o
Risk Adjustment	o	o
Data Processing Issues	o	o

Select the appropriate radio	Are the consumers made aware of what non-FCRA data is collected, when it is used, and how it is used?	
Sales & Marketing	o	o
Operations		

Question 12.20

The next ten survey requests will only display if "Yes" is selected in companion areas above.

1. Explain Process for Product Pricing and Plan Design

2. Explain Process for Claims Adjudication

3. Explain Process for Prior Authorization

4. Explain Process for Utilization/Severity/Quality Management

5. Explain Process for Fraud Detection

6. Explain Process for Risk Management

7. Explain Process for Risk Adjustment

8. Explain Process for Data Processing Issues

9. Explain Process for Sale & Marketing

10. Explain Process for Operations

Question 12.21

FCRA Data

Select the appropriate radio	If you are using data not included in FCRA, do consumers have an opportunity to correct?	
	Yes	No
Product Pricing and Plan Design	o	o
Claims Adjudication	o	o
Prior Authorization	o	o

Utilization/Severity/Quality Management	o	o
Fraud Detection	o	o
Risk Management	o	o
Risk Adjustment	o	o
Data Processing Issues	o	o
Sales & Marketing	o	o
Operations		

Question 12.22
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?	How are results monitored?
Product Pricing and Plan Design		
Claims Adjudication		
Prior Authorization		
Utilization/Severity/Quality Management		
Fraud Detection		
Risk Management		
Risk Adjustment		
Data Processing Issues		
Sales & Marketing		
Operations		

Question 12.23
Do you have a process for applicants for health insurance to contest an adverse underwriting decision? (Y/N)

Question 12.24
Do you keep a log of the number of contested underwriting decisions? (Y/N)

Question 12.25
Does AI/ML delivery, testing, monitoring, or governance differ based on line of business, state, or region? (Y/N)

Question 12.26
 How does the use or governance of AI/ML differ by line of business, state, or region?

This question appears if you answered "Yes" to the previous question.

Question 12.27
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

Question 12.27A: 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.

Question 12.28
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.

Appendix A: Machine Learning Taxonomy

The machine learning (ML) taxonomy provides a listing of ML algorithms that fall under each category that makes up an ML taxonomy. The list is representative but not exhaustive. This is one of many existing ML taxonomies. Some include more or fewer techniques than depicted below, more out of convenience than structure.

Machine Learning Taxonomy Techniques

Generally, the most common techniques are reflected in each category below. If the technique you are using is not represented by one of the categories below, select the other category and enter the ML type in the indicated column. You may enter more than one ML type separated by commas. Each category below is represented in the spreadsheet by the abbreviation in parentheses.

1. **Deep Learning (DL)**
   a. Deep Boltzmann Machine (DBM)
   b. Deep Belief Network (DBN)
   c. Convolutional Neural Network (CNN)
   d. Stacked Auto-Encoder
2. **Ensemble (ENS)**
   a. Random Forest
   b. Gradient Boosting Machine (GBM)
   c. Bootstrapped Aggregation (Bagging)
   d. AdaBoost
   e. Stacked Generalization (Blending)
   f. Gradient Boosted Regression Trees
3. **Neural Networks (NN)**
   a. Radial Basis Function Network (RBFN)
   b. Perceptron
   c. Back-Propagation
   d. Hopfield Network
4. **Regularization (REG)**
   a. Ridge Regression
   b. Least Absolute Shrinkage and Selection Operator (LASSO)
   c. Elastic Net
   d. Least Angle Regression (LARS)
5. **Rule System (RS)**
   a. Cubist
   b. One Rule (OneR)
   c. Zero Rule (ZeroR)
   d. Repeated Incremental Pruning to Produce Error Reduction (RIPPER)
6. **Large Language Models (LLM), such as**
   a. ChatGPT
   b. GPT – 3.5
   c. GPT – 4.0
   d. Gemini
   e. Cohere
   f. Claude
   g. LLaMA
   h. XLNet

      i. BERT
      j. Ernie

7. Bayesian (BAY)
    a. Naïve Bayes
    b. Averaged One-Dependence Estimators (AODE)
    c. Bayesian Belief Network (BBN)
    d. Gaussian Naïve Bayes
    e. Multinomial Naïve Bayes
    f. Bayesian Network (BN)

8. Decision Tree (DT)
    a. Classification and Regression Tree (CART)
    b. Iterative Dichotomiser (ID3)
    c. C4.5
    d. C5.0
    e. Chi-Square Automatic Interaction Detection (CHAID)
    f. Decision Stump
    g. Conditional Decision Trees
    h. M5

9. Dimensionality Reduction (DR)
    a. Principal Component Analysis (PCA)
    b. Partial Least Squares Regression (PLSR)
    c. Sammon Mapping
    d. Multidimensional Scaling (MDS)
    e. Project Pursuit
    f. Principal Component Regression (PCR)
    g. Partial Least Squares Discriminant Analysis
    h. Mixture Discriminant Analysis (MDA)
    i. Quadratic Discriminant Analysis (QDA)
    j. Regularized Discriminant Analysis (RDA)
    k. Flexible Discriminate Analysis (FDA)
    l. Linear Discriminant Analysis (LDA)

10. Instance-Based (IB)
    a. k-Nearest Neighbor (KNN)
    b. Learning Vector Quantization (LVQ)
    c. Self-Organizing Map (SOM)
    d. Locally Weighted Learning (LWL)

11. Clustering (CLU)
    a. k-Means
    b. k-Medians
    c. Expectation Maximization
    d. Hierarchical Clustering

12. Cox Regression (COX)

Appendix B: Table of Contents

The Table of Contents

The table of contents is navigational and allows respondents to jump to different parts of the survey. This feature is very useful for assigning sections of the survey to different subject matter experts to fill out. It will appear after the product matrix questions. It is important that the primary contact for the company complete the prior sections 1 through 7 as depicted above before sending the survey link to assignees to complete their sections. The elements of the table of contents are delineated below.

Use this TOC to jump around in the survey.