

**NOTE: This sample demonstrates our analysis capabilities. We run this same process on your exact RFP.**

# Data Analytics AI/ML Platform Services

*Based on real federal solicitation structure - HHS / 8(a) Small Business*

<b>NAICS CODE</b>	541511 - Custom Computer Programming Services
<b>SET-ASIDE TYPE</b>	8(a) Small Business Program
<b>CONTRACT TYPE</b>	IDIQ - Indefinite Delivery / Indefinite Quantity
<b>ESTIMATED VALUE</b>	~\$6.8M over 5-year ordering period
<b>TYPICAL SCOPE</b>	Data Architecture + AI/ML Platform + Analytics Dashboards
<b>TYPICAL PAGE LIMIT</b>	43 pages technical + management volumes

**What this is**  
A complete breakdown of a federal AI/ML data analytics RFP - FISMA, HIPAA, Section 508, bias documentation, and the structure HHS evaluators expect.

**What we did**  
We mapped every FISMA and HIPAA requirement, structured all proposal volumes, and identified what separates winning AI/ML bids at HHS.

**What it means for you**  
HHS 8(a) contracts are highly competitive. The teams that win know which compliance items get proposals rejected before scoring. This shows you those items.

## WHAT'S IN THIS DOCUMENT

- 1. Full Compliance Checklist (all requirements mapped)
- 2. Complete Proposal Outline (all volumes, sections, and guidance)
- 3. Key Win Themes (5 detailed discriminators with tactical guidance)



## SECTION 1 - COMPLIANCE CHECKLIST

Review every item before proposal submission. Items marked with a checkbox are required compliance actions.

### 8(a) Program & Registration

- Active 8(a) certification with SBA - within program term, graduation not pending within contract period
- SAM.gov registration current - CAGE, reps & certs, 8(a) status reflected and accurate
- NAICS 541511 size standard confirmed (\$30M average annual receipts for small business)
- No active exclusions, debarments, or suspensions in SAM.gov
- Prior 8(a) contracts with HHS or within HHS's primary agencies (CMS, FDA, NIH, OIG) preferred

### Technical Platform Requirements

- FedRAMP-compliant cloud platform identified: AWS GovCloud, Azure Government, or GCP Public Sector
- Platform has existing FedRAMP Moderate or High ATO (not 'in process')
- Data architecture team has experience with federal data standards (HL7 FHIR, CMS data formats)
- AI/ML model development process documented with model versioning and audit trail
- Bias testing and AI fairness methodology documented (NIST AI RMF or equivalent)
- Model explainability approach defined for high-stakes decisions

### Data Privacy & Compliance

- HIPAA Business Associate Agreement (BAA) experience - can execute BAA with HHS
- Privacy Act of 1974 compliance approach documented
- HHS information security policies: IS2P2 familiarity confirmed
- Data retention and destruction procedures per HHS records management requirements
- PII/PHI data handling: encryption at rest and in transit, access logging, audit trails
- Federated data access approach for data sources not eligible for centralized collection

### Section 508 & Accessibility

- Section 508 compliance approach documented for all dashboard and reporting deliverables
- WCAG 2.1 AA conformance testing process defined
- Named accessibility testing tool (Axe, Deque, WAVE, or equivalent)
- Remediation process for 508 findings identified during development and QA

### Development Methodology

- Agile development methodology with federal-specific acceptance criteria
- Definition of Done maps to FISMA control families (not just feature completion)
- Sprint cadence and ceremony structure defined (2-week sprints typical for HHS)
- Open-source software (OSS) disclosure and approval process per HHS policy
- Software Bill of Materials (SBOM) capability for all deployed components
- CI/CD pipeline with automated security scanning (SAST, DAST, SCA)

## SECTION 2 - PROPOSAL OUTLINE & SECTION GUIDANCE

Each section below includes page allocations, what evaluators are looking for, and specific must-include elements.

### VOLUME 1 - TECHNICAL APPROACH - PAGE LIMIT: 43 pages

#### 1.0 Executive Summary - Understanding of HHS OIG Mission [2 pages]

**Evaluator Guidance:**

HHS OIG's core mandate is protecting the integrity of HHS programs - primarily Medicare and Medicaid - from fraud, waste, and abuse. Every AI/ML capability you propose should be framed in terms of how it advances this mission. Don't pitch generic 'data analytics' - pitch 'anomaly detection on Medicare claims patterns' and 'predictive risk scoring for provider audit selection.'

**Must Include:**

- Demonstration of understanding HHS OIG's specific mission (fraud detection, program integrity)
- How your data analytics approach directly supports OIG's investigative and audit mission
- Your top 2-3 technical differentiators in the federal data/AI space
- Any prior HHS or health data experience

#### 1.1 Data Architecture - Ingestion, Storage & Processing Pipeline [10 pages]

**Evaluator Guidance:**

HHS OIG works with massive healthcare datasets - Medicare claims data alone represents hundreds of millions of records. Your data architecture must be designed for scale, security, and auditability. Show that you understand federal data formats (HL7, FHIR, X12 EDI for claims data) and have experience building pipelines that can process this type of data at government scale.

**Must Include:**

- End-to-end data pipeline architecture: ingestion sources, staging, processing, serving layers
- Data catalog and metadata management approach
- Data lineage tracking: can you trace every record from source to dashboard?
- Handling of sensitive data: PII/PHI identification, masking, tokenization
- Scale design: how does the architecture perform at 100M+ record dataset sizes?
- Data quality framework: validation rules, anomaly detection in the data itself
- FedRAMP cloud platform specifics: which services, which regions, how compliance is maintained

#### 1.2 AI/ML Platform - Development, Training & Monitoring [10 pages]

**Evaluator Guidance:**

Federal AI deployments are under increasing scrutiny for bias, explainability, and governance. HHS OIG uses AI/ML to make decisions that affect healthcare providers - audit selection, payment suspensions, investigation prioritization. These are high-stakes decisions that must be defensible in court and compliant with Executive Order 13960 on Trustworthy AI in Government. Your AI/ML approach must address this explicitly.

**Must Include:**

- Model development lifecycle: from business requirement to production deployment
- Feature engineering methodology for healthcare/claims data
- Model training infrastructure: compute resources, training frameworks, experiment tracking
- Model evaluation methodology: metrics, holdout testing, cross-validation approach
- Bias testing: which bias metrics you measure, at what thresholds you flag concerns
- NIST AI RMF alignment: how your development process maps to the four core functions
- Model explainability: SHAP, LIME, or equivalent - how you explain model decisions to non-technical stakeholders
- Drift detection: how you monitor production models for performance degradation
- Model retraining cadence and approval process (who approves a model update for production?)

### 1.3 Analytics Dashboards & Reporting [6 pages]

**Evaluator Guidance:**

HHS OIG analysts and investigators are not data scientists. Your dashboards must be intuitive for non-technical users while still providing the depth that sophisticated investigators need. Section 508 compliance is not optional - HHS enforces it strictly, and non-compliant deliverables will be rejected.

**Must Include:**

- Dashboard architecture: BI platform choice and justification (Tableau, Power BI, Looker, etc.)
- User roles and access tiers: analyst view vs. investigator view vs. executive summary
- Section 508 compliance methodology: testing approach, WCAG 2.1 AA conformance
- Named accessibility testing tool and testing cadence
- Self-service analytics capability: can analysts build their own queries and reports?
- Export and sharing: how reports are shared with external parties (prosecutors, other agencies)

### 1.4 Security & Privacy - FISMA, HIPAA & HHS Controls [6 pages]

**Evaluator Guidance:**

HHS data is among the most sensitive in the federal government - it includes Medicare beneficiary records, provider information, and investigative case files. Your security section must address FISMA Moderate (at minimum) and HIPAA compliance. Show familiarity with HHS's specific security policy: IS2P2 (HHS Information Security and Privacy Program).

**Must Include:**

- FISMA system categorization: why Moderate vs. High, based on impact assessment
- ATO pathway: new authorization vs. FedRAMP inheritance - which you will use and why
- HIPAA compliance: BAA execution process, PHI handling procedures, breach response
- HHS IS2P2 compliance approach
- Data encryption: at-rest and in-transit standards, key management
- Access control: Role-Based Access Control (RBAC) design for the system
- Audit logging: what is logged, retention period, SIEM integration

### 1.5 Implementation Roadmap [5 pages]

**Evaluator Guidance:**

HHS procurement timelines are long, and programs can change direction. Your roadmap should show a phased approach that delivers value incrementally - not a big-bang 18-month build before anything goes to production. Show how you will deliver a working MVP within the first 90 days and iterate from there.

**Must Include:**

- Phase 1 (Days 1-90): Foundation - cloud environment, data ingestion, initial dashboards
- Phase 2 (Days 91-180): Core ML models trained, validated, and in pilot
- Phase 3 (Days 181-365): Full production deployment, user training, ATO complete
- Key milestones with named deliverables and acceptance criteria
- Dependencies: what the Government must provide and by when
- Risk register: top 5 risks with probability, impact, and mitigation

### 1.6 Maintenance, Operations & Model Governance [4 pages]

**Evaluator Guidance:**

AI systems require ongoing maintenance in ways that traditional software does not. Models drift over time as the underlying data distribution changes. New healthcare fraud schemes emerge that the model was not trained to detect. Show HHS OIG that you have a mature model operations (MLOps) capability that keeps the system accurate and up-to-date over the contract period.

**Must Include:**

- MLOps pipeline: how model updates are developed, tested, and deployed to production
- Model governance board: who approves changes to production models
- Performance monitoring: metrics tracked, alert thresholds, reporting cadence
- Drift detection methodology and retraining trigger criteria
- Patch management for the platform: OS, libraries, dependencies
- SLA commitments: system availability, data freshness, dashboard load times

**2.0 Program Management - Agile in Federal Context [5 pages]****Evaluator Guidance:**

HHS OIG runs FITARA reviews and has a structured project governance process. Your Agile methodology must be adapted for federal oversight requirements - sprint reviews with COR participation, sprint metrics reported to government stakeholders, change management process for scope changes. Show that you understand 'federal Agile' - not just commercial Scrum.

**Must Include:**

- Sprint cadence and ceremony structure with Government participation defined
- FITARA compliance approach: how you manage IT investment within FITARA framework
- Change management: how scope changes are identified, evaluated, and approved
- Definition of Done that maps to FISMA control families
- Status reporting: what the Government sees, how often, in what format

**2.1 Key Personnel [6 pages + resumes as attachments]****Evaluator Guidance:**

HHS evaluators look for data science credentials (PhD or MS preferred for Lead Data Scientist), prior federal health data experience, and an ISSO with FISMA/ATO experience. The ML Architect needs to have shipped production ML systems, not just trained models in notebooks.

**Must Include:**

- Lead Data Scientist: MS or PhD, 5+ years applied ML, federal health data experience preferred
- ML Architect/Engineer: production ML deployment experience, MLOps platform expertise
- Data Architect: federal data architecture experience, FedRAMP cloud expertise
- ISSO: FISMA ATO experience, HHS or similar agency background

**2.2 Past Performance [5 pages]****Evaluator Guidance:**

Three federal data analytics or AI/ML references will significantly strengthen this proposal. References should demonstrate work with healthcare data, similar data scale (tens or hundreds of millions of records), and production ML deployment (not just analysis or reporting).

**Must Include:**

- 3 federal data analytics or AI/ML references
- At least 1 reference involving healthcare or claims data
- Specific metrics: dataset size, models deployed, accuracy/precision metrics achieved
- CPARS ratings or equivalent performance documentation

## SECTION 3 - KEY WIN THEMES & TACTICAL GUIDANCE

These are the 5 most important differentiators for this contract type. Each theme includes tactical guidance on how to execute it in your proposal.

### WIN THEME 1: Frame Every Capability Around Fraud Detection

***HHS OIG's core mandate is protecting Medicare and Medicaid from fraud, waste, and abuse. Generic 'data analytics' language will not win. 'Anomaly detection on Medicare claims patterns' will.***

**Tactical Guidance:**

HHS OIG processes billions of dollars in healthcare claims and is responsible for identifying providers who are billing fraudulently, receiving kickbacks, or performing unnecessary procedures. Their investigators and analysts use data to identify patterns that suggest fraud - but they are overwhelmed by data volume.

Every AI/ML capability you describe should be explicitly connected to a fraud detection or program integrity use case. Instead of 'we build predictive models,' write 'we build predictive risk scoring models that identify Medicare providers with elevated fraud risk indicators - reducing the investigator's universe from 1.2M providers to a priority list of 8,000 for annual audit selection.'

Know the specific fraud schemes HHS OIG investigates: upcoding (billing for more complex services than performed), unbundling (billing separately for services normally billed together), home health fraud, durable medical equipment fraud, opioid overprescribing. If you can frame your analytics capabilities around detecting these specific schemes, you demonstrate mission understanding that generic IT contractors cannot match.

### WIN THEME 2: FedRAMP Authorization on Day 1

***HHS will not accept 'we'll get FedRAMP authorization.' Your platform must have an existing FedRAMP Moderate or High ATO before you propose it.***

**Tactical Guidance:**

FedRAMP authorization is not a project milestone - it is a precondition for proposal submission. HHS will ask for evidence of your platform's FedRAMP authorization in the technical evaluation. 'We are pursuing FedRAMP authorization' or 'we plan to apply for FedRAMP' will result in a proposal weakness at minimum and a non-compliance finding at worst.

If you build on AWS GovCloud, Azure Government, or GCP Public Sector, your IaaS/PaaS platform has existing FedRAMP Moderate or High ATO. State this explicitly: 'Our platform is deployed on AWS GovCloud (US-East), which holds a FedRAMP High authorization. We inherit [X] controls from the AWS FedRAMP package and document [Y] agency-specific controls in our SSP.'

The FedRAMP inheritance model is specifically important: show that you understand which controls AWS (or Azure or GCP) owns, which are shared responsibility, and which are entirely your responsibility. Evaluators with technical depth will ask about this, and a clear answer demonstrates maturity.

Note: FedRAMP In Process (a package submitted but not yet authorized) does not meet the requirement. Only current, authorized packages qualify.

### WIN THEME 3: Bias Mitigation Is Now an Evaluation Criterion

***Federal agencies are now explicitly evaluating AI fairness and explainability. NIST AI RMF alignment is a differentiator - most competitors skip this section.***

**Tactical Guidance:**

Executive Order 13960 (Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government) and subsequent guidance from OMB has made AI ethics and fairness an explicit evaluation consideration for federal AI procurements. HHS has additional sensitivity because AI systems that influence healthcare decisions can have disparate impacts on protected populations.

A winning proposal in this category goes beyond saying 'we test for bias.' It describes specifically: which bias metrics you measure (demographic parity, equalized odds, calibration), at what threshold a bias finding triggers a model redesign, how you communicate model limitations to end users, and how you document model decisions for auditability.

NIST AI RMF alignment is the current federal standard. Show how your development process maps to the four core functions: GOVERN, MAP, MEASURE, MANAGE. Evaluators who are familiar with the AI RMF will recognize and reward this framing; those who are not will see it as evidence of sophistication.

Note that bias testing is not just about protected classes - in the healthcare fraud context, it includes ensuring the model does not systematically over-flag providers serving rural or underserved populations simply because those populations have different healthcare utilization patterns.

#### **WIN THEME 4: Section 508 is a Hard Requirement, Not a Checkbox**

***HHS enforces Section 508 strictly. Name your accessibility testing tool and show a testing cadence. 70% of proposals treat this as a checkbox - yours should not.***

**Tactical Guidance:**

Section 508 of the Rehabilitation Act requires that federal agencies' electronic information technology be accessible to people with disabilities. HHS is one of the more rigorous enforcers of this requirement - deliverables that do not meet WCAG 2.1 AA standards will be rejected and must be remediated before acceptance.

The specific things evaluators look for: (1) a named accessibility testing tool (Axe, Deque, WAVE, Microsoft Accessibility Insights), (2) a testing cadence integrated into the sprint cycle rather than a final-sprint check, (3) a remediation process for findings, and (4) a conformance statement format for deliverables.

Common 508 failures in analytics dashboards: interactive charts that are not keyboard navigable, color-coded visualizations with no alternative text, data tables without proper header markup, and PDF exports that do not have tagged PDF structure.

Include Section 508 in your Definition of Done. If every sprint review includes an accessibility pass on new UI components, you will not have a compliance surprise at the end of Phase 1. This is a sign of engineering maturity that evaluators recognize.

If you have built and delivered 508-compliant federal dashboards before, reference it in past performance. The specific phrasing: 'All dashboard deliverables on [contract name] passed HHS 508 acceptance testing with zero critical findings on final submission.'

#### **WIN THEME 5: Federal Agile - Not Just Commercial Scrum**

***HHS OIG runs FITARA reviews and wants predictable sprint delivery with acceptance criteria mapped to FISMA control families. Standard Scrum vocabulary is not enough.***

**Tactical Guidance:**

Commercial Agile focuses on feature delivery, customer feedback loops, and rapid iteration. Federal Agile must layer compliance requirements on top of all of that: FISMA control implementation milestones, ATO documentation deliverables, government-accepted sprint review criteria, and FITARA investment reporting.

The key differentiator is in your Definition of Done. A commercial DoD might read: 'Code reviewed, unit tests passing, deployed to staging.' A federal DoD for this contract should read: 'Code reviewed, unit tests passing, SAST scan completed with no Critical findings, deployed to staging environment in FedRAMP boundary, COR sprint review acceptance obtained, FISMA control implementation notes updated in SSP.'

HHS OIG also has a formal Project Management Office (PMO) with specific reporting requirements. Show that you have worked within similar PMO structures before - your status reporting format should match what they expect, and your change management process should accommodate government review and approval timelines.

Finally: FITARA requires IT investments above certain thresholds to be reviewed by the HHS CIO. If your contract has a FITARA review requirement, show that you have navigated this process before. Delays in FITARA approval can impact your schedule, and evaluators want to know you won't be surprised by it.

## Ready to run this on your actual RFP?

We return a full breakdown within 24 hours - compliance checklist, proposal outline, and win themes mapped to your exact solicitation. First analysis free. If it helps your bid, the full proposal package starts at \$1,500.

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