

Alabama Medicaid Agency

MEDICAID ENTERPRISE SYSTEMS (MES) – ENTERPRISE DATA SERVICES (EDS) REQUEST FOR INFORMATION

February 14, 2022

*Respond to:
Alabama Medicaid Agency
Attn: Shannon Crane
Lurleen B. Wallace Building
501 Dexter Avenue
P. O. Box 5624
Montgomery, Alabama 36104*

Issued: February 14, 2022

Response Due Date: 5:00 PM, CT, April 12, 2022

Table of Contents

1	Introduction	4
1.1	Objectives of the Request for Information	4
1.2	Alabama Medicaid Agency Overview	4
2	Alabama Medicaid Enterprise Systems Modernization Program (AMMP)	5
2.1	Strategy for Achieving Modularity	5
2.1.1	Working with CMS to define Modular Procurements	5
2.2	Project Support Procurements	5
2.2.1	AMMIS Takeover Implementation and Maintenance and Operations	5
2.2.2	PMO Services.....	6
2.2.3	Enterprise Quality Program (EQP) / Testing Center of Excellence (TCOE).....	6
2.3	MES Modules	6
2.3.1	Centralized Alabama Recipient Eligibility System (CARES)	6
2.3.2	Modular Electronic Visit Verification (MEVV)	7
2.3.3	Enterprise Data Services (EDS)	7
2.3.4	System Integrator (SI)	7
2.3.5	Claims Processing and Management Services (CPMS).....	8
2.3.6	Provider Management	8
2.4	Proposed Project Timeline	9
3	Request for Information Procedure	10
3.1	RFI Coordinator	10
3.2	Questions.....	10
3.3	Response Format.....	10
3.4	Submission	11
3.5	Review and Rejection of RFI Responses.....	11
3.6	Request for Clarifications	12
3.7	Demonstrations, if requested	12
3.8	No Obligation to Issue RFP.....	12
3.9	Disclosure of RFI Contents	12
3.10	Copyright Permission	13
3.11	Cost and Expenses	13
4	Narrative Request for Information	14
4.1	Enterprise Data Services Solution.....	14
4.1.1	Architecture.....	14
4.1.2	Data Management Services.....	16
4.1.3	Integration	16
4.1.4	Data Analytics and Reporting	18
4.1.5	Program Integrity	19
4.1.6	Federal Certification.....	19
4.2	Non-Functional EDS Solution.....	19
4.2.1	Key Performance Indicators (KPI) and Service Level Agreements (SLA)	20
4.2.2	Pricing Structure.....	20
4.2.3	Staffing.....	20
4.2.4	Deliverables and Artifacts.....	21
4.2.5	Schedule Management	22
4.2.6	Transferability	22
4.3	Additional Information and Innovation	22
4.4	Acronyms and Abbreviations	23

Appendix A - Question Template27

Exhibit 1: High Level Service and Module Procurement Schedule5
Exhibit 2: MEVV Functionality7
Exhibit 3: EDS Functionality.....7
Exhibit 4: High Level System Integrator Scope.....8
Exhibit 5: CPMS Functionality8
Exhibit 6: Provider Management Functionality9
Exhibit 7: Approved Modular Roadmap9
Exhibit 8: Relevant Dates.....10
Exhibit 9: MES EDS Contractor Staffing Table21
Exhibit 10: MES EDS Agency and MES PMO Roles and Responsibilities21
Exhibit 11: Enterprise Data Services Deliverables and Artifacts22

1 Introduction

This Request for Information (RFI) is issued by the Alabama Medicaid Agency, hereinafter referred to as the Agency. The Agency is soliciting information, following the procedures contained in this document, from vendors who can provide a technical environment to deliver integrated data from disparate data sources, to generate reports, perform analytics, and provide data visualizations for the Agency to make informed decisions. The Enterprise Data Services (EDS) will also support Medicaid's data quality program and provide centralized storage for all data quality results.

1.1 Objectives of the Request for Information

Through this RFI, the Agency is seeking to gain insight into an EDS solution that has been implemented or is in the process of implementation in another State. Section 4 Narrative Request for Information outlines the Agency's envisioned EDS solution and requires narrative responses from Respondents. The Agency is limiting the scope of this RFI to Respondents who have experience providing a solution and services for a Medicaid Decision Support System (DSS), Management and Administrative Reporting Subsystems (MARS), and Surveillance Utilization Review Subsystems (SURS). Responses received from Respondents who do not include of these components in their solution will not be reviewed.

Any insight into the Agency's roadmap or modular strategy is provided for context only. The issuance of this RFI does not obligate the Agency in any way to issue a future procurement for the solution and services described hereinafter. Respondents will have the ability to respond to any future solicitations related to this RFI.

1.2 Alabama Medicaid Agency Overview

The Agency is responsible for the administration of the Alabama Medicaid Program under a federally approved State Plan for Medical Assistance. Through teamwork, the Agency strives to enhance and operate a cost-efficient system of payment for health care services rendered to Medicaid eligible individuals through a partnership with health care providers, and other health care insurers both public and private.

The Agency's central office is located at 501 Dexter Avenue in Montgomery, Alabama. Central office personnel are responsible for information technology, program management, financial management, program integrity, general support services, professional services, and recipient eligibility services. For certain recipient categories, eligibility determination is made by Agency personnel located in eleven (11) district offices throughout the state and by additional out-stationed workers in designated hospitals, health departments, and clinics. Medicaid eligibility is also determined through established policies by the Alabama Department of Human Resources and the Social Security Administration. As of January 2022, approximately 1.2 million Alabama citizens were eligible for Medicaid benefits each month through a variety of programs.

Additional program information can be found at www.medicaid.alabama.gov.

2 Alabama Medicaid Enterprise Systems Modernization Program (AMMP)

The Agency is moving forward with the modernization of the existing Alabama Medicaid Information System (AMMIS) by replacing it using a modular approach as required by the Centers for Medicare and Medicaid Services (CMS). The goal of the AMMP is to implement an ecosystem of interoperable modules that meet the business goals for the Agency, while complying with federal mandates.

The Agency will use a modular approach that will comply with CMS Standards and Conditions (S&C) and promote the use of industry standards for information exchange and interoperability, provide a seamless business services environment for users, and create a framework aligned with the current Federal guidelines. The Agency has organized the project to implement the EDS and other AMMP modules in a proposed project timeline (**Section 2.4**) that supports the replacement of the existing AMMIS.

2.1 Strategy for Achieving Modularity

As the Agency continues to work with stakeholders, CMS and the Medicaid Enterprise Systems (MES) Division, to modernize the MES, the strategy will evolve and continue to be revised throughout the project lifecycle.

2.1.1 Working with CMS to define Modular Procurements

The Agency worked with CMS and the Program Management Office (PMO) to develop a forward-looking strategy to complete their transformation to a modular MES. The modular strategy will have several procurements, all of which are organized and listed below in **Exhibit 1**.

Exhibit 1: High Level Service and Module Procurement Schedule

Service and Module Procurements	Award (or Projected Award) by Fiscal Year (FY)
Project Service Procurements	
AMMIS Takeover Implementation and Maintenance and Operations	✓ FY 2019
PMO Services	✓ FY 2020
Testing Center of Excellence	FY 2023
MES Modular Procurements	
Modular Electronic Visit Verification	✓ FY 2021
Enterprise Data Services	FY 2023
System Integrator	FY 2023
Claims Processing and Management Services	FY 2024
Provider Management	FY 2025

✓ - Procurements that have been awarded

2.2 Project Support Procurements

2.2.1 AMMIS Takeover Implementation and Maintenance and Operations

The AMMIS Takeover Request for Bid (RFB) provides Vendor services to enhance and operate the current AMMIS for the State of Alabama Medicaid Agency and to serve as the fiscal agent on an annual operational contract. The AMMIS Takeover RFB was executed in April 2020 for a seven-year term.

2.2.2 PMO Services

The Program Management Office (PMO) provides Project Management, Requirements and Business Process Management, Enterprise Architecture, and Organizational Change Management for AMMP. The PMO contract was executed in April 2020 for a five-year term.

2.2.3 Enterprise Quality Program (EQP) / Testing Center of Excellence (TCOE)

The Enterprise Quality Program (EQP) was formed to support and implement AMMP quality goals. The EQP is inclusive of the standards, regulations, best practices, sources, processes, groups, and individuals purposed to produce the highest quality outcomes of products, services, and customer satisfaction for the program. In support of this initiative, the Agency will procure a highly qualified Contractor to architect, provide, and manage resources for a Testing Center of Excellence (TCOE) that will provide centralized test management services.

The TCOE will develop defined test quality standards and good practices across all test phases, stages, activities, and documentation. In addition, the TCOE will be responsible for establishing test management methodologies and resources sufficient to validate and evaluate the Modules meet or exceed Agency-defined quality test and test deployment objectives including, but not limited to:

- System meets or exceeds requirements specifications, including AMMP-defined, Agency-defined, state, federal and other industry standards, regulations, and good practices
- System meets or exceeds user and other stakeholder expectations
- Defects are found and fixed early in the implementation process
- No critical bugs or defects are passed to operational environment(s)
- Test report data and metrics are sufficient to support informed decisions by the Agency, users, and stakeholders
- Facilitate System Integration Testing (SIT), End-to-End (E2E) Testing, User Acceptance Testing (UAT)

2.3 MES Modules

The Modules listed in Exhibit 1 were identified, and chosen by the Agency to provide interchangeable products, services, systems and/or components required to support the AMMP. The modular information below is provided for context only.

2.3.1 Centralized Alabama Recipient Eligibility System (CARES)

CARES is an enterprise product developed and configured by the Agency, as a web-based portal solution. The purpose of CARES is to provide Alabama citizens joint application, eligibility determination and enrollment in public benefits programs. CARES functionality streamlines, consolidates, and coordinates the associated government functions, resulting in improved access

and services to Alabama citizens. This proprietary system was developed and is maintained by the Agency and as such will not be procured with the MES Module procurements.

2.3.2 Modular Electronic Visit Verification (MEVV)

The Agency procured an MEVV solution that provides an Open Model for capturing Electronic Visit Verification (EVV) visit data, and aggregate EVV visit related data from third-party systems. Providers under this model have the flexibility to use the Agency’s MEVV or select a solution that better meets their business and technology needs. Should providers select a solution of their own, they will be required to submit standardized visit-related data as defined by the Agency, to the MEVV. **Exhibit 2** lists the solution components required to support the MEVV.

Exhibit 2: MEVV Functionality

MEVV Functionality		
Open Vendor Model	Data Aggregator	Mobile Devices
Care Management Plans	Scheduling	Visit Recording
Claims/Billing	Remittance Advice	Reporting

2.3.3 Enterprise Data Services (EDS)

The EDS will replace the Decision Support Subsystem (DSS), Surveillance Utilization Review Subsystem (SURS), and Management and Administrative Reporting Subsystem (MARS) components from the AMMIS, as well as transition the Medicaid Data Lake (MDL) to the EDS Solution to provide a single source of truth for all Medicaid related reporting data. The EDS will provide Data Management Services and house a repository to store all data quality result checks from all modules.

The EDS Vendor will provide analytic services to support state personnel using the EDS, as well as subject matter experts to perform studies/analysis on behalf of the state program leaders. The EDS will provide Business Intelligence (BI) tools for reporting and advanced analytics that will provide operational support and management of the state’s Medicaid program. In addition, the EDS solution must be compatible with the current BI tools used by the Agency (e.g., Tableau and Power BI). **Exhibit 3** lists the systems and components that will make up the EDS module.

Exhibit 3: EDS Functionality

EDS Functionality				
DSS	Program Integrity (SURS)	MARS/ Transformed Medicaid Statistical Information System (T-MSIS)	Data Analytics & Reporting	Data Quality Results Repository

2.3.4 System Integrator (SI)

The SI’s scope will be divided into three key components to produce a comprehensive SI

solution and services for the Agency. These components are System Integration Platform (SIP), Integration Services, and Centralized Services. **Exhibit 4** depicts the Agency’s planned scope for the System Integrator Solution and Services.

Exhibit 4: High Level System Integrator Scope

System Integration Platform	Integration of MES Contractor Systems	Centralized Services
Architecture	Partner Integration Guide	Identity Management
Hosting	Partner Specific Integration Plan	MES Portal
Software	Interface Control Documents	Centralized Service Desk Management Tool
Data Governance	Integration sequencing	Centralized Change Management System
Health and Performance Monitoring	MES Contractor System Integrations	Managed File Transfer Service
Business Support		

2.3.5 Claims Processing and Management Services (CPMS)

The CPMS module will support Medicaid business functions and processing for areas such as, third party liability, benefit package maintenance, managed care enrollment, care management, financial management, fee for service claims processing, pharmacy, and prior authorization.

Exhibit 5 lists the systems and components supported by the CPMS Module.

Exhibit 5: CPMS Functionality

CPMS Functionality		
Claims Processing (Fee for Service & Encounter)	Recipient (Long Term Care (LTC), Early and Periodic Screening, Diagnosis and Treatment (EPSDT))	Recipient Accounts Receivable
Financial	Drug Rebate	Third Party Liability
Dental Management	Managed Care	Prior Authorization
Member Services	Drug Utilization Review (DUR)	Medical Services
Pharmacy	Fiscal Agent Services	Provider Portal Services

2.3.6 Provider Management

The Provider Management module will provide a modular solution to support the provider management business processes, including provider enrollment/termination, information management, provider communications, and provider web portal. **Exhibit 6** lists the components in scope for the Provider Management module.

Exhibit 6: Provider Management Functionality

Provider Management Functionality		
Provider Enrollment	Provider Revalidation	Manage Provider Information
Provider Communication	Provider Outreach	Provider Portal
Provider Termination	Grievance & Appeals	

2.4 Proposed Project Timeline

AMMP is expected to be completed over the course of several years and multiple projects. The module start and end dates will be subject to the final, Agency approved schedule. However, this initial timeline is contingent upon modules starting and finishing as soon as feasible while acknowledging that a phased approach may be utilized based on the availability of key Agency staff to support the implementation of each module. This phased approach also considers the inclusion of existing systems, CARES, existing MMIS, and MEVV, being implemented and integrated into the upcoming SI framework.

The Agency expects the final schedule to differ from the schedule presented in **Exhibit 7**. Modules will be implemented in a timeline that most effectively meets the needs of the contract while considering availability of Agency staff and other resources to support the project. The initial timeline presents a staggered view of implementing modules, while completing them as soon as possible.

Exhibit 7: Approved Modular Roadmap

Approved Modular Roadmap		2020		2021				2022				2023				2024				2025				2026				2027				2028				2029				2030					
Calendar Year	Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Concurrent Procurement and SCRs		2	1	1	1	2	2	2	3	3	4	4	5	3	2	4	4	3	4	4	3	3	1	1	1	2	3	4	4	4	2	2	2	0	0	0	1	1	1	3	3	2	2	2	2
Concurrent DDIs		1	1	1	1	2	2	2	2	0	0	0	1	2	3	3	4	5	5	6	6	6	6	5	5	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PMO		Active Contract												Active Contract																															
Procurement & Staffing		Active Contract												RFP				Active Contract				STAFF																							
IV&V		Active Contract																																											
Procurement (N/A)		Active Contract																																											
E&E (CARES)		Active Project																																											
DDI		DDI												DDI-SI																															
EVV		Operations												Operations																															
Procurement & DDI		RFB				DDI				DDI-SI				RFB				Operations																											
System Integrator		RPI+RFP (5 Year)												DDI (Existing Core)				DDI Mods+E&E				Operations																							
Enterprise Data Warehouse		RFB												DDI				Operations				RFB																							
Procurement & DDI		RFB												DDI				Operations				RFB																							
Existing Core (Fiscal Agent)		Operations												Extra Year																															
SI System Change Request (SCR)		SCR												DDI				Operations																											
EDW (DSS) SCR		SCR												DDI				Operations																											
Existing to New Core Transfer		SCR												DDI																															
New Core		Operations																																											
Procurement & DDI		RFB												DDI				Operations				RFB																							
Provider Management		RFB												DDI				Operations				RFB																							
Procurement & DDI		RFB												DDI				Operations				RFB																							
Testing		DDI End-to-End Testing												Operational End-to-End Testing																															
Procurement & Staffing		STAFFING												STAFF																															
Support Services/Help Desk		Existing Support Services/Help Desks												Enhanced Support Services/Help Desks																															
Staffing & Transition		STAFFING & TRANSITION																																											

3 Request for Information Procedure

This request requires any Respondent wishing to submit information to respond to this RFI by 5:00 p.m. CT, April 12, 2022. The Agency will accept a formal written response to this RFI devoid of marketing, sales, or boilerplate material. The Respondents are asked to provide responses specific to each request for information.

Exhibit 8: Relevant Dates

Event	Due Date
Issue RFI	February 14, 2022
Questions Due from Respondents	March 1, 2022
Answers Due from the Agency	March 23, 2022
Deadline of Submission	April 12, 2022
Clarification Request from the Agency	May 6, 2022
Clarifications Due from Respondents	May 20, 2022
Demonstrations, if requested by the Agency	TBD

3.1 RFI Coordinator

Shannon Crane

Alabama Medicaid Agency
Lurleen B. Wallace Building
501 Dexter Avenue
PO Box 5624
Montgomery, AL 36103-5624

EDS@medicaid.alabama.gov

3.2 Questions

Any technical or procedural questions regarding this RFI must be captured using **Appendix A – Question Template** and submitted to the RFI Coordinator via the RFI email address, by the date and time listed in **Exhibit 8: Relevant Dates**. Responses to questions will be posted on the Agency’s website.

3.3 Response Format

Respondents must submit one original with original signatures in ink, one additional hard copy in binder form, and two electronic copies of the response on a Universal Serial Bus (USB) flash drive. Respondents must identify the original hard copy on the outside of the proposal. One electronic copy must be a complete version of the Respondent’s response and the second electronic copy must have any information asserted as confidential or proprietary redacted.

The RFI response must be submitted in a sealed envelope or package with the RFI number and the Respondent's name and address clearly indicated on the envelope or package.

The Respondent must include the following tabbed sections within their response:

A. Transmittal Letter (Limited to 2 Pages)

To include the following information:

1. Statement required in response to **Section 3.7 Demonstrations**
2. Contractor shall provide a transmittal letter, signed by an individual authorized to represent Contractor for this RFI. This letter shall also include contact information for the transmittal signatory, including Mailing Address, Email, and Phone

Narrative Requests for Information (Limited to 100 Pages – 50 pages front and back)

Respondents will provide a narrative response to each request listed in **Section 4 Narrative Requests for Information**.

Appendices

Respondents may provide additional collateral related to their EDS Solution in this section, including the below items:

1. Videos
2. Website links
3. Pre-recorded Webinars
4. Time limited access privileges to content or systems

3.4 Submission

Responses to the RFI may be hand-delivered or mailed to the RFI Coordinator. Vendors should provide one hard copy and one redacted copy with the submission. Responses will not be accepted over the phone or by email. All responses must be received before the Deadline of Submission as stated in **Exhibit 8: Relevant Dates**.

Respondents replying to this RFI will not be precluded from bidding on future Medicaid procurements regarding MES Modularity.

3.5 Review and Rejection of RFI Responses

The Agency reserves the right to reject any and all responses, in whole and in part, received in response to this RFI at any time. This RFI process is for the Agency's informational benefit. This RFI is not the comprehensive set of Request for Proposal (RFP) requirements and specifications, and each Respondent is responsible for determining all factors necessary for submission of a comprehensive response to this RFI.

The RFI response will not be subject to an RFP-type evaluation but only to a review of Respondent's suggested solution, approach to addressing the MES integration, and ability to

perform services that may be of use to the Agency.

3.6 Request for Clarifications

The RFI Coordinator may release a request for clarification for all Respondents by posting the request on the Agency's website. The RFI Coordinator may optionally request clarifications from an individual Respondent by emailing the individual authorized to represent the Respondent as identified in their transmittal letter. All responses to Requests for Clarifications shall be electronic copies only and shall be emailed to the RFI email address in **Section 3.1 RFI Coordinator**.

3.7 Demonstrations, if requested

The Respondent should indicate if they would be willing to provide a virtual demonstration of their solution(s), if requested by the Agency. The purpose of this demonstration would be to seek additional information contained within the response and to further explore issues raised or to further meet the goals of the RFI. Respondents must demonstrate a solution that is in production which could be either a self-contained demonstration or a live demonstration.

Demonstration schedule, agenda, and specific request for key activities to be demonstrated using the envisioned solution will be provided per **Exhibit 8: Relevant Dates**. Respondent presenters must include key delivery staff and not solely corporate executives or sales personnel.

The Agency will not reimburse submitters for any costs in conjunction with their responses to this RFI or demonstrations.

3.8 No Obligation to Issue RFP

This RFI is an inquiry only and no contract or agreement will be entered into as a result of this process. By responding to this document or otherwise participating in this process, no contract or agreement will be formed, and no legal obligation between the Agency and Respondent will arise. Individual firms or teams that have not responded to this RFI shall not be precluded from participating in any future solicitation processes in relation to the project. The issuance of this RFI does not obligate the Agency in any way to issue an RFP or any other procurement for the solution, materials, and services described in this RFI.

3.9 Disclosure of RFI Contents

Respondents should be aware that any information in a response may be subject to disclosure and/or reproduction under Alabama law. Designation as proprietary or confidential may not protect any materials included within the response from disclosure if required by law.

Respondents should mark or otherwise designate any material that they believe is proprietary or otherwise confidential by labeling the page as "CONFIDENTIAL" on the bottom of the page. Respondents shall also state any legal authority as to why that material should not be subject to public disclosure under Alabama law, including the open records laws, and is marked as Proprietary Information. By way of illustration but not limitation, "Proprietary Information" includes trade secrets, inventions, mask works, ideas, processes, formulas, source and object codes, data, programs, other works of authorship, know-how, improvements, discoveries,

developments, designs, and techniques.

It is the sole responsibility of the Respondent to indicate information that is to remain confidential. The Agency assumes no liability for the disclosure of information not identified by the Respondent as confidential.

3.10 Copyright Permission

By submitting a response, the Respondent agrees that the Agency may copy the response for purposes of facilitating the analysis of the response, or to respond to requests for public records. By submitting a response, the Respondent consents to such copying and warrants that such copying will not violate the rights of any third party.

3.11 Cost and Expenses

Each Respondent is responsible for its own costs and expenses related to this process, including cost and expenses associated with preparing and submitting a response to this RFI, participating in the process, the provision of any additional information, or attendance at meetings/interviews. No costs related to this RFI will be reimbursable from the Agency.

4 Narrative Request for Information

This section provides the Agency's definitions and possible components of the EDS solution, along with corresponding requests for information to be addressed by Respondents.

4.1 Enterprise Data Services Solution

The EDS Vendor will Design, Configure, Build (DCB), operate, and maintain a solution that facilitates storage, performs quality checks, and provides reporting and analytics of enterprise data. The Agency has identified an opportunity to improve the consistency and accuracy of data, enhance user experience by reducing the time it takes to query on demand, generate analytics and reports, and provide optimal storage capabilities. The EDS will provide decision support services across the enterprise and will offer a unified approach for organizing and representing data. In addition, the EDS Vendor will ensure that data security, privacy, compliance, governance, quality, consistency of formats, and performance standards are established and met. The EDS will encompass the following technical services sections:

- EDS Architecture – An EDS that is more responsive to the business needs and can grow with the organization
- Data Management Services – To provide a controlled environment for transforming raw data into data that can be utilized for consistent reporting and analytics
- Performance – An EDS that responds to the business needs according to targeted Service Level Agreements (SLA's)
- Data Integration – Combines Alabama Medicaid systems of record data with related data from other State agencies and external data sources into a single repository
- Data Analytics and Reporting (DAR) / MARS – Provide structured Federally-required reporting and insight into the data through data exploration and mining
- Program Integrity / SURS – Provide the reporting necessary to identify fraud, waste, and abuse

4.1.1 Architecture

The EDS will be responsive to the Agency's business needs and provide an architecture that is scalable, extensible, and secure. The architecture will include all components necessary to host and maintain the EDS including cloud or physical hosting environments, firmware, middleware, connectivity, security, software, and licensing.

The EDS will include the tools and capabilities to successfully intake, transfer, and integrate data sources in a variety of formats into well-designed data models and data dictionaries. These tools and capabilities will provide insight into the data via Artificial Intelligence, Business Intelligence, Machine Learning, and Data Analytics and Reporting. This would include data from internal MES modules and data from the external sources defined below.

An integral part of the EDS will be an enterprise data model designed around the Agency's data architecture that supports business practices and policies. The EDS will include standardized and reusable data dimensions, such as member, provider, diagnosis, geographic, time, organization and financial. Data Models require Agency review and approval prior to implementing data sources or updates to the EDS. The EDS will include data from the following:

1. The EDS will replace the Decision Support System, Surveillance and Utilization Review Subsystem, and Management Administrative Reporting Subsystem from the AMMIS. The Agency has not purged any data since the 2008 implementation of the existing MMIS. These systems will be decommissioned upon Agency approval of the EDS operations.
 2. The EDS will replace the Patient First Database (PFD) which includes, multiple MMIS tables, external data from the Alabama Department of Public Health (ADPH) for Vital Statistics and Immunization Registry, and census data for inpatient facilities from Alabama Department of Mental Health (ADMH). The PFD will be decommissioned upon Agency approval of the EDS operations.
 3. The EDS will replace the Medicaid Data Lake (MDL) which includes external data from CMS Chronic Condition Warehouse, Alabama One Health Record which houses Medicaid Recipients Clinical Data, Lab Results from HealthTech Solutions (HTS), and Dual Eligible Special Needs (D-SNP) care plans from D-SNP Population Data. The MDL will be decommissioned upon Agency approval of the EDS operations.
 4. The EDS must have the ability to add data sources and systems as the AMMP continues to bring on additional modules.
- A. *Describe the type of solutions including a narrative and a graphic diagram of the model that you would recommend for the Agency EDS solution*
 - B. *Describe the approach to measure, determine, and address future scaling of the solution in areas including, but not limited to, data storage, users, and fulfillment time*
 - C. *Describe how software upgrades are handled throughout each environment, response should address whether they are current release or -1*
 - D. *Describe the recommended environments that will be established for the EDS including, but not limited to: Development, Vendor Test, User Acceptance Test (UAT)/Training, and Production (Raw, Sandbox, and Enterprise Data Warehouse (EDW))*
 - E. *Describe how you will manage and maintain all environments including production and non-production environments throughout the System Development Lifecycle (SDLC)*
 - F. *Describe the approach for Extract, Transform and Load (ETL) or Extract, Load, and Transfer (ELT) in a modular enterprise such as planned by the Agency*
 - G. *Describe previous experience with MMIS, Health Information Exchanges, State and Federal data sources*
 - H. *Describe your experience with a clinical data exchange integration, and your ability to successfully parse and utilize clinical data*
 - I. *Describe the approach to Fast Health Interoperability Resources (FHIR) (and the other standards) as well as how such standards apply to an overall EDS architecture*
 - J. *Describe the approach and methods for incorporating and managing data sources and disparate datasets into current and evolving data models*
 - K. *Describe your standard refresh schedules from various data sources (Real-time, Daily,*

Weekly, etc.)

- L. Describe your approach to a user provisioning or account provisioning system (Single Sign-On)***
- M. Describe the methodology that will be used to limit the conversion of historical data to seven (7) years in support of the Agency's business needs, data retention policies and Federal retention requirements***
- N. Describe the different user types and roles supported by your solution and how each person is supported (what tools/capabilities)***
- O. Describe your ability to use artificial intelligence (AI) and machine learning (ML)***
- P. Describe your lessons learned and successful usage of AI and ML***

4.1.2 Data Management Services

The EDS Vendor will work with the Agency's Data Governance Office (DGO) to align with their Enterprise Data Governance policies, processes, and procedures. The EDS Vendor will establish and maintain a comprehensive set of data governance and data quality processes that will increase the data consistency and quality of enterprise-wide data reporting and analytics.

The EDS Vendor will accept interfaces from the Agency's Data Governance (DG) platform/tool. The interfaces will include the defined Agency's metadata and business rules. It is the Agency's intent to continue using DG platform/tool.

The EDS Vendor will use the metadata definitions and business rules within the Agency's DG platform/tool for all data passing through the EDS. The EDS Vendor will capture results in their data governance and data quality processes and store those results in the EDS for Agency reporting and dashboards.

In addition, the EDS will house the results of data governance and quality rule checks performed by the System Integrator Vendor, module vendors, and other Agency systems, (e.g., Alabama One Health Record). The EDS Vendor will store the information in a format agreed upon by the DGO.

- A. Describe how you will automate, communicate, perform, and record data governance as data moves throughout the EDS solution (e.g., ingest data, cleanse data, store data, and export data)***
- B. Describe tools and capabilities you currently used or used in the past related to data management, data governance, and data quality***
- C. Describe your approach and methodologies to manage and align enterprise-wide disparate data, including, but not limited to, data integration, cleansing, validation and standardization, and transformation***
- D. Describe your method to maintain traceability (data lineage) between the source (original or raw) data and all future views of the data (e.g., data manipulations, summarization, combinations, exports, and integration)***

4.1.3 Integration

The EDS will be capable of continuously adapting as integration standards evolve. As modernization of the MES continues, the Agency expects the integration approach to evolve and mature. Integration of internal data sources including, but not limited to, AMMIS, CARES, MEVV and future AMMP modules will take place in coordination with the MES System Integrator. The EDS vendor will also be responsible for working with external data sources defined in 4.1.1 to establish and maintain all external data integrations.

It is the Agency's intent to host and maintain an industry standard Identity Management solution that enables Single Sign-On (SSO) for all users. The Identity Management service will create, modify, disable, and delete user accounts and their profiles across the MES. EDS user access must be authenticated with the Identity Management service to register a user session, authenticate, and log the user access. The EDS will be responsible for its own role-based access and communicate that to the Identity Management service.

It is the Agency's intent to host and maintain an industry standard Centralized Service Desk Management Tool (CSDMT). The CSDMT will collate each Module Contractor's service desk data to provide a single view into all service requests across the MES, and to support resolution of incidents that involve multiple modules. The EDS will be responsible for supporting the integration of its service desk data with the CSDMT, and for providing data updates.

It is the Agency's intent to host and maintain an industry standard Centralized Change Management System (CCMS). All module contractors will integrate with CCMS to coordinate and track approved MES change orders affecting production. The Agency's Change Advisory Board (CAB) will own and maintain the Centralized Change Management Process. The EDS contractor participates as part of the CAB.

- A. Describe your high-level approach to integrating modular internal interfaces through a system integration solution, and your experience with this approach***
- B. Describe your approach to implementing new technology while supporting the EDS***
- C. Describe the high-level approach, tools, and processes by which you will provide Integration services for collecting and presenting internal and external data sources for the lifecycle of the project (DCB through Turnover of Operations)***
- D. Describe your high-level approach to integrate with a System Integrator or similar solution***
- E. Describe your high-level approach to integrating external interfaces and providing external partners, including but not limited to, ADPH, University of Alabama-Birmingham, Health Tech Solutions, Comagine, University of Massachusetts Medical, Medical and Management Consulting Services and the Attorney General's Office with data extracts and reports, and your experience with this approach***
- F. Describe your solution's ability to integrate with the Identity Management system to support Agency ability to manage all user provisioning and to enable single sign-on for every applicable EDS component***
- G. Describe your Service Desk Management tool(s) and your Change Management system(s), and their ability to integrate with and feed the Agency's CSDMT and CCMS***

4.1.4 Data Analytics and Reporting

The Data Analytics and Reporting (DAR) component will provide the Agency with the tools, mechanisms, and services to support the Agency's business and management needs for data analytics, visualization, and reporting responsibilities. This component is envisioned to provide a single, central portal for analysis and report development activities including a repository of analytic projects and published reports. The Vendor's solution must have the ability to integrate with the Agency's business intelligence tools (Power BI and Tableau) that are currently used by the analytics and informatics teams to perform the reporting, query, and analytics. DAR is expected to have the ability to schedule reports and send electronic communication as needed for delivery and consumption.

The EDS will include a Management and Administrative Reporting function, as required by CMS. Each state must report Medicaid program activity on a regular basis. Some of the major reports and documentation required are CMS 64, CMS 372, Payment Error Rate Measurement (PERM), and Transformed Medicaid Statistical Information System (T-MSIS). These reports are used to assess utilization, claims, quality of care and many other data points.

The EDS support services will include the establishment of a true collaborative relationship between the EDS Vendor and the Agency. The Agency seeks a partnership that results in the evolution of analytic capabilities and maturity, supported by industry best practices, actionable changes, and sharing of knowledge, trends, and tools to help the Agency get the most out of the data used by Medicaid. The EDS vendor will provide highly skilled data scientists and business intelligence analysts that will help the Agency adapt to the EDS and provide ongoing support.

The tools and capabilities embedded within the DAR component must have business intelligence capabilities, advanced analytics capabilities, data science capabilities and tools, and reporting tools.

A. Describe how the EDS will support Management and Administrative Reporting, as required by CMS

- ***Point-in-time reporting and storage***
- ***T-MSIS administration and support***
 - i. Number of individuals required to support and maintain***
 - ii. Describe the tool used to apply Tier edits and the update and maintenance process***
 - iii. Number of high priority issues that exist in the solution***
- ***Payment Error Rate Measurement (PERM) support cycle administration and support (Alabama is a cycle 2 state)***
- ***All other Federal reporting, storage, administration, and support***
 - i. Number of individuals it takes to support and maintain***

B. Describe the specific detailed business intelligence and analytics capabilities of the EDS solution (e.g., statistical analysis, geospatial analysis, data mining, predictive modeling,

and what-if modeling)

- C. Describe the EDS solution standard set of canned reports and dashboards, including but not limited to, Pharmacy, Enrollment & Eligibility, Provider, Claims, Federal/State Management, and Healthcare Quality Management Healthcare Effectiveness Data and Information Set (HEDIS), and Electronic Clinical Quality Measures (eCQM)*
- D. Describe your approach to DAR support services for a Medicaid client, including but not limited to, augmentation of state staff for analytics, reporting and query*
- E. Describe how you will provide an EDS solution which houses a broad set of data attributes that is simple and user-friendly for business user engagement*
- F. Describe your approach to DataOps*

4.1.5 Program Integrity

The Agency's Program Integrity division is responsible for planning, developing, and directing agency efforts to identify and prevent fraud, waste and abuse, and the reasonable and consistent oversight of the Medicaid Program. The EDS will provide Surveillance and Utilization Review (SUR) technology to reduce and eliminate fraud, waste, and abuse in the Medicaid program. SUR activities include prevention, algorithms, investigations, audits, reviews, recovery of improper payments, education and cooperation with the Medicaid Fraud Control Unit, and other state and federal agencies. Federal regulations require State Medicaid Agencies to include statewide surveillance and utilization review technology.

The EDS will provide data to the Agency's Case Tracking tool to provide insight into Agency claims to prevent fraud, waste, and abuse. The Agency would be interested in obtaining information regarding the Vendor's case tracking solution.

- A. Describe your detailed approach to Program Integrity*
- B. Describe your past experience with Program Integrity, including certification efforts*
- C. Describe your detailed approach to Surveillance Utilization Review (SUR)*
- D. Describe your experience with implementing SUR Measures and correlation analysis across these measures*
- E. Describe your detailed approach to Case Tracking*
- F. Describe your past experience with Case Tracking*

4.1.6 Federal Certification

The EDS solution must be certified by both CMS through Outcomes Based Certification (OBC)/Streamlined Modular Certification (SMC) and the Social Security Administration (SSA).

- A. Describe current or past OBC/SMC certification efforts and outcomes*
- B. Describe current or past SSA certification steps, efforts, and outcomes*

4.2 Non-Functional EDS Solution

4.2.1 Key Performance Indicators (KPI) and Service Level Agreements (SLA)

The Agency intends to measure the KPIs in the MES through SLAs. This section is seeking the Respondent's input based upon their experience.

- A. Provide examples of KPIs used in previous EDS contracts related to the categories from Section 4.1, including what the Respondent would consider acceptable performance threshold values*
- B. Provide examples of SLAs used in previous EDS contracts related to the categories from Section 4.1, including incentives. Providing the Respondent's catalog of EDS SLAs is also acceptable*

4.2.2 Pricing Structure

The Agency is seeking insight into the pricing structures used for EDS solutions. Please provide answers to the below statements to assist the Agency in understanding how the Respondent's pricing structure supports fixed priced procurements. Respondents are encouraged to provide example pricing schedules with their response. Answers to this section should not include any actual dollar amounts.

- A. Provide major variables that affect fixed prices for services listed in Sections 4.1 and 4.2, including the below information:*
 - 1. Scalability – rate changes as userbase, data volume, etc.*
 - 2. Initial DCB – the Agency prefers to pay for DCB with fixed price deliverables; provide the Respondent's preferred pricing structure*
 - 3. SLAs – for example discounts, penalties, credits, incentives*
 - 4. Rate Cards (do not include dollar amounts)*
 - 5. Modification Pools*
 - 6. Module Integration per Module defined in Exhibit 8*
 - 7. Infrastructure/Software Maintenance – included in base rate or separate line items*
 - 8. Support and Analytic Services – role based*
 - 9. Data Quality tools and support*
- B. Provide recommendations for information to be included in an EDS procurement and procurement library to enable accurate estimates and cost for the EDS solution*
- C. Provide lessons learned from previous projects that have affected the Respondent's pricing structure*
- D. Describe your approach to pricing AI and ML*

4.2.3 Staffing

The Agency is interested in the level of expertise necessary to successfully implement an Enterprise Data Services solution. The staffing resources assigned to this project are viewed by the Agency as integral components of the AMMP's success. The success and on-time/on-budget delivery of the EDS is dependent upon the EDS Team and the essential skills and experience

they bring to the project. The Agency anticipates the need for onsite subject matter experts (SMEs) including, but not limited to, T-MSIS subject matter experts, Federal Reporting Analysts, Business Intelligence (BI) Analysts, Data Scientist and Artificial Intelligence (AI) Engineers throughout the life of the contract.

- A. Please provide the information requested in Exhibit 10 below for all key roles which would be required to fulfill the scope of the MES EDS project. For project roles with same/similar titles, use the role description to designate/provide the differences**

Example: Staff qualifications expected around T-MSIS subject matter experts, Federal Reporting Analysts, Business Intelligence (BI) Analysts, Data Scientist and Artificial Intelligence (AI) Engineers, and general technical experience.

Exhibit 9: MES EDS Contractor Staffing Table

Project Role	Role Description	Years of Experience	Education / Certifications	Dedicated Full Time Equivalent (FTE) or FTE %

- B. Please provide roles and responsibilities that the Respondent recommends for Agency staff, MES PMO, and MES Module SMEs for the MES EDS Project in Exhibit 11 below.**

Exhibit 10: MES EDS Agency and MES PMO Roles and Responsibilities

Project Role	Responsibilities	% of Time Expected

- C. Provide lessons learned from previous projects that have affected the Respondent’s current staffing model for similar EDS projects**

4.2.4 Deliverables and Artifacts

The Agency sees collaboration between the EDS and the MES PMO as an essential relationship, which will drive a successful MES EDS Project. Part of that relationship is the identification, development, and maintenance of deliverables and artifacts.

- A. Please provide the information requested in Exhibit 12 below for what your expected deliverables would be to deliver successful EDS projects. Example: Architectural artifacts, Continuity of Operations (COOP) / Disaster Recovery (DR) plan, Project Management plan, DCB artifacts**

Exhibit 11: Enterprise Data Services Deliverables and Artifacts

Item	Initial Due Date from Contract Award	Description	Acceptance Criteria	Revision Frequency

B. Provide two (2) or three (3) lessons learned from previous projects that have affected your view of essential deliverables and/or artifacts

4.2.5 Schedule Management

The EDS contractor will be responsible for the overall technical success for implementing and operationally supporting the EDS solution. Per Exhibit 7, the Agency and MES PMO have developed a high-level accelerated schedule for the planning, procurement, and implementation of each component of the MES Project. Currently, there are 21 months allocated for the initial EDS Project DCB.

A. Provide an estimated timeline for the DCB, and an estimated timeline for the data loads

B. Provide initial versus actual timeline for past three projects of similar scope

C. Provide lessons learned from previous projects that have affected your Schedule Management methodology, standards, and/or tools

4.2.6 Transferability

It is the Agency’s intent to continue to use the EDS solution for the foreseeable future. Due to State procurement regulations, the Agency will have to pursue an EDS takeover or transfer procurements.

A. Provide recommended RFP requirements to ensure a successful transfer of your EDS solution to another Contractor or to the Agency, at the end of the contract

B. If the solution is not fully transferable, provide a list of components that are transferable and those that are not

C. Provide lessons learned from previous projects that have affected your approach to the transfer of your EDS Solution to the Agency or another Contractor

D. Describe your expectation of the legacy Vendor to assist with the conversion

E. Describe your end of contract turnover phase, and based on past experience, how much time is required to successfully convert from one EDS platform to the next

4.3 Additional Information and Innovation

It is the Agency’s intent to procure a trusted solution that will provide innovation, and continuous improvement throughout the life of the contract.

A. Provide current, in-development, or future planned value-add components and/or services

not addressed in this RFI

4.4 Acronyms and Abbreviations

Standard acronyms and abbreviations listed within Medicaid and Health and Human Services Projects.

<i>Acronym / Term</i>	<i>Definition</i>
AI	Artificial Intelligence
AL	Alabama
ADMH	Alabama Department of Mental Health
ADPH	Alabama Department of Public Health
AMA	Alabama Medicaid Agency
AMMIS	Alabama Medicaid Management Information System (Legacy)
AMMP	Alabama Medicaid Enterprise Systems (MES) Modernization Program
API	Application Programming Interface
BI	Business Intelligence
CARES	Centralized Alabama Recipient Eligibility System
CAB	Change Advisory Board
CARES E&E	Alabama Program – Eligibility and Enrollment
CCMS	Centralized Change Management System
CMS	Centers for Medicare & Medicaid Services
CMS S&C	CMS Standards and Conditions
COOP	Continuity of Operations
CPMS	Claims Processing and Management Services
CSDMT	Centralized Service Desk Management Tool
DAR	Data Analytics and Reporting

<i>Acronym / Term</i>	<i>Definition</i>
DCB	Design, Configure, and Build
DG	Data Governance
DGO	Data Governance Office
D-SNP	Dual Eligible Special Needs
DR	Disaster Recovery
DSS	Decision Support System
DUR	Drug Utilization Review
eCQM	Electronic Clinical Quality Measures
EDS	Enterprise Data Services
EDW	Enterprise Data Warehouse
ELT	Extract, Load, and Transfer
EPSDT	Early and Periodic Screening, Diagnosis and Treatment
ESB	Enterprise Service Bus
ETL	Extract, Transform and Load
EVV	Electronic Visit Verification
FHIR	Fast Health Interoperability Resources
FTE	Full Time Equivalent
FY	Fiscal Year
HEDIS	Healthcare Effectiveness Data and Information Set
HTS	HealthTech Solutions
IT	Information Technology
KPI	Key Performance Indicator

<i>Acronym / Term</i>	<i>Definition</i>
LTC	Long Term Care
MARS	Management Administrative Reporting Subsystem
MDL	Medicaid Data Lake
MES	Medicaid Enterprise System
MEVV	Modular Electronic Visit and Verification
MFA	Multi-Factor Authentication
MITA	Medicaid Information Technology Architecture
ML	Machine Learning
NTT DATA	NTT Data Services, LLC
OBC	Outcomes Based Certification
PERM	Payment Error Rate Measurement
PFD	Patient First Database
PMO	Program Management Office
RFI	Request for Information
RFP	Request for Proposal
S&C	CMS Standards & Conditions
SDLC	System Development Life Cycle
SI	System Integrator
SIP	System Integration Platform
SLA	Service Level Agreement
SMC	Streamlined Modular Certification
SME	Subject Matter Expert

<i>Acronym / Term</i>	<i>Definition</i>
SSA	Social Security Administration
SSO	Single Sign-On
SUR	Surveillance Utilization Review
SURS	Surveillance and Utilization Review Subsystem
TCOE	Testing Center of Excellence
T-MSIS	Transformed Medicaid Statistical Information System
TPL	Third Party Liability
UAT	User Acceptance Test
USB	Universal Serial Bus

Appendix A - Question Template

This is a separate artifact, named **Appendix A – Question Template**, and is available in the procurement library.