



Medicaid Enterprise Systems Community of Practice: Analysis of Alternatives (AoA) Template



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For Internal Use Only

Objectives

This session provides an overview of the Medicaid Enterprise Systems (MES) Analysis of Alternatives (AoA) template. After this Community of Practice event, participants will:



Understand the regulatory purpose and structure of the new OMB-approved AoA template



Understand how AoA requirements differ by APD type



Understand CMS expectations for submitted AoAs, including evaluation criteria, reuse strategy, and decision documentation

Analysis of Alternatives: What is it and its Regulatory Basis

What is an Analysis of Alternatives?

The AoA is a structured, evidence-based process that helps:

- Evaluate multiple solution paths for a systems-related need
- Compare options based on defined criteria and available data
- Select a preferred solution that supports program goals

Policy References

[45 CFR 95.610\(a\)\(2\)\(v\)](#): The planning APD shall include a commitment to conduct/prepare the problem(s) needs assessment, feasibility study, **alternatives analysis**, cost benefit analysis, and to develop a Functional Requirements Specification and/or a General Systems Design

[45 CFR §95.610\(b\)\(3\)](#): The implementation APD shall include a requirements analysis, feasibility study **and a statement of alternative considerations** including, where appropriate, the use of service-orientated architecture and a transfer of an existing system and an explanation of why such a transfer is not feasible if another alternative is identified

[42 CFR § 433.112\(b\)\(13\)](#): CMS will approve the E&E or claims system described in an APD if the system **promotes sharing, leverage, and reuse of Medicaid technologies and systems** within and among States.

The MES AoA Template

The MES AoA Template is an OMB approved tool that help states systematically evaluate options for Medicaid system modernization. When used by states, the AoA template will help states:

- Evaluate multiple MES options and clearly document their rationale for selecting an approach (prior to making a commitment).
- Standardize compliance reporting on AoA and reuse, reducing administrative burden.
- Strengthen collaboration among business, technology, and policy stakeholders.
- Identify and apply reuse opportunities more consistently.

The AoA Template can be accessed at [Medicaid.gov](https://www.Medicaid.gov). States must use the new template by July 1, 2026 to satisfy requirements in Section 3 and/or Appendix B of the new MES APD.

AoA Key Features and Updates

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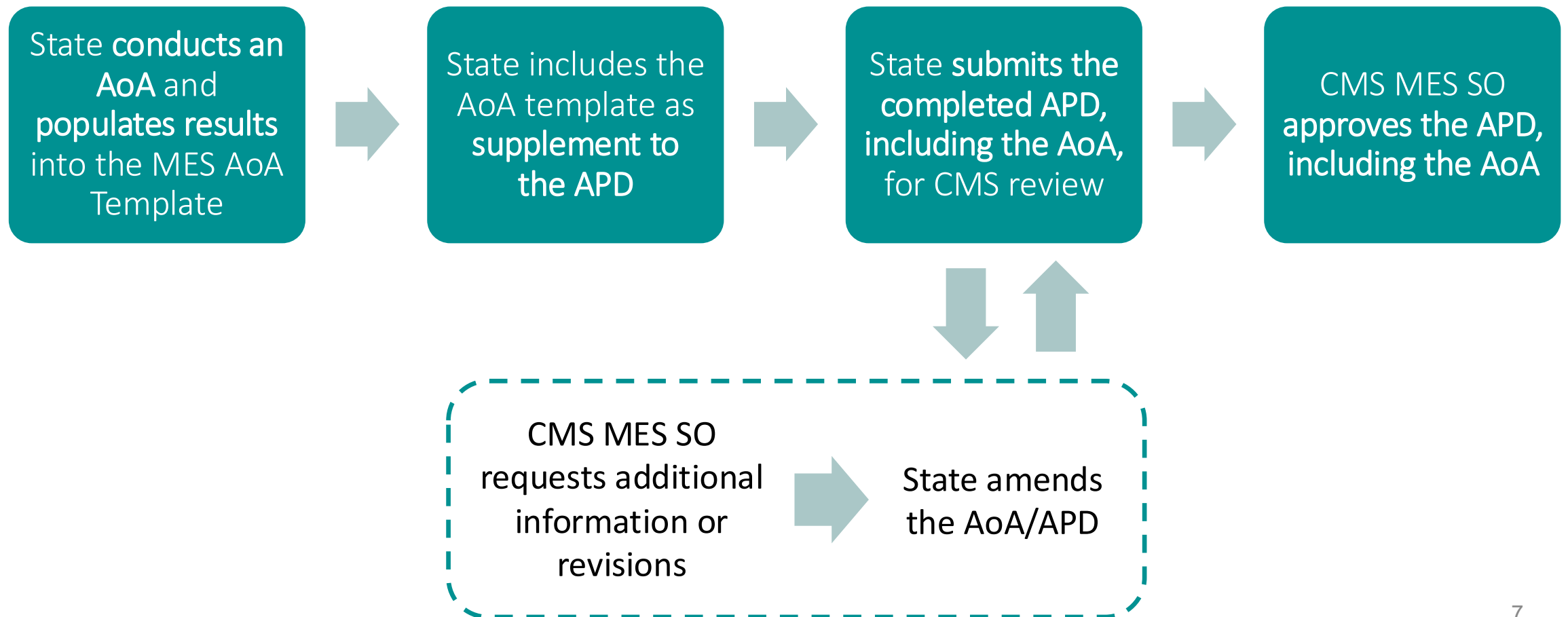
- Built using HHS and Federal Government best practices, plus feedback from state listening sessions
- Includes guidance and checklists for each section
- Requires completion of all sections or justification if content is omitted
- **NEW:** Enterprise Reuse Plan is no longer a key component in Section 2 (Market Research); however, reuse must be a consideration as part of the AoA alternatives.
- **NEW:** Vendor references removed

Connecting the AoA to APDs

AoA requirements vary by APD type:

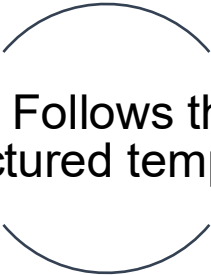
APD Type	AoA Requirement
PAPDs	Instead of conducting an AoA, states are required to include a statement expressing their commitment to conducting an AoA in the future.
IAPDs, APDUs, or As-Needed APDs	States are required to include the results and methodology of an AoA. AoAs are required for significant investment decisions , such as initiating a new project, evaluating major changes to an existing system, or when a new need or capability gap is identified.
OAPDs	No requirements related to an AoA.

AoA Process for IAPDs, APDUs, and As-Needed APDs




CMS AoA Expectations

CMS expects states to produce a complete, objective, and well-documented AoA that:



1. Follows the structured template



2. Emphasizes partnership and reuse



3. Uses transparent criteria and scoring

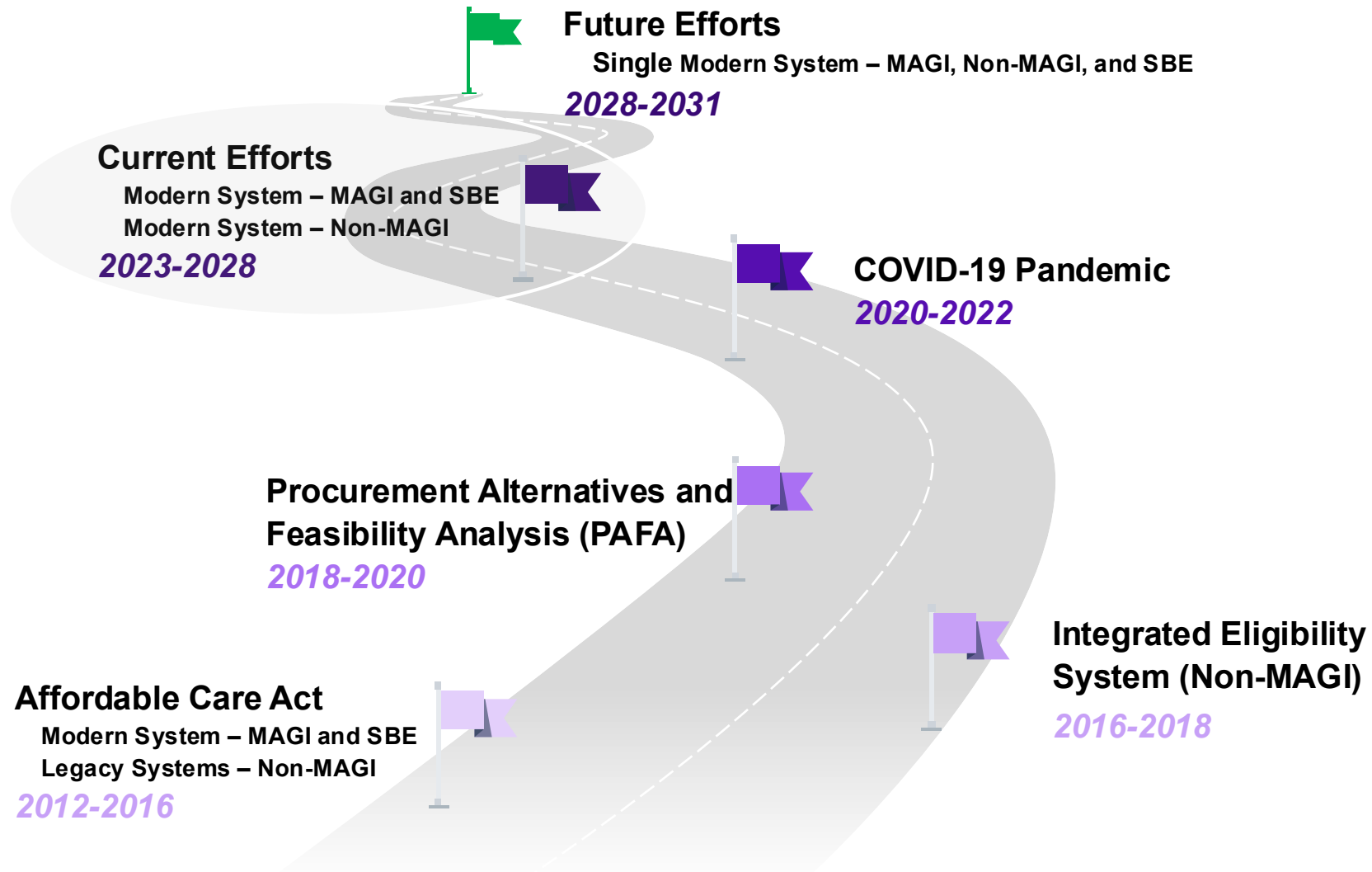


4. Ends with a clear, justified recommendation

AoA Template Walkthrough

NY State Demo

NYS Eligibility and Enrollment Journey



Facts Gathered Over 10 Years

1. **Non-MAGI RFI with IES – 2015**
2. **Non-MAGI RFI for Standalone System – 2018**
3. **Procurement Alternatives and Feasibility Analysis (PAFA) – 2020**
4. **Medicaid Complex Populations (Non-MAGI) Landscape Assessment and Alternative Analysis – 2022**
5. **E&E System Roadmap Narrative – 2025**
6. **Cost Estimate – Non-MAGI System RFP – 2025**
7. **Cost Estimate – Non-MAGI System Amendment – 2026**
8. **Cost Estimate – MAGI/SBE System Amendment – 2026**
9. **Cost Estimate – Converged E&E System – 2026**
10. **CMS Site Visits, Correspondence, and Guidance to Converge New York’s Multiple Systems to a Single System**

The AoA Build

1. Understanding the AoA Template

- a. Bring Facts to the Table
- b. Invest in Telling Your Story

2. Initial Draft – Early Decision to Utilize AI (Amazon Quick Suite) to Assist (5 Days)

- a. First Pass Produced ~35% Ready Document
- b. Second Pass and Refinement Produced ~50% Ready Document
- c. Further Used AI to Elaborate and Refine Business Language
- d. No AI Used to Prepare Financials

3. Final Editing – No Shortcuts (5 Days)

- a. Final Narrative Review – Word for Word
- b. Final Financial Review – Number by Number
- c. Evaluation Process – Criteria, Methodology, Scoring Guide, Matrix

Key Observations

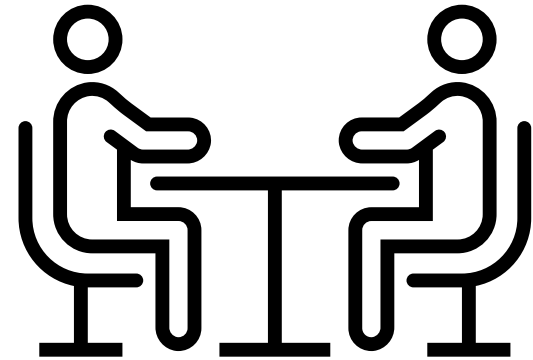
1. **AOA validated the assumptions and quantified the savings of moving to a single system/centralized model.**
2. **AOA can be repurposed for other stakeholders as the project moves through state level reviewers.**
3. **“Analysis of Alternatives Identified Solution” (20 pages) strengthens the journey narrative.**
4. **“Executive Summary” (5 pages) provides a concise review of over ten years of data gathering and analysis.**

Key Reminders

CMS Oversight and Support for AoAs

Key Reminders:

- Review AoAs for completeness, clarity, and compliance.
- Ensure that the selected approach makes sense.
- Assess the AoA's alignment with APD content.
- Identify red flags early and address issues or concerns with CMS, when needed.
- CMS will support states as they navigate AoA activities and outputs
- Technical Assistance is available



Resources

Templates

- [MES Templates on Medicaid.gov](#)

MES Requirements

- [SHO Letter #25-003](#) (Analysis of Alternatives discussion begins on Page 4)

Point of Contacts

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- CMS MES State Officers

AoA FAQs

AoA FAQs (1 of 3)

The AoA seems like it will be a heavy lift. Is enhanced match funding available to perform AoAs?

Yes. Enhanced match funding is available. Project Management Offices (PMOs) or Systems Integrator vendors can participate in the development of the AoA and related activities if proper controls are in place.

What aspects of the AoA process are covered under the Planning Advance Planning Document (PAPD) vs. Implementation APD (IAPD)?

During the PAPD, only a commitment to perform the AoA is required via Section 3. The AoA should be completed and included as part of the initial IAPD (typically referenced within Section 3 and included via Appendix B).

What is the definition of a project that requires an AOA?

An AoA is required for any significant investment decision, such as initiating a new project, evaluating changes to an existing system, or when a new need or capability gap is identified. The AoA compares different potential solutions (alternatives) based on cost, effectiveness, risks, and alignment with program goals to help select the best option.

Is it possible for a single IAPD to include multiple projects for MES services, systems, or modules that necessitate two distinct AoAs?

Yes. A single IAPD may include multiple projects, and each project that represents a distinct investment decision may require its own AoA. A single MES system or module may support multiple projects, and multiple MES modules may support one project, but each project should be evaluated independently based on its scope and objectives.

AoA FAQs (2 of 3)

How can states share market research information with each other ahead of formal processes?

States may share market research information through their MES SOs, who can connect them directly with other states. States can also:

- Access Medicaid Enterprise Reuse resources on Medicaid.gov
- Engage with peers at CMS conferences and through the State Technical Advisory Group (S-TAG)
- Collaborate directly with states working on similar MES initiatives, following any applicable procurement rules

What does “reuse” encompass?

In the context of the AoA, "reuse" means sharing, adapting, or building on existing Medicaid technologies and systems, within a state or across states, rather than building new solutions from scratch. States are expected to promote reuse as required by 42 CFR 433.112. For detailed guidance, see SMD #18-0054 or search the FAQs on Medicaid.gov for "Medicaid Enterprise System (MES) Reuse."

Contact your MES SO for state-specific examples of successful MES reuse initiatives.

States can only consider what is submitted in the bid from the vendor, but the scope of the AoA appears to include considerations beyond that. Can CMS clarify how to approach this broader scope?

The AoA is not limited to vendor bid responses. Typically, the AoA is completed before a Request for Proposal is issued. States should evaluate a full range of viable alternatives, including reuse, configuration versus customization, phased approaches, and non-vendor solutions, using available market research and state knowledge. Vendor bids may inform the analysis but should not constrain the scope of alternatives considered.

AoA FAQs (3 of 3)

Can CMS provide more detailed scoring methodology for the AoA?

CMS does not require a specific scoring method for the AoA. States should use an evaluation approach that is reasonable, transparent, and well-documented. At a minimum, the evaluation should consider factors such as partnerships, reuse opportunities, functionality, and estimated cost, though states may include other factors. CMS reviews the AoA for completeness, rationale, and sound decision-making, not adherence to a specific scoring model.

State Chief Information Officers do not always have time to review this type of document. Will CMS tailor the review process to their availability?

CMS recognizes the competing demands on State Chief Information Officers and does not require their direct participation in every AoA review. States should follow their internal governance processes to involve leadership as needed. CMS will focus its review on the completeness and quality of the AoA, not who participated in the review.

Structures and procurement authorities differ across states. How will CMS provide flexibility to avoid duplicative work?

CMS will allow flexibility in how states demonstrate compliance with AoA and APD requirements. States may use existing analyses, procurement artifacts, and documentation to satisfy requirements, provided they cover the required elements and include clear cross-references. Contact your CMS MES SO to align on expectations and reduce duplicative work

Questions?

Appendix: AoA Template Deep Dive

AoA Executive Summary

The Executive Summary should:

- Summarize the business problem and proposed MES solution
- Briefly describe alternatives considered
- State the recommended option and why it is recommended
- Reference reuse strategy at a high level
- Provide a clear and complete rationale for the APD reviewer

AoA Executive Summary

Table A: Guidance for AoA Executive Summary

Template Information	Description
Guidance	<p>An AoA executive summary should encapsulate the key findings, conclusions, and recommendations of the analysis. The executive summary section should be no longer than one (1) page.</p> <p>Complete sections 1 through 6 of the AoA first. Once the AoA is complete, return to this Executive Summary section and summarize key findings, conclusions, and recommendations in a few paragraphs.</p> <p>The target audience of this section is the executive leadership team of the State Medicaid Agency (SMA), State information technology (IT), and CMS.</p>

[Click **here** and type text.]

AoA Section 1: AoA Approach

The AoA Approach:

- Describes the approach used to conduct the AoA
- Identifies key stakeholders involved in the analysis
- Outlines the governance, timeline, and decision-making structure
- Clarifies how the state ensured objectivity and reuse consideration



The approach should reflect a **deliberate, inclusive process.**

1. AoA Approach

Table B. Guidance and Checklist for AoA Approach

Template Information	Description
Guidance	<p>A complete AoA begins with a well-crafted approach that delineates responsibilities and guides the analysis process. It is driven by the needs of the project stakeholders and decision-makers, previous analyses, and constraints.</p> <p>In this section, states should detail their approach to conducting the AoA. This is sometimes called an AoA Study Plan.</p> <p>The AoA approach section should not exceed two (2) pages.</p>
Checklist	<ul style="list-style-type: none">• Explain the scope of the AoA and how it was defined, who participated in the AoA exercise, and how they were identified or selected.• Explain how and where participants collaborated, the state's approach to documentation, key AoA milestones, and the timeframes associated with the overall exercise.• Provide the state's approach to identifying, analyzing, and selecting alternatives, along with the methods to remove bias.• Provide details on any other key methodology for developing the AoA.• If the state has AoA process documents, a study/project plan, or an internal "scope of work," include these items here or as an appendix.

AoA Section 2: Market Research

The Market Research and Reuse section documents:

- What market research the state conducted and when
- Whether reuse options were considered or dismissed
- The connection between reuse and alternative selection

Table C. Guidance and Checklist for Market Research

Template Information	Description
Guidance	<p>Use this section to describe the state’s market research under consideration for this project. Market research is the systematic gathering and analysis of information about vendors, state-supported products/solutions, market trends, pricing, and product availability to support informed decision-making.</p> <p>In the context of an MES project, the state’s market research should include a search of current solutions that are (1) available on the market or used in other agencies, (2) in the state’s enterprise, or (3) in other state, federal, and local government organizations. The process may entail surveys, phone calls, an official request for information (RFI), or professional contacts, and must be documented along with the search results.</p> <p>This research is essential because it may also reveal opportunities for partnerships to enable CMS and states to leverage existing IT assets effectively.</p> <p>In evaluating options for building a state MES, the state should select solutions that maximize partnership and can be acquired by leveraging an existing contract through a partnership with another State, District, or Territory.</p>
Checklist	<p>For the Market Research:</p> <ul style="list-style-type: none">• Describe how the market research was conducted and the options selected for consideration.• The submission must contain an explanation if leveraging an existing partnership, creating a new partnership, or reusing systems components from another State/District/Territory are not among the options selected.



This section should demonstrate real inquiry and strategic consideration—checkbox answers will not suffice.

AoA Section 3: Evaluation Criteria

Evaluation criteria should:

- Be clearly defined, relevant, and measurable
- Include considerations like partnerships, reuse, functionality, and estimated cost
- Be applied consistently in later sections
- Include weights to reflect priorities **(optional)**



If any evaluation criteria—including partnerships, reuse, functionality, and estimated cost—are vague, misaligned, or biased toward a single option, the integrity of the analysis is compromised. Don't let weak criteria drive major investment decisions.

Table D. Guidance and Checklist for Evaluation Criteria

Template Information	Description
Guidance	<p>Alternatives must be compared in a thorough and non-biased fashion. This section should include:</p> <ol style="list-style-type: none">1. A brief explanation of the process for choosing the evaluation criteria.2. A table identifying and defining the evaluation criteria (including considerations and benchmarks for evaluation and scoring).3. A scoring guide to assess the alternatives. <p>Criteria should align with the project goals, requirements, and constraints. Evaluation criteria must include, but are not limited to, partnerships, reuse, functionality, and estimated cost. Other standard criteria are ease of implementation, risks/issues, scalability, user experience, innovation potential (use of modern tools/technology stacks), organizational impact, schedule, maintainability, security, and accessibility. Consider having stakeholders vote on the most critical selection criteria based on business and technical needs and weigh the criteria accordingly. If the criteria are not weighted, remove that column from Table E.</p> <p>Assigning weights reflects the criterion's importance to the business and Medicaid program and is used in calculating the score. The weights should add up to 100 percent or 1.0.</p>
Checklist	<ul style="list-style-type: none">• Summarize evaluation criteria selection methodology, including the weighting, if applicable.• Describe the state-specific analysis criteria (optional to use Table E).• The description of each criterion in Table E should assist the stakeholders in scoring.• Identify the scoring guide in Table F based on the state's preferred approach (optional to use Table F).• Ensure that the scoring approach applies consistently across all criteria in Table E.

AoA Section 3: Evaluation Criteria (continued)

Table E. Example Alternatives Analysis Criteria *

Criteria	Description	Weight
Partnerships	The solution can be acquired by leveraging an existing contract through a partnership with another State, District, or Territory.	
Reuse	Solution adapts existing capabilities within the state, capabilities in use by another state, or those available from the vendor community, with minimal customization and/or incorporates reuse into the design of new capabilities.	
Functionality	Solution meets the technical requirements and functional specifications identified by the state. (Each alternative may be scored against multiple requirements.)	
Estimated Cost	The solution is evaluated for its total estimated cost of ownership, including design, development, testing, training, migration, implementation, licensing, and operations and maintenance.	
Ease of Implementation	Solution can be implemented without disrupting existing operations. Solution can be implemented using minimal configuration, as opposed to custom development, to meet non-financial business needs and objectives.	
Risks/Issues	Expectations for the overall solution risk/issues are low. (Each alternative may be scored against multiple risks.)	
Scalability	Solution can effectively and efficiently scale with the project's growth and changing needs.	
User Experience	Solution is user friendly, and the end users will not require extensive ongoing training.	
Innovation Potential	Solution is well-positioned to support future technical enhancements and leverages modern tools/technology stacks.	

*Partial Table shown

Table F. Scoring Guide (Example)

Score	Description
1	The alternative is not viable because it does not meet the criterion.
2	The alternative is suboptimal because it requires more than minimum custom development to meet the needs of the criterion.
3	The alternative meets the needs of the criterion with minimum configuration.
4	The alternative meets the basic needs out of the box with existing functionality.
5	The alternative exceeds the basic needs, offering a significant competitive advantage.

AoA Section 4: Identification & Evaluation of Alternatives

In this section states must identify and evaluate at least three alternatives, including:

- The status quo or no-action path (legacy system)
- Two or more viable options under serious consideration

These may include examples such as:

- Legacy system enhancement
- COTS/market solutions
- Reuse of other states' or vendors' systems
- Shared services or cooperative purchasing models



If alternatives are not meaningfully distinct, fully developed, and supported by evidence, the analysis becomes a justification exercise rather than a true comparison. Make the state show its work.

Table G. Guidance and Checklist for Identification and Evaluation of Alternatives

Template Information	Description
Guidance	This section should define and document the various alternatives or solutions under consideration. These alternatives or solutions may include different technologies, vendors, implementation strategies, or combinations thereof. The state describes the current state or at least two proposed alternatives (a minimum of at least three alternatives in the absence of a legacy solution).
Checklist	<p>For each alternative, provide:</p> <ul style="list-style-type: none"> • Background on the solution via a short narrative. • Risk summaries* – include technical risks, project management risks, and any other factors that may impact the success of the IT project. • A qualitative and/or quantitative assessment against the goals/objectives, requirements, and other criteria identified in Section 3 (inclusive of reuse and functionality). <p>* For risk/issues summaries: Describe the risks and issues. Consider the effects and magnitude of the alternative to the existing business and technical architecture. Impacts may include:</p> <ul style="list-style-type: none"> • Modification/optimization/elimination of existing processes, procedures, and systems. • Integration of processes and procedures within or across business units. • Interruption to service. • Modification of organizational structure. • Modification of service level agreements. • Development of technical staff skills and experience in operations and maintenance. • Impacts on providers and beneficiaries. <p>** For cost-analysis:</p> <ul style="list-style-type: none"> • Identify estimated costs, include the cost for implementations and M&O. • Use the same cost model for all alternatives and provide the model in the appendices.

AoA Section 5: Evaluation Matrix

The Evaluation Matrix should:

- Apply the criteria from Section 3 to all options
- Use a consistent scoring scale (e.g., 1–5)
- Optionally include weights to reflect criteria importance



Scoring must be applied consistently using the state's defined criteria and scale—this is not the place to rewrite the rules.

Table H. Guidance and Checklist for Evaluation Matrix

Template Information	Description
Guidance	In this section, the state provides an evaluation matrix or rubric for scoring each alternative against the evaluation criteria from Section 3. Including a rubric in the AoA process enhances transparency and objectivity by providing a structured framework for evaluating alternatives. A rubric also ensures that all stakeholders use established criteria and weights in the decision-making process to increase reliability and rigor in the evaluation. The rubric should be well-defined, clearly communicated, and consistently applied across all alternatives.
Checklist	<ul style="list-style-type: none">• For each alternative, assess and score its performance against each criterion using the scoring system provided in the Scoring Guide in Section 3.• Optionally, weights can be applied to criteria if certain factors are deemed more critical than others. Multiply the score by the assigned weight for each criterion.• Obtain a total score by summing up the weighted scores for each alternative.• The alternative with the highest total score may be considered the most favorable option, which should be annotated in the solution rank section of the table.• Remember to customize the rubric based on your project's specific needs, objectives, and context. Adjust the criteria, weights, and scoring system to align with the analysis's priorities and goals.

AoA Section 5: Evaluation Matrix (continued)

Table I. Evaluation Matrix (Example)

Criteria	Weight	Score: Alternative 1	Score: Alternative 2	Score: Alternative 3
Delete this row for delivery.	Copied from Table E	Score (per Scoring Guide), then multiply by weight	Score (per Scoring Guide), then multiply by weight	Score (per Scoring Guide), then multiply by weight
Partnerships				
Reuse				
Functionality				
Estimated Cost				
Ease of Implementation				
Risks/Issues				
Scalability				
User Experience				
Innovation Potential				
Organizational Impact				
Schedule				
Maintainability				
Security				
Accessibility				
Total				
Solution Rank				

AoA Section 6: Preferred Solution

The preferred solution narrative should:

- Align with the evaluation matrix results
- Discuss any tradeoffs of the preferred solution
- Summarize how this solution supports reuse, cost-efficiency, and CMS priorities
- Connect to APD funding request and implementation plans

Table J. Guidance and Checklist for AoA Identified Solution

Template Information	Description
Guidance	This section must present a well-informed decision regarding the selection of the identified solution based on the evaluation matrix. The narrative should highlight the chosen solution's benefits and mitigations for any areas in which it did not score well.
Checklist	<ul style="list-style-type: none">• Provide a short narrative on the identified solution.



Without this section, CMS cannot validate the decision carried over to the APD and move towards approval.