

How to succeed with your MMIS procurement: Buy outcomes, not systems (Part 3)

States can cut Medicaid Management Information System (MMIS) implementation time and risk by using already proven commercial capabilities — those used in the commercial health care market — to meet state Medicaid business requirements. These capabilities can help in two major ways:

- Provide states with unprecedented and much-needed flexibility
- Attract new MMIS market entrants and increase competition, helping states take advantage of broader expertise and proven solutions with lower cost of ownership.

For MMIS replacement projects, CMS encourages states to:

- Rethink their MMIS approach along modular lines
- Acquire specific business services (rather than systems) where possible to manage their Medicaid programs
- Leverage commercial capabilities to gain exposure to new ideas and more competition.

To break the traditional approach of acquiring massive custom systems, a standard practice in the MMIS market for more than 30 years, state agencies must reshape the way they procure MMIS capabilities – including how states specify MMIS requirements in RFPs.

This paper provides twenty detailed recommendations for RFP changes that will allow states to leverage existing commercial service capabilities and to reap the full benefits of a modern, flexible, lower-risk and lower-cost Medicaid enterprise.

How to procure MMIS outcomes via services rather than building your own system

1. [Learn how Medicaid commercial payers have solved similar problems.](#)

Today, commercial health care payers cover the cost of care for nearly two-thirds of Medicaid beneficiaries nationwide¹, and assume full financial and health outcomes liability for those members.

When a Medicaid health plan takes on the financial and outcomes risk for its Medicaid population, it is similar to the responsibility and accountability undertaken by the state, but for its assigned membership. Medicaid health plans also often serve multiple states, and for many plans their total membership exceeds the size of many single state Medicaid programs.

As described in Parts 1 and 2 of this 3-part series, a services-based Medicaid Management Information System (MMIS) is based on commercial health care best practices. It can provide state Medicaid programs many benefits:

- Faster implementation time
- Reduced implementation cost
- Diminished implementation risk
- More predictable overall cost of ownership
- Achieve business goals more quickly

In this article, Part 3 in our series, we build on the recommendations put forth in two other white papers on services-based requirements: RFP recommendations (Part 1), and SLA recommendations (Part 2).

Sources:

1. Medicaid and CHIP Payment and Access Commission, MACStats: Medicaid and CHIP Data Book (Washington, DC: Medicaid and CHIP Payment and Access Commission, December 2017), <https://www.macpac.gov/wp-content/uploads/2015/11/EXHIBIT-29.-Percentage-of-Medicaid-Enrollees-in-Managed-Care-by-State-July-1-2015.pdf>, p. 83.

Systems supporting large Medicaid payers (MCOs) must support similar program challenges to state Medicaid agencies, including:

- Supporting provider participation across a wide range of specialties
- Accommodating the complexities of value-based payments
- Achieving access in challenging rural and frontier geographies
- Integrating the impact of social determinants on health and well-being
- Supporting the uniqueness of waiver and long-term services and supports (LTSS) program.

Beyond program challenges, these large Medicaid payers also experience technological challenges similar to state MMIS projects such as:

- Migration from legacy systems to modern architectures to support a wide range of business services
- Attainment of better data integration and analytics
- Adoption and proliferation of best practices
- Technological flexibility to support ever-changing program requirements
- Budget predictability and better fiscal control.

To solve these technological challenges, nearly all Medicaid MCOs use a combination of commercial-off-the-shelf (COTS) technologies, with minimal customization, connected by an enterprise service bus (ESB) to manage their business. While differences remain between state MMIS and Medicaid MCO needs, both program and technological challenges contain many similarities.

Yet, why is the knowledge transfer between major commercial participants in the Medicaid payer market and state MMIS initiatives nearly nonexistent? Perhaps because, traditionally, states have viewed MMIS as a “system” where system integrators are sought for help, instead of viewing its needs as a “service,” where payer market participants are sought for help.

If states were to view their MMIS needs as a “service,” where the state buys outcomes rather than systems, the past system-centric procurement approaches no longer make sense.

State Medicaid agencies can learn helpful lessons from Medicaid payers and their business-enabling partners where technological modernization has been addressed and solved. The introduction of modules into MMIS architectures makes this possible like never before by helping states to bucket their needs into commercially-solvable components. But states must first open their thinking to:

- How they view their needs
- How they align those needs to procure discrete solution components or modules
- How those modules are acquired and implemented.

Here are some rules of thumb that can open state MMIS procurements to proven Medicaid payer market solutions, drive more competition, and help ease the transition to modern MMIS approaches built on proven, repeatable business services.

A. Align MMIS requirements to existing commercial-off-the-shelf (COTS) capabilities.

States should define their needs in line with COTS capabilities that already exist on a widespread basis. We call this “commercial rationalization.” If RFP requirements are aligned to commercially available technologies, versus custom specifications, then:

- New industry participants with proven capabilities will participate
- States will have access to more robust solutions that are used and supported by the broader healthcare market for MMIS functions
- Alignment to commercially available technologies will drive down costs due to increased competition.

“Technological extensibility,” which is the capability of a software product to accommodate custom requirements, is built into most industry COTS solutions. Hence, there is no longer justification for creating custom state systems where the state becomes the whole market for that system and therefore bears its entire cost and risk. Instead, today’s COTS can accommodate unique state requirements that, before, required custom system solutions.

In addition to aligning MMIS requirements to existing COTS capabilities, states should define the scope of their MMIS modules to align with existing commercial vendor service capabilities. The following represents Optum’s recommendation for how MMIS module scope should be defined:

Core services module. This includes FFS claims processing and related services, such as benefit plan management, provider screening and enrollment, contact center, provider and member operations, electronic data interchange (EDI) streamlining, third-party liability, and electronic visit verification. Functions in this module are similar to those performed by a vast array of commercial market participants using COTS technologies. This module can be acquired as an Administrative Service Organization (ASO) with strong competition from new, proven market entrants while still permitting participation from traditional MMIS vendors.

Care management module. This module includes all functions to manage FFS health care delivery including clinical pre-authorization, utilization and health management, behavioral and medical care integration, emergency department diversion, hospital discharge and readmission management, complex case management for super-utilizers, and transplant management. Functions in this module are similar to those performed by numerous Medicaid payers and benefit administrators as well as Medicare quality improvement organizations (QIOs) and QIO-like entities. Most of these organizations use COTS technologies to deliver their care management service. Acquisition of this module should see strong competition from both new, proven market entrants as well as traditional players. If a state is seeking fewer modules and broader vendor accountability, this module can readily be combined with the core services module as was the case with one recent state procurement.

Pharmacy Services module. This module includes all functions for pharmacy benefit administration, including point-of-service (POS) claims processing, prior authorization, preferred drug list (PDL) management, rebate administration, maximum allowable cost (MAC) pricing, complex case management for super-utilizers, supplemental rebate contracting, generic optimization, medication therapy management, drug utilization review (DUR) services, and specialty pharmacy. Pharmacy services have historically been acquired by many states as a separate module from an established pool of proven vendors with great success. We encourage states to continue this proven practice.

Data warehousing and analytics module. This module includes all the functions around data management and analytics for broad-based Medicaid program management, including enterprise-level data warehousing, data enrichment, MARS and SURs components, and program integrity services. Functions in this module require specialized skills and technologies not common among traditional MMIS vendors. Many states have historically carved this function into a separate module with great success and we encourage that practice.

Financial management services module. This includes carved-out MMIS financial services such as provider payments, managed care capitation payments, general ledger, provider recoupment and funds management. We believe this function can best be performed by most state financial systems and become an “in-house” administered module. However, if greater separation is required, this function can be acquired from one of numerous financial services vendors operating in the commercial market. As a separate option, one state assigned managed care capitation payments to its Medicaid enrollment broker.*

System integration services module. This includes all the integration services to join together the enterprise, including project management, integration of the multi-vendor environment, and integration technologies. CMS has generally defined this module and required it be separate from other modules.

*For states using capitated managed care, it may create provider confusion to have payments associated with a vendor’s role as an MCO are mixed with payments associated with a vendor’s role as a state fee-for-service (FFS) fiscal agent. For this reason, we recommend provider payments associated with the state’s FFS program be either included as part of a financial management module where an MCO cannot compete or the state’s financial system.

B. Align functions that are not traditionally performed by Medicaid health plans into separate modules.

Although systems supporting Medicaid Health Plans and State Medicaid Enterprise Systems perform largely parallel functions, there are major capabilities that states require that Medicaid Health Plans do not perform. We recommend separating these functions into modules that are separate from those where there is a great deal of overlapping functionality – so that states can take advantage of leveraging platforms that do support Medicaid Health Plans. Some examples of the state specific functions that should be separated from core health plan functions are:

- i. Execution of Medicaid Health Plan capitation payments: We recommend aligning payment of capitation payments to the financial module or the enrollment broker module.
- ii. Assignment of Medicaid-eligible individuals to Medicaid Health Plans: Most states with managed care programs already maintain a separate enrollment broker, apart from their MMIS/fiscal agent vendor, to engage with Medicaid-eligible individuals in selecting a Medicaid MCO. Allowing the enrollment broker to execute the assignment of members to the Medicaid MCO they select is efficient business process, and has the benefit of allowing the state to leverage existing technologies used by Medicaid MCOs for other functions without creating need to develop this functionality.
- iii. Processing of encounters from Medicaid Health Plans: Medicaid MCOs need to submit encounters to states, but they do not process encounters for capitation rate development or analytics that states require. However, there are numerous COTS products designed to capture and validate already adjudicated claims, perform comprehensive editing of those claims and perform re-pricing and analytics. These functions are indeed “commercial” as every health plan needs to evaluate network performance and implement various pricing strategies to mitigate risk, evaluate outcomes or improve cost efficiency. We recommend states seek these proven, reusable COTS capabilities to process MCO encounters as part of its data warehousing and analytics modules or in a separate encounter processing module, and preserve core claims processing for FFS benefits.

Following the recommendations above will enable states to maximize re-use of existing COTS products and commercial vendor capabilities widely used by Medicaid health plans for supporting commercially-similar MMIS functions. In addition, following these recommendations will enable states to capitalize on lessons learned from the commercial market in addressing challenges similar to those faced by states today with MMIS modernization.

2. Expand the definition of qualified vendor experience.

In order to take advantage of COTS-based solutions currently supporting Medicaid health plans, states should consider experience using those solutions as relevant experience to deliver a services-based MMIS. A state should consider the bidder’s experience with similar projects, even if those projects were not specifically related to state MMIS. A bidder may have experience in commercial, Medicaid, Medicare or commercial projects that is similar in scope to what is required of the RFP. For example, a bidder may have very relevant experience implementing COTS technologies to deliver business services in similar projects, but not have custom MMIS development experience.

A RFP that mandates a vendor have prior full MMIS certification experience will limit competition to primarily legacy vendors with high historical MMIS project failure rates and disqualify new vendors who are leveraging COTS solutions that are applicable to MMIS functions. To receive the full benefit of a more open procurement with qualified vendors, we strongly encourage states not to restrict competition to only those entities that have built and obtained legacy MMIS certification in a previous state.

To be more competitive for your state’s MMIS procurements, we recommend accepting similar competitive, commercial capabilities for MMIS business functions.

Recommendation

Below is an excerpt from a state MMIS RFP approved by CMS. This is an example of a requirement that maximizes competition while still limiting bidding to those qualified to perform the work by allowing relevant experience outside of Medicaid.

Offeror shall describe its ASO system and related Medicaid operations experience of similar scope and size in other government or commercial insurance programs. This shall include a description of engagements/ contracts on which Offeror has performed services similar to those required in this Contract.

To maximize competition among qualified bidders, we recommend the qualifications of the prime bidder as well as its subsidiaries, affiliates and parent all count in the state's evaluation to the extent each entity is under the control of a performance guaranteeing entity. For example, if the bidding entity has a legal parent and that parent owns subsidiaries other than the bidding entity, the qualifications and experience of those subsidiaries should count in the state's evaluation to the extent the common parent can command their resources as part of a parent performance guarantee on the contract. This enables large commercial enterprises to compete effectively and prevents a state's inadvertent disqualification (or under-qualification) of an otherwise top-performing bidder.

Below is an example of a RFP requirement that maximizes competition while still limiting bidding to those qualified to perform the work by allowing relevant experience of eligible affiliated entities.

The bidder shall provide the following information regarding the organization's experience:

Description of all services similar to those sought by this RFP that the bidder, predecessor entities, and affiliated entities have provided to other businesses or governmental entities within the last (5) years.

Experience of predecessor and affiliated entities will be eligible as qualifications for this RFP if those entities are under the control of the entity whose signature is on the contract performance guarantee.

3. Make Service Level Agreements (SLAs) outcomes focused.

Service-level agreements (SLAs) should focus on outcomes. States should limit systems-oriented requirements to those necessary to maintain efficient interoperability with other MMIS modules and state systems.

CMS has signaled that ongoing enhanced matching funding for operations should be tied to operational metrics reporting and goals attainment for MMIS-related contracts. CMS has also expressed that future SLAs should be outcomes focused and tethered to these operational metrics. CMS wants a clear line of accountability between what it is funding and what the state is achieving via its contracting.

Recommendation

We generally recommend keeping SLAs focused on outcomes and linked to Critical Success Factors (CSFs) included in CMS' Medicaid Enterprise Certification Toolkit. This will create the clear nexus between certification, enhanced matching funds and ongoing operational performance that CMS is seeking. For specific SLA recommendations, see the Optum white paper, "Key considerations for a modern MMIS: Part 2."

4. Purchase business services instead of building a system.

Today states have options other than building and owning custom systems. Instead, they can buy the business service, allowing for quick scaling and flexibility in pricing. We say, "Why build and own a power plant when you can just buy the electricity?" Services-based solutions are enabled by a SaaS (Software as a Service) technical solution that is owned, hosted and operated by the vendor. This is called the BPaaS via SaaS model, which is the delivery of business processes (BPaaS: Business Process as a Service) with software services over the internet (SaaS: Software as a Service). To interoperate efficiently, these services must be integrated with other MMIS modules and state systems, which is accomplished during implementation.

In the BPaaS via SaaS model, the system features and functions are, for the most part, the contractor's responsibility. They also must accommodate specific state system requirements and those of CMS certification requirements and are architected accordingly to deliver the specified outcomes in the BPaaS via SaaS model. However, state RFPs often include detailed technology requirements, which are unnecessary, restrict state options, and provide no benefit when purchasing outcomes.

Recommendation

One state's RFP for such services described their objective as:

[Department's] goal is to purchase services, not hardware or software applications, to accomplish the objectives set out in the solicitation. Contractor shall blend a combination of excellence and innovation in business operations, system implementation, and technology into a solution that represents the best value to the state.

The following two points will help your RFP align with the BPaaS via SaaS model.

A. Discuss your willingness to modify business processes defined in the state plan if, and when, new business process efficiency warrants it.

In selected cases, a services-based model may be able to attain higher levels of efficiency if alterations to operational, procedural or other processes that may impact the way claims are processed can be modified. If necessary, we suggest states discuss their willingness to amend certain portions of their state plan to accommodate enhanced efficiencies made available through new technologies such as a services-based model.

B. Specify requirements in the form of outcomes.

Require bidders to describe how they will meet outcome-based RFP requirements. States have traditionally purchased custom system builds for their MMIS projects so it is not surprising that "muscle memory" often drives traditional technical requirements into new RFPs. States should ask themselves whether those technical requirements are really necessary to delivering outcomes. In most cases, they are not and, if included, will continue to drive custom built solutions and limit the number of RFP responses.

5. Align deliverables to a BPaaS via SaaS model.

Traditional MMIS procurements specify an initial project phase of "Design, Development and Implementation," commonly referred to as DDI, during which time the contractor is required to conduct a requirements analysis and create a General System Design (GSD). This is followed by a Detailed System Design (DSD).

Both deliverables contain thousands of pages of detailed system documentation, appropriate when a state is purchasing the entire system, but not necessary for BPaaS via SaaS projects. In these projects, only the implementation — the "I" of "DDI" — is required since the system has already been designed and developed. BPaaS via SaaS projects focus on configuration rather than software coding. Hence, configuration and interface documentation should replace system documentation. These projects justify a different approach to deliverables.

Recommendation

We suggest that states consider the differences in a BPaaS via SaaS projects, create its desired list of deliverables and provide them as part of the RFP. But then we recommend states ask the bidder to propose adjustments to that deliverables list to reflect the nature of their proposed solution as part of their RFP response. Below is an excerpt from a CMS-approved state RFP with language consistent with our recommendation:

Offerors may propose additions to the [deliverables list]. All data and documents required for the proper operation and maintenance of Offeror's solution and supporting operations shall be included in the [deliverables list], and all [deliverables list] data items shall be considered Deliverables. For COTS components, the [deliverables list] shall include technical documentation consistent with Contractor's proposed long-term system maintenance concept. The [deliverables list] shall include sufficient data items such that a follow-on contractor or [department] could successfully assume the duties of operations and system maintenance in the future. This documentation shall include business process models, State-led and Contractor-led, using Business Process Modeling Notation or other notation as approved by [department]. For Software whose rights are or will be owned by the State and/or Federal Government, or that are open source or public domain, the [deliverables list] shall include all source code, build files, and other data required to properly modify and maintain that Software.

Offerors may also propose that certain [deliverables list items] listed in the Attachments are not relevant for their proposed solution. For each listed [deliverables list item] that is not applicable for the Offeror's solution, the Offeror shall mark the N/A box in the Initial options in the Status row of the [deliverables list]. The Offeror must also enter a justification as to why it believes the [deliverables list item] is not applicable.

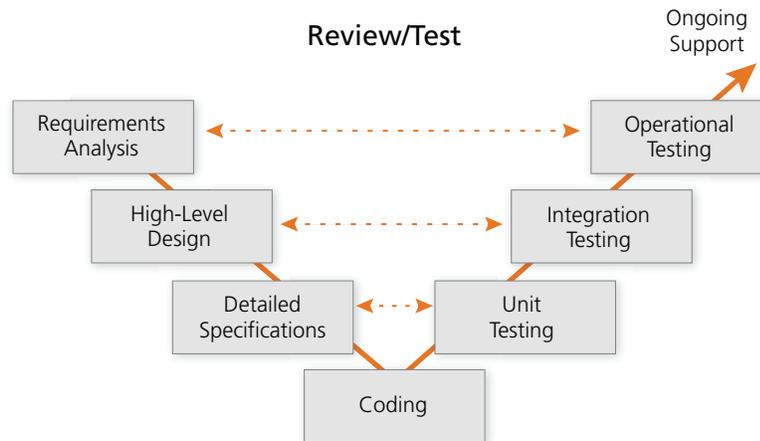
Contractor may use any format for data items with [department] approval.

6. Require unit and system testing as deliverables on custom components only, not on configurable BPaaS via SaaS model COTS components.

Individual system features and functions may already exist in COTS software that's owned and maintained by the contractor. The contractor may choose to perform unit-level systems testing on these already built commercial components to validate configuration. However, this should be done only for the contractor's consumption and not designated as a state deliverable.

In a case where custom components are required to meet RFP outcome specifications, the contractor may develop system functionality in one of two ways at the discretion of the contractor. First, the contractor may choose to enhance its COTS technology to accommodate the requirement and, under this option, the developed software would become part of the COTS and hence be owned by the contractor or its COTS vendor(s). In the second instance, which may likely occur on a case where the requirement is truly unique to a single state, the contractor may develop a custom software component apart from its COTS for state ownership. Regardless of the path the contractor takes to accommodate new system functionality, new software components should be unit-level, system, and integration tested with results available to both the contractor and the state to demonstrate completeness. Once the contractor's overall technical solution has been fully tested and is in live operations, it should be continually regression tested through automated procedures to make sure no defect intrusion occurs as a result of routine changes.

In general, for a BPaaS via SaaS solution, it is most efficient for the state to require detailed system level testing deliverables only for custom components, configuration, and integration with other MMIS modules and state systems. User-acceptance and operational readiness testing should then be used to validate that both the total system and operational processes produce the desired results. This is consistent with the testing "V" model commonly found in the software development left cycle.**



**"V Model" related to that found in Dr. Richard Turner, "Toward Agile Systems Engineering Processes," Systems and Software Consortium, www.stsc.hill.af.mil, April 2007, p. 11.

Recommendation

In a BPaaS via SaaS model, the ultimate form of testing for state consumption is operational readiness testing. The contractor must prove it can deliver fully on the SLA outcomes sought under the contract. This approach assures the state it will get the outcomes required by the contract. It also preserves the contractor's ability to be time and cost efficient in its implementation.

7. The State should acquire software licenses only for those system components to which it needs direct access.

In traditional MMIS projects where states procure a custom system, software licensing requirements reflect state ownership of the system. BPaaS via SaaS projects are vastly different, and software licensing should be adjusted accordingly.

In a SaaS delivery model, the state may require certain access to components of the contractor's system solution. But the system will never reside on state hardware and should not require full software licensing to the state.

Recommendation

Below is RFP language regarding software access from one state's CMS-approved MMIS procurement:

Offeror shall describe client access requirements for their solution for both [department] and external consumers of the hosted solution where applicable, including any client access software and licensing requirements.

Software licenses should terminate at the end of the contract as the contractor's hosted solution ceases to be available to the state. This is very different from traditional MMIS projects where the system is left behind and is state property.

The exception to this end-of-contract termination should be in the case of a contract termination for cause where the state must have a sustaining ability to continue operations under emergency conditions. In that case, the contractor should be required to grant continuing access and support to the state and/or its successor administrative contractor for a specified, limited period of time to complete a transition to new operations.

8. Specify evergreen software and hardware as well as pure COTS solutions.

In a BPaaS via SaaS model, one of the benefits to states is they don't have to manage and maintain a system and keep it current with ever-changing federal regulations. Because COTS technology is "commercial," it provides "market-based" financing for upkeep and regulatory currency. One state defined COTS in its RFP language as follows:

"Commercial off-the-shelf (COTS) software" means software used with no customization and for which source code is not made available to licensees.

Your contractor should be required, without additional cost to the state, to keep all of its software and hardware current and compliant with federal regulations. Over the course of a long-term contract, the technology evolves; both hardware and software becomes out of date and insufficient to support program needs. By purchasing business services the vendor provides upgrades of the supporting technology – including both software and hardware – at the vendor's cost.

For this to be accomplished, however, COTS technologies must comply with this definition and not be modified through customization. When this definition is breached and software is modified (such as a code branch), the ability for COTS technologies to ingest new versions, releases, patches, bug and bug fixes become compromised, and results in significantly higher state costs and more time to implement changes that should otherwise be routine and inexpensive.

Recommendation

When a contractor has source code for COTS software, it can be tempting to open the source code and apply changes to the software. States should seek contractors that have a track record of preserving COTS integrity while using COTS extensibility features through application programming interfaces (APIs, also called "software exits") liberally to accommodate needed customization. This technique requires greater skill, but preserves the integrity of the COTS software and enables it to be "evergreen," that is, constantly current during the term of the contract. This is how nearly all commercial payers maintain their systems, but is historically uncommon in the MMIS market.

States should emphasize and insist on acquiring and maintaining pure COTS technologies. They should also require bidders to describe their experience in doing so in projects similar to the project at hand.

9. Specify what you want to accomplish, not how the technology should work.

We have seen two general themes in recent state MMIS procurements that seem to run counter to preserving the benefits of using COTS solutions. In the first instance, we saw a state overly "modularize" its business requirements. This meant that functions fully performed in common COTS claims solutions had to be broken apart (or bid redundantly) for each module to meet the state's requirements.

In the second instance, we've seen states specify that a single business rules engine must be used to drive all MMIS components. COTS components use their own configurable business rules engines. Requiring that each be reengineered to work with a single MMIS-wide business rules engine is expensive and unnecessary and not consistent with the use of COTS solutions in the commercial sector.

Recommendation

We recommend states avoid specifying "how" bidder technology performs a function. Instead, specify "what" outcome the technology needs to achieve. The bidder can then determine how it meets those requirements while preserving COTS integrity and associated benefits.

10. Specify technical requirements that are technology agnostic.

To allow vendors to provide the best COTS technology available to meet state SLA requirements, states should not specify technology or COTS solutions by name. Vendors have invested capital to prebuild MMIS solutions choosing the COTS technologies that work best with their solution, while meeting the state's SLA requirements and performing integration into the state MMIS environment.

If the state has an enterprise service bus (ESB) that it wants bidders to use to support integration activities, permit the bidder to interface its own ESB with the state's. By doing so, vendor modular components that comprise its solution don't have to be reengineered to separately accommodate a custom interface.

Recommendation

States will want to avoid any RFP language that specifies technologies by name as that limits bidders' abilities to meet the state's outcomes in an efficient and cost-effective manner.

11. Allow a multi-tenant technical solution.

States are adopting reuse principles and rapidly moving to BPaaS via SaaS delivery models in which the contractor owns and operates a system that can deliver state Medicaid business requirements. Most of these systems are multi-tenant in nature where one instance of a system can support multiple state programs across multiple states, while keeping each state's data separated securely. This is more common than not in commercial payer implementations.

Recommendation

We realize states have not traditionally procured multi-tenant BPaaS via SaaS solutions for their MMIS needs. However, to capture commercial efficiency and maximize reuse, it is important to exercise care in drafting RFP technical requirements so that multi-tenant solutions are not precluded and are instead explicitly permitted.

One specific area for consideration is around system governance. In a multi-tenant BPaaS via SaaS solution, certain changes required to maintain the solution's "evergreen" nature should be applied continuously by the contractor without intervention or approval by the state. Other changes, such as those required to meet state policy changes, should be subject to state approval prior to implementing. This enables the contractor to control how RFP requirements are met while preserving the state's ability to specify what outcomes it requires.

12. Allow private or public clouds with NIST security compliance.

It is important to recognize and evaluate the differences among various cloud offerings. A key benefit of a cloud-enabled solution is the ability to support multiple products or clients while isolating their respective data. States should look for efficient and effective cloud-enabling options while ensuring state's data will remain isolated and secure. Doing so allows the state to enjoy significant cost savings over traditional MMIS hardware solutions.

Recommendations

We recommend states remain hosting agnostic in specifying the RFP requirements. Hosting the vendor's technology solution, in general, should be the vendor's burden and at the vendor's discretion as long as the vendor meets the state's performance and security requirements.

Further, many states have used NIST 800-53 as a framework for their own security rules and regulations. If states have not done so already, we encourage them to assess the applicability of NIST standards to their Medicaid programs and for compliance with their state security policies and standards. In evaluating security standards for a state's Medicaid program, we recommend that the state focus on the outcome of secure operations. We saw this approach in one state's RFP, which had the following language:

Contractor shall develop and maintain a security and privacy program with effective security and privacy controls compliant with the most current version of the CMS Minimum Acceptable Risk Standards for Exchanges (MARS-E), Catalog of Minimum Acceptable Risk Security and Privacy Controls for Exchanges.

This approach freed the bidding contractors to propose a secure solution that met or exceeded the standard noted in the RFP.

13. Allow vendors to specify implementation timelines appropriate for their solution.

As described earlier, in a BPaaS via SaaS procurement, only implementation (that is, the “I” of “DDI”) is required. Implementation can be 18 months or less for the claims processing module, and less for other modules, such as 9 months for provider management and credentialing, and 6 months for EDI. States’ time-to-benefit is accelerated because a project’s go-live date happens sooner. It also dramatically reduces risk as the design and development phases are largely already completed at the start of a project.

We believe the ideal implementation duration is one that is long enough to reasonably accomplish the work while being short enough to maintain stable requirements and avoid excessive scope change. However, we realize that implementation duration is affected by the bidder’s ability to:

- Mobilize its project team
- Efficiently configure, tailor and integrate its technical solution
- Conduct adequate testing to demonstrate operational readiness.

Recommendations

We recommend states use RFP language that permits bidders to propose their own implementation duration, and then be accountable for meeting their own deadline. We saw this approach in one state’s RFP, which had language as follows:

Offerors shall propose the schedule and project plan for the Implementation Phase including dates for Milestones and Deliverables.
Dates for the Milestones and Deliverables, including the Targeted Operational Start Date, are contractually binding and will be used in the calculation of damages as applicable.

This state adjusted evaluated costs from each bidder to account for added state costs associated with those vendors proposing longer implementation durations and then compared the operational expense for equal durations. While the technique does add some complexity to evaluating bidder costs on an apples-to-apples basis, it enables contractors to present their best offers based on their knowledge and confidence in their solution.

14. Adopt a pricing evaluation methodology to better compare vendor pricing under varying contractor-proposed implementation durations.

As mentioned above, permitting bidders to propose differing implementation phase durations may pose a challenge in evaluating apples-to-apples pricing if the total contract term (implementation plus operations) is fixed. This is because the operational phase would shorten or lengthen based on the bidder’s proposed implementation duration and its total contract operational cost would consequently shrink and expand.

Recommendation

To resolve that challenge, we suggest that states calculate an evaluated price that is based on:

- The sum of the implementation costs plus a weighted average monthly operations price multiplied by a fixed number of operational contract months.

This allows a bidder who proposes an 18-month implementation to be compared directly to a bidder who proposes a 30-month implementation or even a 15-month implementation. A state may choose to create an incentive to shorten implementation times (and accelerate time to business value).

One state added to every bid that contained an implementation phase beyond 18 months, an amount approximating its monthly cost to support the implementation project outside of what was budgeted against the state’s planning implementation duration.

Below is an example of such a price evaluation methodology. This approach has been used previously by a state in a CMS-approved RFP for MMIS services. Note the example is intended only to illustrate key points and is not illustrative of any actual pricing.

Price or Evaluation Factor		Adjusted for Varying Implementation Durations (RECOMMENDED)			Not Adjusted for Varying Implementation Durations (NOT RECOMMENDED)		
		Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
State's Planned Implementation Duration (months)*		18	18	18	18	18	18
State's Planned Overall Contract Duration (months)		96	96	96	96	96	96
Bidder Proposal for Implementation	Price	\$30.0M	\$30.0M	\$30.0M	\$30.0M	\$30.0M	\$30.0M
	Proposed Duration (months)	18	30	15	18	30	15
Bidder Proposal for Operations	Annual Price	\$15.0M	\$15.0M	\$15.0M	\$15.0M	\$15.0M	\$15.0M
	Proposed Duration (months)	78	66	81	78	66	81
Total Proposed Contract Price		\$127.5M	\$112.5M	\$131.3M	\$127.5M	\$112.5M	\$131.3M
State's Other Costs to Support Implementation (monthly)**		\$.5M	\$.5M	\$.5M	\$.5M	\$.5M	\$.5M
Evaluated Price	Implementation	\$30.0M	\$30.0M	\$30.0M	\$30.0M	\$30.0M	\$30.0M
	State's Other Costs (Savings) to Support Implementation	\$.0M	\$6.0M	-\$1.5M	\$.0M	\$6.0M	-\$1.5M
	Evaluated Operations Duration (months) ***	78	78	78	78	78	78
	Operations	\$97.5M	\$97.5M	\$97.5M	\$97.5M	\$82.5M	\$101.3M
	Total	\$127.5M	\$133.5M	\$126.0M	\$127.5M	\$118.5M	\$129.8M

* May or may not be disclosed to bidders

** Defined by the state and reflective of the state's anticipated monthly cost to support an implementation apart from what is assumed for its planned implementation duration

*** Equal to the State's Planned Overall Contract Duration less the State's Planned Implementation Duration (fixed for apples-to-apples bid comparisons)

15. Specify date-of-service transition instead of data-of-receipt cutover.

Traditional "big-bang" MMIS implementations started with a cutover from legacy operations to new operations overnight. All operations were handled by a legacy vendor until midnight prior to go-live when the new contractor and its system took over operations at full capacity on day one. This approach has led to major problems. Providers may experience disruption in payments. Contractor call centers get swamped. This approach is known in the commercial industry as a date-of-receipt (DOR) cutover. It is rarely used outside of the MMIS world.

The prevailing technique in the commercial world is a date-of-service (DOS) cutover where operations are gradually transitioned from the legacy system to the new system based on the date-of-service on member claims. The legacy system continues to operate for a period of time after the new system go-live date to adjudicate and support claims with dates-of-service prior to the go-live date.

This approach requires continued funding for the legacy contractor for a limited run-out period to accommodate incurred-but-not-realized (IBNR) claims, which CMS has expressed a willingness to fund. The major benefit of this approach is it does not require the new contractor to configure its solution with historical rules to adjudicate historical claims. Instead, it enables the new contractor to focus only on go-forward policy.

This greatly simplifies system configuration and data conversion and is the number-one reason DOS cutovers are a commercial standard. As an added benefit, the legacy operation can also be used as a back-up solution in the event the new contractor fails to perform after go-live.

Recommendation

We strongly encourage states to permit use of a DOS cutover technique. It enables a more rapid implementation and substantially cuts risk and cost, and is the preferred approach for commercial payers. But here are several important considerations that must be addressed when putting it to use.

Claims run-out handling and parallel legacy operations

Three important factors affect the efficiency of a DOS transition:

1. The state's timely filing limit
2. The amount of time CMS is willing to fund legacy operations beyond new contractor operations go-live (three to six months, in our experience)
3. The amount of time the state is willing to freeze (predominantly) claims adjudication policy prior to new contractor operations go-live (ideally not less than four months).

In an ideal case, the durations for factors 2 and 3 would add to equal the duration in factor 1. This scenario allows the new solution to be configured to support pre-go-live claims with dates-of-service occurring during the state's adjudication policy freeze to handle IBNR claims remaining after the legacy solution shuts down. This is accomplished by configuring benefit plans and adjudication policy with effective dates equal to the start date of the freeze. This case would enable a system, either the legacy or the new, to accommodate processing for all claims throughout the transition.

In reality, there may be a gap during which legacy IBNR claims will require processing and the legacy system will no longer be available to support them. Further, in cases where these claims involve dates-of-service prior to a state's claims adjudication policy freeze, the new system may not be configured to process them either. Such an instance may require manual processing for a small number of claims. Both the state and the contractor should try to minimize these volumes.

Two mitigation measures are available to do so. The first involves stretching factors 2 and 3 as much as is reasonable to equal factor 1. The second requires a simple analysis of IBNR claims by provider, designed to help steer provider outreach efforts to encourage timely submission and completion of IBNR volumes by the legacy solution.

We suggest states make IBNR historical volumes and IBNR-by-provider-type information available as part of their bidder's library and provide some guidance around the above three factors so that bidders can propose the most efficient approach and accurately anticipate costs.

Mass claims adjustments

Another consideration in using a DOS cutover is how to handle mass claims adjustments, which may be an issue if the mass adjustment time period predates the converted claims data.

Recommendation

We recommend that an RFP permit the contractor to propose solutions for mass adjustments that may involve use of other components to resolve this challenge. For example, in our experience, a data warehouse can be employed to effectively execute mass adjustments involving claims not currently available in the claims adjudication platform.

16. Allow for flexibility in staffing model to help smooth the transition from old to new MMIS vendor.

Another important consideration in a DOS cutover involves startup staffing and staff transition. In a DOS cutover, the legacy operation continues to operate for a transitional period while new operations ramp up. In this instance, it is best if there is careful planning and cooperation between the outgoing and incoming contractors so that knowledgeable staff are retained while transitioning to new operations. This becomes particularly challenging when it comes to RFP requirements to name key staff members in bidder proposals, particularly in tight labor markets and where retaining certain incumbent contract staff may be desired by the state. In a best-case scenario, some key staff members would stay employed by the incumbent contractor until it makes sense to transition them to the new contractor.

Recommendation

To overcome this challenge, we suggest bidders be required to name key leadership positions in their proposals, but be permitted to describe their startup staffing methodology in lieu of naming every key staff role. This helps facilitate a smooth and appropriate transition of incumbent contractor staff and minimizes any disruption in legacy contractor operations during transition related to early key staff departures.

17. Seek appropriate balance between centralized (shared) and local (dedicated) resources.

We fully understand that states want to specify local, dedicated operations teams in their RFPs. However, we have tried many staffing models and strongly believe that a balanced approach between shared and dedicated resources can bring higher service levels and greater value to state Medicaid programs.

For example, states can benefit from the careful use of shared-resource centers of excellence to draw in particular expertise that may not be available locally or to handle peak workload demands that outstrip the capacity of the local team. One example is the handling of peak provider call volumes during a reimbursement policy change. Often such changes can spur excess call volumes, even with appropriate use of provider outreach and education prior to the change. To meet peak-workload demands, it is helpful to be able to utilize shared services centers to help keep customer service levels high and resource allocation lean.

We believe the centralized / dedicated resource balance is dynamic and must be managed continuously so that adjustments are effectively applied when and where needed. While it is important to have local staff available to work with the state and providers, it is equally important for vendors to have flexibility to manage the locations of production-oriented functions such as claims processing and call centers. Using centralized staff for these kinds of functions allows more efficient use of staff resources to manage peak work volumes.

This balance provides benefits for both the state and the vendor, including the ability to keep customer service levels high, provide economies of scale and aid business continuity.

Recommendation

We recommend that states permit some level of resource balance in bidder proposals to maintain high customer service levels and efficiently allocate resources. A state may want to consider a requirement of a minimum percentage of locally based staff coupled with the bidder's management plan for dynamically adjusting staff levels between local and remote.

18. Plan your organizational change management as part of the bid.

The implementation of anything new introduces change to how work gets performed by state agency personnel. Success can only be accomplished when the organization embraces the change rather than resisting it. It is critical that the state understands how the organization at-large and its stakeholders will be impacted by change. Once understood, organizational leadership should launch a systematic approach to manage expectations, enable the cultural shift, and institute work process and method changes necessary to embrace the change. This is where the discipline of Organizational Change Management (OCM) is critical. An OCM team should be formed and engaged at the onset of the overall MMIS replacement project implementation phase to address how the organization will be impacted by change and thrive from it.

Recommendation

In today's multi-vendor MMIS replacement project environment, we recommend the state establish OCM as a management discipline to help facilitate project success. We recommend the state itself actually own this effort, but require each vendor to actively participate in OCM as a team member contributing to both the design of the OCM effort as it relates to their solution, and the delivery of OCM training as part of OCM execution. Each vendor should be well equipped to contribute as they know their solution best, but state leadership is important since organization members will follow their lead. We recommend the state plan to have dedicated resources lead the OCM effort and these resources should report directly to the top of the impacted agency.

19. Use a pricing approach that accommodates fluctuations in caseloads.

Contract pricing should be equitable. Pricing should represent good value for both the state and the contractor, even when caseload volumes fluctuate. With an expected contract time horizon as long as 10 years, caseload volumes could fluctuate substantially due to changes in eligibility requirements at both the federal and state level or, perhaps, expansion or contraction of capitated managed care. The contract pricing structure should automatically adjust when these fluctuations occur.

Recommendation

An appropriate way to establish equitable, self-adjusting pricing is to permit bidders to propose a combination of fixed monthly fees and per-member-per-month (PMPM) rates. The former covers the contractor's fixed costs and the latter covers variable costs. In this pricing model, the state can choose how much of its volume to allocate to the fixed monthly fee portion of contractor pricing and how much to allocate to PMPM rates.

A recent state procurement defined this type of pricing model and allocated about 20 percent of its anticipated volumes to the fixed monthly fee portion of the bid with the remaining allocated to PMPM rates. Separately, for implementation, the model included a fixed-fee arrangement allocated by key contract deliverable. Together, this approach helps the contractor align its actual costs to its revenue as caseload volumes fluctuate during the contract term.

20. Ask bidders to disclose potential and actual organizational conflicts of interest and to propose a mitigation plan subject to state approval.

In today's health care market, many organizations participate in numerous elements of the health care delivery system ranging from administration to insurance plans to health care delivery. In particular, large commercial health care organizations with capabilities that can directly benefit state MMIS projects are highly likely to participate in multiple industry sectors.

It is commonplace in the industry to require that any bidder responding to an RFP for a MMIS project must meet certain criteria that confirms their status as a "responsible bidder." One key measure of whether a bidder is responsible is the requirement that each bidder must be free of any conflict of interest, including organizational conflicts of interest (OCIs). It is important that states incorporate into their RFPs clear language about how they will evaluate OCIs. If they fail to do so, states may inadvertently exclude from consideration commercial healthcare organizations that have the experience and innovation being sought as part of MMIS modernization efforts.

Recommendation

We recommend that RFPs adopt the following approach to determining whether a bidder who may appear to have an OCI or who has an actual OCI should be declared a responsible bidder and thus capable of being selected by the state as the contractor.

A. Define in the RFP what constitutes an OCI based on the Federal standard.

The Federal Acquisition Regulation (FAR) Part 9.5 sets forth three clear definitions of what constitutes an organizational conflict of interest:

- i. **Biased Ground Rules** where an organization has had the opportunity to help the government set the ground rules (i.e., contract requirement specifications) that could intentionally/or not favor itself or affiliates in a future competition "with that government agency.
- ii. **Impaired Objectivity** where an organization under one government contract may be in a position to evaluate the work of itself, or its affiliate's work performed under a completely separate government contract. The concern would be that in evaluating that work, the organization could use subjective judgment or criteria that would affect the outcome to financially benefit itself or its affiliate.
- iii. **Unequal Access to Information** where an organization has access to nonpublic information as part of its performance on a government contract, and that information may provide the organization or its affiliates with an unfair competitive advantage in a later competition for a government contract.

B. No automatic disqualification.

Do not automatically disqualify a bidder if the bidder has an apparent or actual OCI.

C. Require disclosure, explanations and mitigation measures from the bidder.

Require each bidder to include, in its proposal response, the following information:

- i. A disclosure of any apparent or actual OCIs, including the facts or circumstances, such as business relationships and/or ownership interests of affiliated companies to the bidder, that may create an apparent and/or actual OCI;
- ii. A characterization of the “type” of OCI consistent with the FAR Part 9.5 standards;
- iii. For each type of apparent OCI that has been disclosed, require the bidder to explain why there is no *actual* OCI; and
- iv. For each type of actual OCI that has been disclosed, require the bidder to explain what mitigation measures have been and/or will be implemented for the state to then evaluate whether the mitigation measure is acceptable.

In addition to standardizing FAR Part 9.5 language, the state could further enhance its evaluation of each mitigation plan by requiring explanation on the methodologies used by the organization to detect OCI risks. This requirement would provide the state with additional information regarding the organization’s commitment and disciplined approach in detecting and identifying any OCIs, and mitigating those risks in the best interests of the state.

D. Permit the state to evaluate and accept or reject the disclosure based on federal standards.

Permit the state, acting through its evaluation committee, to determine whether it agrees with the bidder’s disclosure that any apparent OCI is not an actual OCI and whether any actual OCI has been effectively mitigated such that it is still appropriate to award the contract to the bidder. The state should base its determination on the established federal standards for doing so under FAR Part 9.5.

Recommendation

There are three reasons we are recommending this approach:

1. Federal funding of state MMIS contracts

Since MMIS projects are, for the most part, federally funded by CMS, it would be appropriate for all states to adopt federal standards in defining OCIs so that resulting OCI risk avoidance/mitigation plans proposed for the MMIS project can be evaluated and approved in an effective manner.

The states’ use of these FAR-defined parameters provides organizations with the ability to submit OCI mitigation plan that would clearly call out where the potential OCI risks might exist in relationship to the work performed under the government contract; and clarify the mitigation steps the organization must demonstrate to prevent any potential OCI from becoming an actual OCI. Such an approach provides the state with the clarity it needs to effectively evaluate each mitigation plan, measuring the organization’s ability to significantly reduce OCI risk, thus avoiding any resulting adverse impact in the execution of the state’s MMIS project.

2. The approach is consistent with general definitions of bidder responsibility under state procurement manuals and procedures.

The recommended approach provides more specificity of the more general definition found in state procurement manuals and procedures for how to evaluate whether a bidder meets the prerequisite requirements for being a “responsible bidder.”

3. The approach achieves the state’s objective of encouraging competition from responsible bidders with relevant historical experience and innovative ideas for MMIS projects.

Automatically disqualifying a bidder with an apparent or even an actual OCI will, by definition, reduce the number of bidders and more importantly, could deprive the state of considering the relevant historical experience of commercial healthcare organizations that can also bring innovative ideas to MMIS modernization.

The approach does not require the state to award a contract to a bidder with an apparent or actual OCI. However, if the disclosure and mitigation plan is considered and accepted, the state would satisfy itself that the responsibility criteria has been met, while at the same time benefiting from what such bidders can bring to the state’s MMIS project.

Using this approach to OCI will permit bidders to propose proven commercial capabilities and maximize procurement competition, while preserving state control over potential OCI in MMIS contracts.

The CMS mandate for modularity, and CMS’s acceptance of services offerings in lieu of large system implementations, together change everything for the MMIS market and open it to new commercial market participants like never before. States can gain from adopting commercial best practices and technological solutions while accelerating time-to-value and reducing risk. These recommendations are meant as a guide to help states explore these options and decide the best course as they build their Medicaid enterprises for the future.

About Optum

Optum® is a leading health services and innovation company dedicated to helping make the health system work better for everyone. With more than 125,000 people collaborating worldwide, Optum combines technology, data and expertise to improve the delivery, quality and efficiency of health care. Optum supports Medicaid agencies in 49 states plus the District of Columbia. Our solutions touch half of all Medicaid recipients nationwide.

Learn more about services-based requirements for MMIS.

Call: 1-800-765-6092

Email: innovate@optum.com

Visit: optum.com



11000 Optum Circle, Eden Prairie, MN 55344

Optum® and its respective marks are trademarks of Optum, Inc. All other brand or product names are trademarks or registered marks of their respective owners. Because we are continuously improving our products and services, Optum reserves the right to change specifications without prior notice. Optum is an equal opportunity employer.