Practical modernization

A Medicaid modularity approach

Modularity is not a new concept.

The Medicaid technical landscape has often relied on various components, COTS software and integration across the enterprise to deliver the services required. Some common larger modules since the mid-2000s include drug rebate and pharmacy benefits management, for example. In recent years, however, CMS has challenged states to implement modularity with specific characteristics outlined in CMS' Medicaid Program; Mechanized Claims Processing and Information Retrieval Systems rule[1] — to improve customer support and provide health and human services efficiently and cost-effectively.

The beauty of modularity is the flexibility it provides. Through modularity complex MMIS systems are divided into separate scalable components that address a specific business function. This enables states to focus on the business outcomes they want to achieve rather than having to change their core Medicaid Enterprise System (MES).

Modularity is intended to enable states to implement discrete components that work together seamlessly — to help ensure the timely delivery of services, greater visibility of information across programs for more informed decision-making and a better user experience.

[1] https://www.federalregister.gov/documents/2015/12/04/2015-30591/medicaid-program-mechanized-claims-processing-and-information-retrieval-systems-9010

Challenges to modularity

While modularity offers many benefits, there can be unexpected challenges. Trying to implement several modules simultaneously just trades the risk of large, monolithic go-lives for the complexities of having to procure and manage all-at-once modular programs.

This can lead to the "weakest link" conundrum where successful vendors can be delayed by struggling vendors when there are links and dependencies among modules. This adds up to increased and unexpected design, development and implementation (DDI) costs. It may also cause states to need to extend legacy vendors long beyond their original plans.

As states finish the DDI phase and move into the Operate and Maintain (O&M) phase, they must now manage multi-step, multi-vendor processes, further inhibiting their ability to drive cost savings.

The many handoffs among vendors increases points of failure for business processes. With each vendor responsible only for the activity up to the point of handoff, SLAs now shift to focusing on slices of processes instead of more meaningful business outcomes. And states may be left to investigate the source of a performance failure themselves.

Benefits of modularization & modernization

Select **progressive technology** from different vendors
✓ Open architecture and modularization framework can **accommodate other technology vendors**

Gain the flexibility to swap solutions over time
✓ Open architecture allows states to **swap out modules** as desired

Avoid vendor lock-in and **other risks of single massive solutions**
✓ Modules can be replaced as needed as they are connected via ESB, **not embedded in a monolithic system**

Benefit from multiple independent vendors contributing **best practices and new ideas**
✓ Independent vendors as subcontractors present **best practices and new ideas with reduced risk** through experienced fiscal agent as prime

Encourage **reuse** among states
✓ **Modules can be reused** among stages

Achieve optimal **balance** of open source and proprietary COTS vs. custom solutions
✓ Open architecture enables **balance** of custom solutions with leverageable COTS solutions

Approaching modularity for the right reasons

Through modularity, states can implement discrete components that work together seamlessly to support the Medicaid enterprise. Based on our experience working with Medicaid systems, Gainwell can offer some valuable considerations as you explore modernizing your MMIS.

The first step is to define where you want to go — what outcomes you want to achieve, aligned to your business goals. Modularity should be done for the right reasons, not just for the sake of modularity. The answers to several questions will help you determine and understand your roadmap for your modernization journey:

- What are the greatest business or processing pain points in your program?
- What area of your program do you feel you can and should improve?
- What are the program's priorities or desired outcomes you hope to achieve?

Value to Modernize for States (average)

Ease of modularization
Degree of integration and dependency on the core

High

SI
Program Integrity
Provider
Pharmacy & DR
EDW
Member
Care Management
Managed Care
TPL
Claims, Encounters, and Financials
EVV

Low

Low   High

Figure 1. Assessing modularity functions based on value and ease
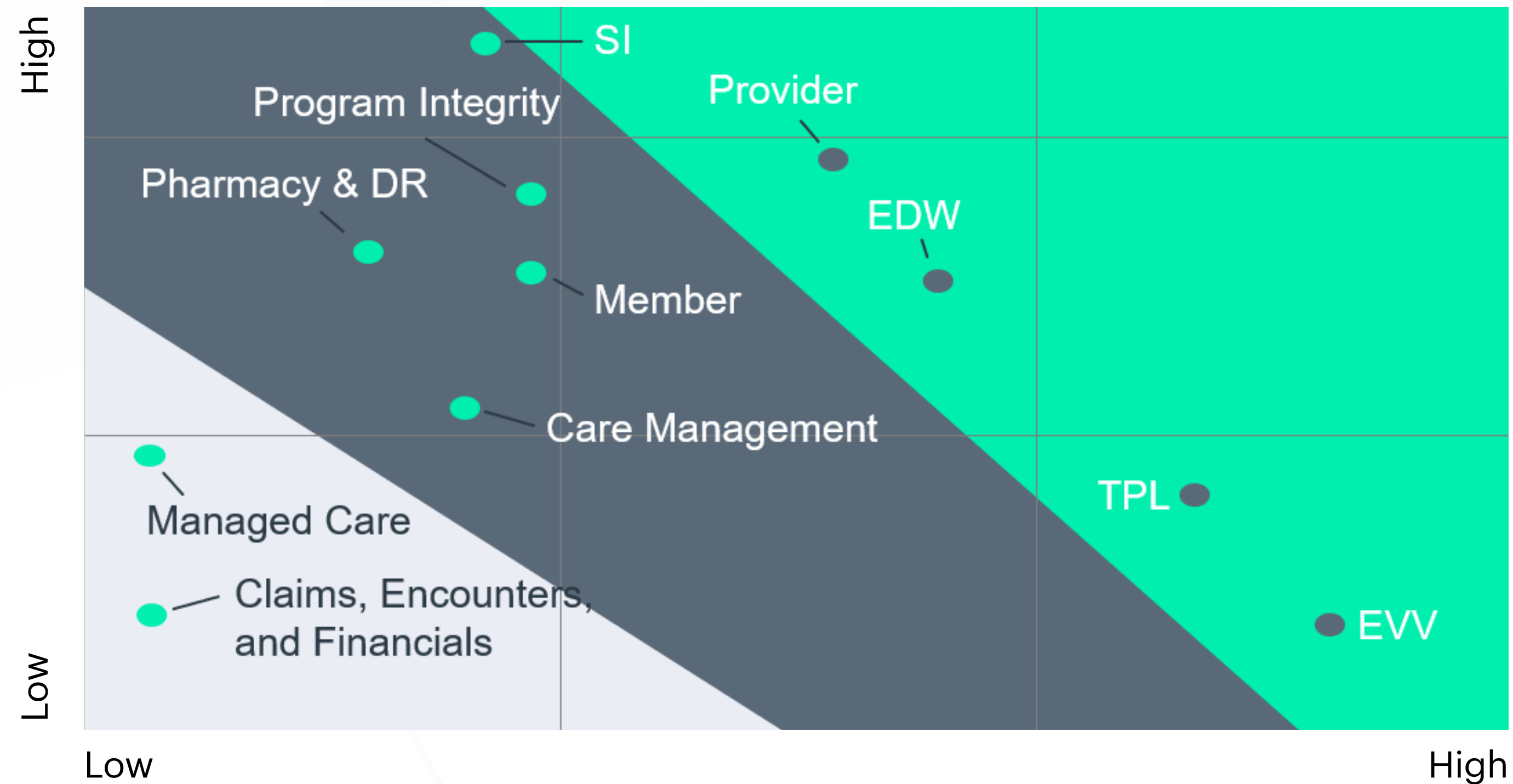Source: Survey across eight states

Figure 1 illustrates feedback to a Gainwell survey of early adopters of modularity. It shows the value we see modernization providing to the program versus the relative ease of modernization. Gainwell's approach involves partnering with states to develop a thoughtful sequencing of modules based on complexity, benefit and state-specific needs — it's not a one-size-fits-all process.

The Approach

A state's approach to modernization requires careful planning and sequencing of modules based on complexity, benefits and state-specific needs. A potential approach could include three waves:

First wave — States can use their existing enterprise service bus (ESB) to expedite implementing the most valuable modules. Additional strategies, such as full implementation of a system integrator (SI) layer and ESB, are options. States should partner with vendors to determine a modernization roadmap based on refining a value versus complexity model to be state specific. This allows for data exchanges with existing solutions.

Second wave — Bring in additional MES modular solutions after the integration foundation for modernization is in place. States will follow the designated, state-specific modernization roadmap to implement other new modular MES solutions — such as provider, pharmacy and drug rebate, third-party liability (TPL), program integrity and member management.

Third wave — This involves modernizing the core platform for claims and encounters processing and financial management, along with the Managed Care module. These core modules have the greatest complexity.

The role — and value — of a system integrator

When it comes to modularity, system integration is a critical element and the first thing that must be in place. The role of a system integrator goes far beyond merely acting as a consultant; they must bring a technical platform for data translation and transformation that connects all of the modules in a MES ecosystem.

Your SI should lead the integration of the other MES module vendors, monitor the overall health of the solution and support the department in implementing a governance strategy. Strong governance is important to support your agency in achieving your MES strategy and ensuring that it's aligned with your IT health roadmap.

Five aspects to program governance

These are steps that help keep your program on track and assist in decision making:

Project — Establish and execute enterprise process management organization and change-management processes and establish the integrated master plan and its execution.

Technical — Establish and implement enterprise-wide standards for the overall solution, defining technical, network and security standards for integration.

Information — Establish and oversee the overall data governance for the solution, including data creation, sharing and developing data quality policy.

Testing — Establish and execute enterprise end-to-end testing of the solution, managing the testing strategy, process and oversight.

Operations — Establish and oversee enterprise operational processes to capture KPIs, establish status reporting mechanisms and train staff and external stakeholders.

The system integrator supplies the tools to translate and transform the data across system boundaries that have not been integrated previously, as needed.

Making modularity work for you

Here are some important lessons Gainwell has learned from our experience with modularity:

- Agencies need to determine if their current organizational structure could be a barrier to implementing the modular MES and put in place a well-thought-out organizational structure to support the program.

- State agencies should do an "as-is" versus "to-be" enterprise architecture analysis and document the requirements before onboarding modules.

- Strict program governance is needed. Based on our lessons learned from other implementations, agencies should have appropriate executive oversight and a program steering committee in place before onboarding any modules.

- Modularity should be driven by business requirements and needs, not by a technology roadmap.

- Early-mover states have made the mistake of considering system integration as a technology-heavy implementation and chose vendors who were light on Medicaid domain expertise. We highly recommend states look for a system integrator with combined business, technology, tools and deep Medicaid domain expertise to help drive decisions and keep the program on schedule.

- Plan for testing and training early in the process. Testing can be complicated in a multi-module environment, so be sure to spend the appropriate amount of time to capture the right test cases. You may want to consider hiring a testing vendor or add an integration testing scope with your SI vendor.

Reducing complexity, improving outcomes

Gainwell isn't new to modularity; we've had distinct business functions supporting modularity for more than two decades in the areas of drug rebate, data warehouse and pharmacy benefit management, for example. We have supported Medicaid and state government programs for 50+ years.

Gainwell uses a COTS-based, software-as-a-service (SaaS) model supported by lessons learned in other implementations. We can help states prioritize and successfully implement their modular Medicaid systems.

By taking a strategic, tactical approach, states can meet their goals and outcomes faster, with less risk and more reliability. And in the process, you can increase your system's ability to interact, interface and share data. Through more streamlined, effective services, state Medicaid programs can create a stronger foundation to protect the health and well-being of the communities you serve with the support they need.

Visit us

to learn more about Gainwell's Medicaid Management Solution.

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