HEALTH CARE PAYERS, PROVIDERS, SYSTEMS & SERVICES

How State Medicaid Agencies Can Accelerate Tech Modernization

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State Medicaid agencies have big aspirations for transformational improvements—in both the delivery of services and the impact that Medicaid programs have on the health and well-being of their members. To meet these aspirations, agencies will need to accelerate the modernization of their technology infrastructure.

The infrastructure, known as Medicaid enterprise systems (MES), serves several key functions for state agencies. These systems enable and streamline key processes such as provider enrollment,

member enrollment, and claims processing. They also store, integrate, and generate varied critical information, including utilization, spending, and quality data. From this data, the systems also generate insights that allow for ongoing improvement of the Medicaid program. But MES can serve these critical functions only if they are fully supported by modern technology infrastructure.

Many of Medicaid's legacy systems were developed more than 30 years ago. These antiquated technologies limit agencies' ability to meet new policy or program requirements. For example, inefficient tech infrastructure presents significant challenges in reviewing the backlog of millions of eligibility redeterminations (a consequence of the unwinding of the COVID public health emergency's continuous enrollment provision). But the challenges facing agencies extend far beyond managing backlogs to broader goals such as enabling value-based payment models, streamlining managed care organization (MCO) enrollment, and enhancing module interoperability.

As a result, for nearly a decade, states have launched major projects to overhaul mission-critical and aging MES. Since 2015, the Centers for Medicare & Medicaid Services (CMS) has spent an average of $6 billion annually on state MES and integrated eligibility systems, with the federal government providing 90% of the cost for design, development, and implementation.

While state agencies are making progress in their approach to modernization—some faster than others—many are still experiencing some combination of multiyear project delays, millions in cost overruns, and operational issues including system failures and personal data breaches. Although these types of complications are not unusual for a large-scale digital transformation , they are not inevitable.

To successfully pursue system modernization, agencies need a new approach. More specifically, agency leadership needs to shift from pursuing a technology-led to a business-led approach. A business-led approach starts with overall program goals and then identifies the technologies, processes, and organizational changes needed to meet them. It requires leaders at all levels to think in terms of end-to-end business-led change—starting with strategic planning all the way through tactical implementation and performance measurement. Too often, agency leaders are overly focused on technology requirements, in both planning and execution, rather than the objectives of the programs and operations they want to fix, improve, or transform. A business-led approach can simplify systems, accelerate progress, reduce costs, and minimize the headwinds so common to these large-scale transformations.

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Technological excellence is necessary but not sufficient for developing MES that are suitably modern and fit for purpose. Agency leaders need a business-led approach that overinvests in strategic planning upfront, leverages human-centered design principles, and enables strong project

management capabilities to work in concert with advanced data analytics . Together, these efforts present a clear path forward to successful MES modernization.

Technology Modernization Challenges Facing State Agencies

Recent studies show that approximately 70% of technology transformations fail to achieve all target outcomes. In our experience, five key challenges tend to drive these failures. Many state Medicaid agencies are facing one or more of these challenges, and their situations are made even more difficult by financial and staffing constraints that typically affect public sector agencies.

Overemphasis on Technology in Goal Setting and Strategic Planning. Technology-led planning tends to be excessively prescriptive and disconnected from broader agency strategy as well as the priority needs of members, providers, and staff. For example, a technology-led approach might focus first on detailing the requirements to build a new provider enrollment system, thus locking bidders or vendors into an overly prescriptive process (rather than focusing on the wider goal of designing a system that enables easier provider enrollment). This focus may carry through the entire project life cycle, leading to delays, overly complex designs, and finished systems that meet the technical specifications but do not achieve the overall desired outcomes.

Insufficient Consideration of the Human Experience. Technology-led approaches and large-scale IT transformations often overlook the human experience of interacting with technologies and the activities and functions they are ultimately aiming to support. The complexities of designing and implementing these system transformations can make it challenging to step back and fully consider how people use the technologies. Without taking this perspective to drive decisions on tech system design, agencies risk investing significant time and money in building the wrong tools or capabilities. Furthermore, this can result in technology inhibiting rather than enabling the desired impact.

Underinvestment in Managing Organizational Change. Comprehensive organizational change management requires articulating a new operating model and the process improvements that will support it. This includes training employees to understand not only how technology supports these process improvements but how to use the new systems effectively. Another symptom of a tech-led approach is a failure to invest sufficiently in training employees and explaining the process side of a new system or major update. For example, implementing a new software module can take months or years of sustained effort. Staff need to know why changes are being made, how it will affect them, and how they can contribute to the change process by offering their own suggestions for future enhancements. When organizations properly invest in change management, they are ensuring that their leaders are actively guiding and supporting the adoption of new technologies and processes at every step.

Reporting-Driven Project and Vendor Management. Traditional project management organizations (PMOs) are not always proactive, in part because they are frequently ill equipped to provide agency leaders with the information needed to oversee organization-wide progress and preemptively manage risk . PMOs are more likely to simply report requirements that are on- or off-track, without linking that status to a target outcome, improving requirements gathering, or mitigating obstacles to operational goals such as updating a member assignment methodology. As a result, agencies tend to focus on ensuring that system modules meet statutory and regulatory requirements, rather than flagging problems and coordinating solutions when, for example, a systems integration stalls or a vendor fails to communicate process changes, both of which increase costs.

Inadequate Focus on Advanced Analytics. At a minimum, agencies need to be able to extract, combine, and analyze their current data quickly and effectively. Unfortunately, many still rely on legacy information systems that require a concerted effort to get even basic access to clean, timely, and organized data. Improving these core operational functions should be a central aspiration of MES modernization efforts. But agencies increasingly need to think beyond these basic capabilities. MES modernization enables the advanced analytics necessary to generate unique member- and provider-centric insights . Modernization initiatives should aspire to leverage advanced artificial intelligence (AI) and machine learning (ML) technologies that can enable leaders and frontline administrators to make more precise and effective data-driven decisions. Advanced analytics are also vital tools for Medicaid agencies to manage and measure the quality of care and disparities in access to the right health care services .

Five Key Actions to Pursue a Business-Led Approach

Many large-scale tech implementations have been delivered on time and within budget while successfully meeting organizational needs and promised outcomes. Over the years, we have seen many of the same processes, practices, and tools applied to these successful technology transformations. Typically, five actions contribute to a successful end-to-end business-led approach.

Overinvest Upfront in Strategic Planning. Technology plans must be aligned with agency goals from day one. The detailed lists of tech requirements for modularization will come later in the transformation. This outcomes-focused mindset is what differentiates a strategy that delivers the benefits of MES modernization from one that creates unnecessary complexity and delays that can last for years. Early planning should include procurement and vendor selection strategies that are oriented toward business needs and program goals, rather than a laundry list of vendor requirements. This will help align agency and vendor expectations, guide selection of the right combination of vendors, and make RFPs more focused on outcomes than requirements.

Apply Human-Centered Design Early. The most effective technology transformations leverage a comprehensive and fully integrated human-centered design (HCD) lens. HCD is the discipline of

gathering and using data to design processes that are responsive to the needs of real people. For example, HCD could be used in a broad effort to redesign and streamline employee workflows to make the online experience for members easier . HCD is also effective for smaller but significant improvements, such as writing clearer instructions to help members understand what actions they need to take to keep their coverage.

HCD techniques should begin with strategic planning and requirement gathering, followed by collecting user input from agency leadership, Medicaid staff, MCOs and providers, and members. By analyzing this user input, technology systems and process design changes are more likely to address the range of users' pain points. A comprehensive approach will deliver and address interim activities and functions along the way. HCD can be invaluable in the design and delivery of MES modules, particularly those that rely heavily on optimizing the user experience.

Build Support for Organizational Change Management. An organization's ability to create the strategy and implement the plans needed to update systems requires the buy-in and ongoing engagement of top leaders and line managers. The support of one or two key decision makers is not enough; the entire leadership team must be involved. This level of commitment means that leaders have to support major changes in processes, not just the implementation of new technologies. For example, high-level support for a comprehensive assessment of current and future advanced analytics capabilities could require changes across multiple processes, decision rights, and reporting lines. To support and fully embed these process changes into the organization, agencies should leverage all essential tools—including formal classroom training, e-learning, and on-the-job instruction—both before and after implementation begins.

Strengthen the PMO to De-Risk the Journey. Many Medicaid IT PMOs are under-resourced and wrestle with a variety of operational risks. Unclear targets and timelines, an inability to incentivize change, and processes that are not fully embedded in ways of working waste valuable agency time and resources. This can lead to projects going far over budget while failing to deliver essential functionality such as interoperability between system modules. The strategies below highlight opportunities to help traditional PMOs become activist PMOs:

- **Increase the PMO's visibility and authority.** The PMO for a major MES implementation or upgrade should report directly to agency leadership. Too many layers between the PMO and the agency's top leaders can reduce the PMO's efficiency and authority. Employees should regularly interact with the PMO team and have a clear understanding of the PMO's roles, responsibilities, goals, and expectations for employee engagement throughout the transformation.

- **Deepen engagement with business and technology teams.** The PMO is not a systems integrator. Its role is to champion agency objectives and drive coordination between business and technology teams. PMOs should therefore be embedded in-person with the teams they support. Without regular face-to-face interactions with teams, PMOs may be viewed as creating more work rather than advancing agency priorities and effectiveness.

- **Ensure that the data is accurate and useful.** It is the PMO's responsibility to use data to produce reports and dashboards that allow it to be an effective coordinator of agency activities and outcomes. To make the information useful, the PMO needs to start with

accurate data. By using this data to enhance visibility, PMOs can empower agency leaders with a clearer and more complete view of activities across all departments and vendors. This view boosts leaders' ability to link actions to outcomes and their capacity to communicate decisions using quantitative and qualitative insights.

Invest to improve data quality and advance analytics. To get the most out of MES modernization, it's critical to plan for how MES data will be used to generate program insights—not just how it will be collected, stored, and used to support program operations. Agencies should prioritize pushing their systems integrators to ensure that the system includes an analytics-friendly system architecture and tools to measure data quality and fidelity. Further, programs should invest in a "data lake," a centralized data repository for structured and unstructured data that captures information across modules. A data lake enables the use of advanced analytics tools that increase the understanding of cost drivers and outcomes as well as the impact of new programs and policies.

Now Is the Time to Simplify and Accelerate

Stage agency leaders need to reevaluate their approach to technology modernization—and they need to do it today. At a time when states are challenged in meeting member needs, those needs and the demand for services are continuing to grow.

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The stakes are high, but the benefits of modernization are vast. CMS incentives and access to funding are providing momentum, and states have more opportunities than ever to learn from the successes and challenges of others, given that different agencies are at different points in their modernization journeys. States also stand to benefit from looking beyond other agencies and leveraging best practices from similar technology implementations in the private sector .

Change of this scale is never easy. But if agencies adopt a holistic business-led approach, they can reduce complications and increase the potential for success. By enabling smart and cost-effective technology investments aimed at delivering better services for patients, providers, and other stakeholders, a business-led approach keeps higher-level aspirations front and center in the pursuit of these complex transformations.

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