



2016 Michigan NASCIO Award Nomination

Michigan Medicaid as a Service

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Category: Cross-Boundary Collaboration and Partnerships

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Executive Summary

The federal government and the 50 states combined spend more than \$475 *billion* a year on Medicaid services for the nation's in-need population. At the state level, Medicaid expenses account for an average of 23.6 percent of state budgets. And these costs are just patient expenses. The price of administering Medicaid, including the large-scale information technology (IT) infrastructure required, adds to the already astronomical figure.

Despite the price tag, the state-run IT infrastructure that processes Medicaid claims – known as a Medicaid Management Information System, or MMIS – are typically outdated, inefficient platforms that have not been upgraded in decades. The systems compound the burdensome finances of Medicaid; they cost an enormous amount to implement and operate, while failing to realize any cost reductions associated with modern technology.

In 2013, Michigan decided to buck the status quo. Michigan enlisted the help of Maryland-based IT company CNSI and embarked on a first-of-a-kind industry innovation that is the subject of this nomination: a completely automated real-time and cloud-enabled MMIS. The cloud-based system was a watershed moment in the industry. The system enjoys many advantages over the legacy systems used in other states, but none more so than its transformation of stand-alone MMIS to Michigan Medicaid as a Service. Until this moment each state had to develop, implement and operate its own costly MMIS.

The Michigan cloud-based solution is built on a multi-state governance model, meaning more than one state can employ the same Medicaid platform to reduce costs. The solution aligns with Michigan's Executive goal to "Reinvent our Government" by implementing new innovations for government, and supports Michigan's IT Strategic Plan and Cloud First strategy.

In 2013, it was announced that Illinois would join Michigan in employing a common MMIS platform. The first phase of the project, Electronic Medicaid Incentive Payment Program (eMIPP), went live for Illinois in March 2014. In July of 2015, the Provider Enrollment (PE) phase of the project was implemented, allowing hundreds of thousands of Illinois health care providers to seamlessly manage their enrollments in the cloud based provider system. The final phase to roll out the remaining Michigan modules of the cloud MMIS will be complete in 2017. Illinois implementation of remaining modules is scheduled for 2018.

Illinois has realized significant savings of \$10M by implementing eMIPP and PE on Michigan's cloud compared to traditional standalone development. Implementation savings are due primarily to a reduced timeline and reduced infrastructure costs. In addition, Illinois is projected to save \$20M in operations costs over 5 years through shared operations and infrastructure costs. Michigan is projected to realize 10 percent operational savings.

Michigan has revolutionized the delivery of Medicaid services. Michigan Medicaid as a Service has diminished the burden on taxpayers while improving the delivery of care to those in need, representing the best public health IT has to offer.

Concept

The concept of Medicaid Management Information Systems is not new. In 1972 Congress made MMIS mandatory for all states, though it did contribute significant funding for both implementation and operation of the systems. Congress also allowed states to hire vendors to implement the systems, which most did. However, after the initial investment, many states left their systems to stagnate.

Technology advanced almost exponentially over the next 30 years, but MMIS' were left behind. Even when states did decide to invest in a new system, the undertaking was onerous. Systems cost hundreds of millions of dollars and took years to fully implement. Often, due to bureaucratic, political and technological realities, the projects were behind schedule and over budget, which made the upgrade decision all the more daunting for other states.

In 2006, leadership for both the Michigan Department of Health and Human Services and the Michigan Department of Technology, Management and Budget carefully weighed these considerations and found they were faced with a pivotal decision - subscribe to the old, costly way of doing MMIS business or pioneer a new path with promising yet untested technology.

After weighing the options, the choice was made to go with the web-based system created by CNSI which offered significantly more efficiency, transparency and usability. The gamble paid off. Michigan's new MMIS solution became a best-in-class, federally certified system supporting two million beneficiaries, 53,000 providers, 38 benefit plans and more than 25,000 users.

But innovation does not rest. In 2012 Michigan leaders recognized the opportunity to make another great leap forward in Medicaid technology. This new idea was the creation of Michigan Medicaid as a Service. Medicaid would transition to the cloud so other states could take advantage of a single administrative infrastructure allowing for lower costs and increased efficiencies for every associated state.

Work began in 2013. Michigan – in concert with Illinois, the Centers for Medicare & Medicaid Services (CMS) and CNSI – developed the concept for the project by conducting demos and feasibility studies, establishing governance models and processes, and drafting an initial intergovernmental agreement. A project management approach was implemented following Michigan's project management methodology (www.michigan.gov/suite).

By September of 2013, CMS had signed off on the cloud architecture and approved funding for the project. The cloud architecture meets all Michigan and Federal IT standards including accessibility and security policy requirements. In March of 2014, Michigan's Electronic Medicaid Incentive Payment Program (eMIPP) went live in Illinois. The eMIPP implementation was critical because it established the working model between the states and demonstrated the efficiency of the cloud model. eMIPP is an excellent starting point for Michigan Medicaid as a Service cloud implementation as it allows the state to onboard a smaller set of health care

providers onto the system and get the providers acclimated to the new system while concurrently familiarizing state staff with the system and associated processes.

After eMIPP went live in 2014, it was transitioned to a multi-state operations model. This model established Michigan’s ability to operate and maintain the cloud application for multiple states. Establishing early operations for eMIPP enabled Michigan to put in place its ITIL-based operations processes which serve as the foundation for subsequent phase operations.

In July of 2015, Michigan’s provider enrollment on the cloud went live in Illinois and since that time Michigan and Illinois have realized savings beyond the initial predictions. Michigan shared their cloud MMIS success with other States at the Medicaid Enterprise Systems Conference in August of 2015 in addition to other communication opportunities.

Initial cost-benefit analyses predicted implementation savings of 40 percent for the states and a 50 percent cost reduction for CMS. Operationally, Michigan Medicaid as a Service was projected to save states 40 percent over the course of five years.

Illinois has realized significant savings by implementing eMIPP and PE on Michigan’s cloud. Implementation savings are due primarily to a combination of a reduced timeline and reduced infrastructure costs. Additionally, Michigan has realized operational savings through shared operations and infrastructure costs. The table below provides the estimated savings versus a traditional Design Development Implementation (DDI) method implementation:

Implementation Savings

State	Phase	Estimated Traditional DDI Implementation Cost (\$M)	Cloud Actual Implementation Cost (\$M)	Cloud Implementation Savings Amount (\$M)	Cloud Implementation Savings (%)
Illinois	eMIPP / PE	\$20.0	\$10.0	\$10.0	50%

Five Year Operations Savings

State	Phase	Estimated Traditional DDI 5 Year Operations Cost (\$M)	Estimated Cloud 5 Year Operations Cost (\$M)	Estimated Cloud 5 Year Operations Savings (\$M)	Estimated Cloud 5 Years Operations Savings (%)
Illinois	eMIPP / PE	\$35.0	\$15.0	\$20.0	57%
Michigan	eMIPP / PE	N/A	N/A	N/A	10%

Significance

The significance of Michigan Medicaid as a Service, in terms of health care, technology, public policy, and even politics cannot be overstated. Medicaid recipients receive potentially dozens of procedures a year, each of which must be processed through the MMIS and paid out. Aging systems caused enormous inefficiency at the cost of taxpayer dollars and deteriorated delivery of care. Michigan alone has 2.3 million Medicaid enrollees whose care costs more than \$13.5 billion per year. Illinois counts more than 3 million Medicaid enrollees and spends \$16.7 billion per year.

The scope of the health and financial impact would put the project in its own category even before technological and political obstacles are considered. Michigan has established itself as a genuine technological pioneer in the space. This cloud-based MMIS, which has required a first-of-a-kind intergovernmental partnership, puts Michigan Medicaid as a Service miles ahead of the pack.

Politics come into play in the development of a public project, especially one that involves entitlement programs and multiple states working together. However, rather than add to the weight of the political football, Michigan Medicaid as a Service simplifies the issue. While adhering to limited state budgets; this approach reduces time, cost and risk. Perhaps the most significant aspect of the project is its capacity to expand to incorporate more states. Michigan Medicaid as a Service does not fit into the big picture, it *is* the big picture. The innovation has been proven – both states involved and the federal government have seen significant cost savings and improved care delivery. As more states join, savings and efficiencies will continue to increase.

This ground breaking initiative aligns with Michigan’s gubernatorial goal to “Reinvent our Government” by implementing new innovations for government use, and strongly supports Michigan’s IT Strategic Plan and Cloud First strategy. The solution meets CMS’ seven standards and conditions, and the modular architecture allows for a phased implementation.

Impact

The numbers truly speak for themselves in this case. The federal government, through CMS, realizes a 50 percent cost reduction in the matching funding contribution during implementation. States that subscribe to Michigan Medicaid as a Service are projected to save 40 percent during implementation and 40 percent operationally over the course of five years.

Illinois’ projected savings for the full MMIS cloud turned out to be even higher. Illinois will spend only \$80 million to implement Michigan Medicaid as a Service, compared to the \$240 a traditional MMIS would have cost. That’s a 67 percent reduction in price that is delivered directly to taxpayers. Over five years, the state is projected to spend \$191 million operating the service, compared to the \$387 million a traditional system would have cost – a 51 percent reduction.

Procurement and implementation time is also positively impacted by Michigan Medicaid as a Service. By taking advantage of the shared infrastructure on the cloud, states are able to implement a cutting-edge Medicaid program in two fewer years than a traditional MMIS would take, without the delays and cost overruns that plague the industry. Michigan now hosts an unrivaled Medicaid knowledge base. That knowledge base is leveraged for each joining state; further reducing the learning curve.

The final phase to roll out the remaining Michigan modules of the cloud MMIS will be complete in 2017. Illinois implementation of remaining modules is scheduled for 2018. This will result in a streamlined implementation in 3 years compared to traditional DDI implementations which often take 5 years or longer.

Risk – a constant concern for public sector leaders – is also substantially mitigated. Michigan Medicaid as a Service is predictable, repeatable and standardized. The system is based on easily replicated templates and a pre-existing governance model. States are also able to adopt the business processes, functionality, and technology standards of the cloud, without having to reconcile differences among states or design a custom system. Michigan Medicaid as a Service is also federally certified by CMS, meaning there are no regulatory hoops to jump through and no risk of being denied certification after millions of dollars have already been invested.

Savings on a scale of hundreds of millions of dollars speak for themselves. But the human impact is even greater. The 72 million under-privileged individuals that rely on Medicaid deserve a system that works for them. With Michigan Medicaid as a Service they receive it.

Michigan Medicaid as a Service system not only serves as a Medicaid payment platform but also deploys technology which improves care for the citizens of the states who benefit from the system. Included in the platform are mobile applications and web portals which allow Medicaid beneficiaries to view and update data related to their Medicaid benefits as well as their personal health information.

Sharing government services across states through the cloud is the future and the future is here. Michigan is blazing the trail with this innovative, cost-effective solution that provides improved services to citizens, facilitates multi-state partnerships, showcases advanced technology and provides a foundation for even greater technological and governmental transformations. Michigan Medicaid as a Service is a national best-practice that will be replicated throughout the United States, to the benefit of taxpayers and Medicaid beneficiaries alike.