Migrating Your Medicaid IT to Cloud

MARKET TRENDS REPORT

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Introduction

Medicaid has become a public service staple since launching in 1965. For tens of millions of Americans, this program ensures that they can afford health care despite their limited income and resources.

Scores of governments, however, struggle to deliver Medicaid benefits to their citizens. Whether federal, state or local, these agencies use technology that can't fully support their Medicaid Management Information System (MMIS) needs. MMIS networks are digital platforms for streamlining Medicaid administration. Historically, older MMIS systems are inflexible, respond to changes slowly and ultimately raise long-term costs. In contrast, modernizing IT such as MMIS networks can help agencies become more versatile while helping them save money on operating expenses.

One state's recent MMIS modernization provides its peers nationwide with a clear map to improving their Medicaid IT. Washington's efforts to modernize the state's Medicaid system and deliver citizens better, more timely services offer agencies at every level an example of how to modernize and upgrade their MMIS networks.

In 2018, Washington's Health Care Authority (HCA) became America's first agency to transition all its production MMIS applications and infrastructure into a public cloud. The migration's results demonstrate how cloud computing can transform MMIS processes and improve the delivery of Medicaid benefits.

To understand why modernizing MMIS systems with cloud is important, GovLoop partnered with Amazon Web Services (AWS) and Client Network Services, Inc. (CNSI). AWS is an on-demand cloud platform provider, while CNSI is a health care IT solutions provider. HCA revitalized Washington's Medicaid services by transferring its MMIS network to a CNSI platform based in AWS's public cloud. The following pages discuss the current challenges agencies face with their MMIS networks and share best practices for delivering Medicaid services more efficiently with cloud.

BY THE NUMBERS

75.1 million

people monthly were served by Medicaid on average in FY 2018.

$402.9 billion

was spent by the federal government on total Medicaid programs in FY 2018.

1.81 million

people were enrolled in Apple Health, Washington's Medicaid system, as of May 2019.

69.6%

of Washington's adults ages 20 to 44 years old had access to preventative and ambulatory health services through Apple Heath in reporting year (RY) 2018.

72.6%

of Washington's adults ages 45 to 64 years old had access to preventative and ambulatory health services through Apple Health in RY 2018.

80.6%

of Washington's adults ages 20 to 64 years old had access to preventative and ambulatory health services through Apple Health in RY 2018.

Cloud Smart, the federal government's new strategy for adopting cloud more efficiently by considering procurement, security and workforces, was introduced in 2018. Although meant for federal agencies, the strategy is also valuable for state and local organizations.

THE CHALLENGE

Legacy IT is Lacking for Modular MMIS

Health care constantly evolves, as the people using it have unpredictable needs. Medicaid is no exception, and what's true of the program one day may change the next. Take Medicaid's threshold for beneficiaries – if lawmakers alter the amount that qualifies someone as low-income, the amount of people who are eligible to claim the program's benefits also changes.

Currently, legacy MMIS networks are falling behind rapid developments in Medicaid services. These systems have two major shortcomings: They're costly to maintain, and slow to change.

"In the legacy world, the systems are usually the roadblock," said John Harding, Vice President of Operations at CNSI. "Compliance in a legacy platform can costs tens of millions of dollars and take years to implement."

Regrettably, many agencies don't realize how Medicaid is straining their legacy MMIS networks until they try changing their health care service delivery. In 2018, for instance, Washington's HCA decided that its legacy IT could no longer provide Medicaid services efficiently enough for citizens.

"Washington's cloud adoption was tied into their ability to think through and implement a healthier state," Harding said. "HCA continued its journey as an adaptable and nimble organization by leveraging tools such as cloud to pursue their ambitious health care goals."

Even worse, HCA and scores of similar organizations gradually discovered that legacy MMIS systems don't support modularization. Modularization creates a reusable system for services such as Medicaid using modules that interact, interface and share data between one another. In 2016, CMS required agencies to include modularity in all their MMIS and Medicaid eligibility and enrollment (E&E) plans going forward.

"In the legacy world, modularization would be virtually impossible," Harding said. "The cloud makes it much easier to implement."

THE SOLUTION: MODULARIZING YOUR CLOUD

Although Medicaid benefits are critical for citizens, providing them with traditional IT becomes costlier and more difficult as the program's data grows more complicated. Modernizing IT with modularization can help soothe these pain points for agencies.

Fortunately, modularization can help agencies make the most of their Medicaid information. By creating modules that handle, manage and store vast amounts of data, modularization can assist agencies with delivering Medicaid benefits quickly and efficiently.

"MMIS networks are very large and encompass many different functions and modules," Harding said. "Public clouds allow us to take that large scope and scale and deliver those services on a cost-effective basis."

Public clouds, meanwhile, fit modularization well, as these flexible platforms reduce the burden on IT workers. Vendors publicly offer these clouds to various organizations while aiding them with security and IT management. In turn, agencies can focus more on innovation, customer experience (CX) and other concerns.

Over time, modernization efforts give agencies such as HCA happier employees by lightening their IT management and security workloads. These workers become increasingly satisfied as they work on more fulfilling responsibilities such as innovation.

"We've seen folks transition to different roles, take on larger responsibilities and do more things," said Casey Burns, Health and Human Services Strategy Leader at AWS. "Giving them the best tools on the market to work with is an important facet of keeping them happy."

BEST PRACTICES
Modularizing Your Cloud

I. Modernize Your Technology

Swapping traditional IT for modern solutions such as cloud produces valuable savings over time. Outdated IT also presents agencies with more security risks, so replacing it can help them keep their data safer. As IT ages, meanwhile, it becomes increasingly unreliable. Modernizing IT helps agencies deliver services more consistently and with fewer interruptions.

2. Map Out Your MMIS's Cloud Migration

MMIS networks are complex, and agencies moving them to cloud should carefully plan their transition.

Although it's a federal initiative, the 2018 Cloud Smart strategy can also provide state and local agencies with a roadmap to successful cloud adoption. Cloud Smart prepares agencies for implementing cloud by advising them on the procurement, security and workforce challenges they'll face. The goal is cheaply and efficiently readying employees for cloud while protecting sensitive data with the technology.

HCA's journey, meanwhile, illustrates how agencies can address Cloud Smart's workforce component. First, CNSI worked with HCA business and technology teams to create a proof of concept for hosting MMIS applications in cloud that familiarized its teams with the tools and technologies involved. Next, CNSI conducted tabletop exercises that imagined their cloud's functionality and performance. Finally, CNSI and HCA crafted and monitored schedules for migrating applications and services to their cloud to keep the entire project on track.

3. See How Cloud Changes Your Agency's Security

For many agencies, hosting their MMIS networks in a public cloud requires some compliance and security adjustments. This is because agencies aren't accustomed to cloud vendors assisting them with both concerns.

Cybersecurity, for its part, is critical to all levels of government because all departments handle sensitive citizen data. Agencies that don't protect this information risk losing public trust, failing to achieve their mission and even threatening citizens' safety.

Fortunately, public cloud providers aid agencies by creating clouds that comply with all applicable security standards. The Federal Risk and Authorization Management Program (FedRAMP), for example, guarantees that clouds are secure for federal data. By lending a hand with compliance, vendors relieve some of the pressure on agencies to meet these standards.

Although vendors play a part in public cloud security, agencies still have responsibilities of their own. Agencies at every level must make sure their workforces practice basic cyber hygiene and recognize current security trends.

4. Refocus Your Agency's Employees After Cloud Adoption

Many agencies find change intimidating and can be set in their ways. Cloud, however, can help MMIS staffers focus on CX and innovation rather than IT management and security.

By reducing the time spent on outdated, manual processes, such as repairing physical data centers, agencies field faster, more efficient workforces. Employees grow more satisfied and can more simply accomplish their missions; over time, these workers also provide a stronger CX to citizens.

Consider HCA. After adopting cloud, HCA's workers can channel their energy to delivering economic, nutritional and other benefits better and more efficiently.

5. Make Your Data More Visible

The Digital Accountability and Transparency Act of 2014 (often called the DATA Act) strives to make information about federal expenditures more accessible and transparent. The law required the Treasury Department (USDT) to create common financial data standards for all federal agencies. It also mandated that agencies provide more information to USASpending.gov, a website that tracks federal spending governmentwide.

Collectively, these measures help citizens see how their tax dollars are spent. For instance, HCA handles Medicaid spending data that USASpending.gov would monitor because of the DATA Act. Subsequently, public clouds handling such information must comply with the law's accessibility, security and transparency requirements.

How AWS and CNSI Help

Agencies looking to follow HCA's lead migrating their MMIS networks to cloud need two things: a modular Medicaid platform and a reliable public cloud for hosting it.

HCA satisfied both requirements by transferring its MMIS network to a CNSI platform hosted in AWS's public cloud. AWS and CNSI's partnership offers agencies an example of the possible combinations for modernizing their MMIS networks. Hosted in AWS's public cloud, CNSI's modular platform can help agencies fluidly deliver Medicaid services to citizens.

"Our modular platform is about the speed and pace of change it can deliver," Harding said. "We've seen the ability to deploy this platform quickly at both the federal and state levels."

CNSI's modules are CMS-certified and comply with all federal IT standards. Agencies can also configure and customize CNSI's modules to their specific MMIS needs, as the platform's business functions are reusable.

Public clouds, meanwhile, can provide agencies with agile, reliable and secure services. Vendors such as AWS manage the cloud's infrastructure while helping agencies with security. Such pairings let agencies focus on achieving their missions rather than mundane tasks such as IT maintenance.

Working together, tools such as AWS's public cloud and CNSI's modular platform can empower MMIS networks that are driven by data analytics. By understanding their Medicaid data in real time, agencies have the best possible intelligence for delivering benefits.

"Having a flexible data environment is where organizations are going," Burns said. "They can respond to the changes that are happening now."

Learn more at www.cns-inc.com.

THE HISTORY OF MEDICAID MODERNIZATION

CMS transformed Medicaid modernization in 2006 by introducing modularity as a concept for enabling MMIS networks. Since then, CMS has urged agencies from the federal level on down to consider modularity as they modernize, procure and implement MMIS networks.

"Modularity is about transitioning from tightly coupled legacy applications generally provided by one large provider to an environment where agencies have much more flexibility," Burns said. "It's about trying to allow agencies to adopt the best technology and services available for specific components."

CMS added modularity to the Medicaid discussion as part of the agency's Medicaid Information Technology Architecture (MITA). MITA is CMS's framework for aligning an agency's IT business operations to create agencywide MMIS networks focused on efficiently delivering Medicaid services to beneficiaries.

State agencies such as Washington's HCA, meanwhile, have felt more pressure to implement modular MMIS networks since 2016. That August, CMS mandated that agencies include modularity in their MMIS and Medicaid E&E plans.

Conclusion

HCA may have completed America's first MMIS cloud migration with the help of AWS and CNSI, but any agency can improve its Medicaid IT by similarly modernizing it. With CMS demanding that all manner of agencies modularize their MMIS networks, combining the right cloud with the right platform during modernization is essential.

Thankfully, a wide range of public clouds exist for anchoring modular MMIS networks. Agencies that deploy such networks can modernize their Medicaid IT infrastructures while reducing the cost, risk and time involved with implementation.

Overall, agencies that utilize proven, shared cloud infrastructures can launch modular, cutting-edge MMIS networks that boost their Medicaid services by leaving legacy IT behind.

ABOUT CNSI

Founded in 1994, CNSI has established strong domain expertise in prominent industries, including State Medicaid, Federal and State Health IT, and Government IT. We employ a world-class team of technologists, program managers, subject matter experts and business analysts, all of whom have experience with large scale mission-critical IT implementations. CNSI has its Corporate Office in Rockville, Maryland and with site in nine cities worldwide, including Chennai, India. It is across these sites where we focus on developing the latest in health IT in order to provide better care, better health at a lower cost to over 50 million Americans.

To learn more about CNSI, please visit www.cns-inc.com

ABOUT AWS

With over 2,000 government agencies using AWS, we understand the requirements US government agencies have to balance economy and agility with security, compliance and reliability. In every instance, we have been among the first to solve government compliance challenges facing cloud computing and have consistently helped our customers navigate procurement and policy issues related to adoption of cloud computing. Cloud computing offers a pay-as-you-go model, delivering access to up-to-date technology resources that are managed by experts. Simply access AWS services over the internet, with no upfront costs (no capital investment), and pay only for the computing resources that you use, as your needs scale.

To learn more about AWS, please visit www.aws.amazon.com

ABOUT GOVLOOP

GovLoop's mission is to "connect government to improve government." We aim to inspire public-sector professionals by serving as the knowledge network for government. GovLoop connects more than 300,000 members, fostering cross-government collaboration, solving common problems and advancing government careers. GovLoop is headquartered in Washington, D.C., with a team of dedicated professionals who share a commitment to connect and improve government.

For more information about this report, please reach out to info@govloop.com.

1152 15th St. NW Suite 800
Washington, DC 20005

P: (202) 407-7421 | F: (202) 407-7501

www.govloop.com
@GovLoop