

CNSI Solution Delivers Stand-Out Performance at Payer-to-Payer Connectathon

On January 24, the CNSI Products Team participated in the [CARIN Alliance](#) Connectathon. The event brought together payers and servers (vendors) to test whether their existing Patient Access APIs (application program interface) could be re-purposed to also support payer-to-payer connections. Using sandbox environments, participants tested their APIs across three scenarios to determine if they could connect, retrieve, and validate data with other payers. Among the servers/vendors who participated:

- CNSI's Interoperability Solution achieved successful connections and data retrieval with all four participating payers.
- All four payers reported they found it easy to integrate within 20 minutes to CNSI's Interoperability Solution and just one other server.

"We follow the exact standards of the SMART® on FHIR® and OAuth 2.0, so that's why the payers were able to connect so quickly," says Ajay Tipnis, Principal Solutions Architect. "Last year, we were focusing on third-party applications; going forward we are focusing on leveraging our investments to improve interoperability across the board including payer-to-payer connections."

The Centers for Medicare and Medicaid Services' (CMS) Interoperability and Patient Access Final Rule is intended to give patients access to their healthcare data when and how they choose. In 2021, Medicaid payers were required to enable data exchange between payers and patients via third-party apps, which supported mobile device access. In the near

future, CMS will also enforce payer-to-payer data exchange, which will enable patients to take their health data with them when switching to a new health plan, such as during a move to a new state or to a new employer plan.

CNSI's Interoperability Solution is already live for our Michigan and Washington programs. Additionally, it will go live with the programs in Illinois, Arizona and Wyoming in the near future.

CNSI delivers a broad range of health information technology enterprise solutions and customizable products to a diverse base of state and federal agencies in the United States. We align, build, and manage innovative, high-quality, cost-effective solutions that help clients achieve their mission, enhance business performance, reduce costs, and improve the health of individuals and communities. Headquartered in the United States with global operations, CNSI employs a world-class team of technologists, program managers, and subject matter experts with large scale mission-critical information technology implementation experience.

Taking Technology Personally: CNSI Managing Director Gaurav Maini profiled in Forbes India



This article originally appeared in the February 11, 2022 issue of *Forbes India*.

CNSI Managing Director Gaurav Maini uses his healthcare technology background to improve lives with a unified global team. As an executive with Epic Systems in Wisconsin, United States, Gaurav Maini was no stranger to on-site technology implementations. When his own children were due to be born, Gaurav went to the local hospital to personally test the electronic health record systems that would empower his family and their medical providers. This fundamental connection to the humanity of healthcare technology now drives Gaurav's work as Senior Vice President and Managing Director for India at U.S.-based CNSI. CNSI delivers health information technology solutions and customizable products to state and federal agencies in the United States, where it is headquartered. With a major technology center in Chennai since 2004, CNSI employs a world-class team of engineers, program managers, and subject matter experts with large-scale technology implementation experience. When CEO Todd Stottlemeyer selected Gaurav Maini to lead CNSI's India operations in October 2020, he stated, "Gaurav knows what it takes to build and deploy solutions to help us improve health outcomes, better manage population

health, and bend the cost curve.”

Prior to CNSI, Gaurav Maini spent eight years as Managing Director of Philips VitalHealth Asia Pacific, establishing Philips as a leading provider of solutions focused on health data, coordination of care, and patient and clinician engagement. He is passionate about the confluence of technology and healthcare. “I get to follow that passion through CNSI’s vision: to be the market leader and most trusted partner for innovative and transformative technology-enabled solutions that improve health and social services outcomes and reduce costs,” says Gaurav.

Gaurav has extensive experience with the complexities and costs of healthcare technology systems in the U.S. After earning his master’s degree from Texas A&M University, he held technical leadership roles in both the U.S. and India. There he witnessed the difference between U.S.-based firms who used their India operations as purely back-office support and those who operated as a single, global team. “The CNSI core value of ‘One Team – One CNSI’ is critical to our ‘follow the sun’ model that allows us to keep pace with the evolving needs of our government healthcare customers,” he asserts. He detailed the keys to help multinational employees work collaboratively in the article, “Building Medical Claims Processing Software From 12 Time Zones Away,” in the September/October 2021 edition of IEEE Software.

Much of the multi-billion-dollar expense in U.S. Medicaid information systems – CNSI’s core product area – is driven by the complexity of processing medical insurance claims. Over 200 pieces of data make up the average Medicaid payment claim submitted by a healthcare provider. Over 250,000 claims per day are submitted to the average state Medicaid agency. CNSI integrates patient data and artificial intelligence technology to reduce manual claims review time and expense. CNSI processes more than 1.3 billion claims per year across U.S. federal and state environments, totaling more than \$135

billion in payments to over 700,000 care providers. Again, Gaurav Maini points out the human impact within these volumes, “Our products are connecting patients to their healthcare data or reducing administrative burden for overworked healthcare providers. One in fifteen Americans is affected by our work in this vital and personal area of their lives.” He adds, “We take this very seriously. I take this personally.”

Work, purpose, and healthcare have never been more personal for Gaurav and his CNSI team than during the COVID-19 pandemic. He oversees rapid team growth as part of CNSI’s global HR strategy. “We’re driving healthcare transformation by attracting diverse talent, creating an inclusive culture. We listen to our teams and continue to evolve our employee engagement and development programs,” he states. Gaurav was instrumental in developing CNSI’s “Future of Work” policy to make remote or hybrid work arrangements permanent, adding investments in employee safety and satisfaction. He adds, “Recruiting from across India – not just Chennai – is critical to adding top engineering talent to our team.”

CNSI’s growth shows no signs of slowing. With multiple contract awards in 2020 and 2021, demand for CNSI solutions remains high. “With the December 2021 acquisition of CNSI by Carlyle Group, one of the world’s largest, global private equity firms, CNSI has powerful backing to continue our mission,” he adds. “I am here because this is the place to do challenging work with talented people, to be recognized and rewarded for our efforts, and to know that our work has meaning.” Whether building a better medical record for his children or building a better workplace for his teams, Gaurav Maini is taking this personally.

CNSI's Follow-the-Sun Development Model Supports Ongoing MMIS Modernization: IEEE Software September/October 2021

How does a U.S.-based company with a multi-national workforce – of whom half are not U.S. healthcare consumers – become an industry leader in next-generation Medicaid software? It sets a high bar for people, process, and technology that enables seamless teamwork across every time zone of its business.

That is the subject of a new article, “Building Medical Claims Processing Software From 12 Times Zones Away,” in the September/October 2021 [edition of IEEE Software](#) (requires subscription or purchase to view full text). Its authors, [Gaurav Maini](#), Senior Vice President and Managing Director, and Sanjeev Jayakumar, Product Owner and Business Analysis Practice Head, work at U.S.-based CNSI. The authors support the company's India operations based in Chennai.

Much of the multi-billion-dollar expense in U.S. Medicaid Management Information Systems (MMIS) is driven by the complexity of processing health insurance claims:

- 200+ pieces of information make up the average Medicaid claim submitted by a healthcare provider.
- 1,000+ business rules validate each claim in the adjudication process (determining whether to pay the claim).
- 25+ possible algorithms – each requiring over 50 pages of logic documentation – determine the price of reimbursement if payment is warranted.

- 250,000+ claims per day are submitted to an average state Medicaid agency for adjudication and pricing.

Delays, errors, waste, or abuse in any stage of this system can seriously disrupt patients, providers, and state agencies.

The frequent regulatory and budgetary adjustments in the U.S. public healthcare claims system led CNSI to build its own claims processing engine from the ground up. CNSI maintains more than three million lines of code in their evoBrix X™ platform and RuleIT® rules engine with new functionality, adjudication rules and pricing algorithms to keep pace with the evolving needs of its government healthcare customers.

From the Editor

Writing medical software from the other side of the world requires the right technical choices and ongoing investment in getting the domain knowledge across 12 time zones.—Michael van Geuchten and Les Horton

Since 2004, CNSI has embraced a follow-the-sun model, growing their presence in Chennai, India, to complement the U.S.-based workforce. CNSI leaders made significant investments in in-house MMIS domain training for all employees, ensuring fluency in relevant processes and terminologies – investments that continue today with CNSI's commitment to a culture of learning. This built credibility and enabled the U.S.-based and India-based employees to work collaboratively as one team. Rigorous attention to technology, processes, and domain expertise were the keys to overcoming cultural and physical distances in the CNSI model.

People and processes continue to be critical success factors for CNSI in developing next-generation MMIS solutions. The multinational model helped CNSI embrace the 2016 MMIS modularity guidance from the Centers for Medicare and Medicaid Services (CMS) and continue their strong work in cloud based MMIS. This scalable development model allows CNSI to integrate

patient engagement and artificial intelligence (AI) technologies for reducing the time spent by agency staff on manual review of claims.

“The key success factor for our company was the definition and implementation of processes to seamlessly capture, communicate, and track ongoing changes to code and documentation,” according to the CNSI authors. “Even with the best tools in place, poorly defined or poorly implemented processes will erode confidence in the efficacy of the follow-the-sun model.”

Sign in to read the full article text (IEEE membership or subscription required):

<https://ieeexplore.ieee.org/abstract/document/9520306>

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Source: S. Jayakumar and G. Maini, “Building Medical Claims-Processing Software From 12 Time Zones Away,” in *IEEE Software*, vol. 38, no. 5, pp. 125-129, Sept.-Oct. 2021, doi: 10.1109/MS.2021.3086615.



SANJEEV JAYAKUMAR is a product owner and business analysis practice head at CNSI, Chennai, 600002, India. Contact him at sanjeev.jayakumar@cns-inc.com.



GAUREV MAENI is the senior vice president and managing director at CNSI, Chennai, 600002, India. Contact him at gaurev.maeni@cns-inc.com.

Health IT: Improving Quantity & Quality of Care in Rural Areas

It's no secret that delivering health care in rural environments comes with its own unique challenges, from patient transportation issues to workforce shortage issues, higher rates of uninsured or under-insured and higher poverty rates. But with rural areas in nearly every state and 1 out of 5 Americans living within a rural area, it's clear that agencies and providers must overcome those challenges to be able to effectively serve the people in their communities.

The Centers for Medicaid & Medicare (CMS) recently identified its [first-ever Rural Health Strategy](#) which focuses on ways that technology can help improve rural health outcomes in a way that doesn't further burden already-stretched systems. Here's how CMS is using (and supporting) technology to benefit rural patients:

Expanding telehealth

In the past year, CMS has expanded the Medicare program to allow for access to telehealth and other virtual services, allowing rural patients to easily check in with their physician over the phone or via the internet, using patient-supplied videos and other images to help determine if an in-person visit is warranted. These efforts have created historic changes in the way healthcare is delivered to rural communities by bringing healthcare to patients where they are.

Increasing Medicare Advantage flexibility

Expanding telehealth and other technology-enabled health services is the first step in better serving rural communities, but it's imperative that Medicare covers these services in order to achieve anticipated benefits. In addition to expanding the scope and type of services that can be delivered remotely, CMS is also creating more flexibility in Medicare Advantage plans by ensuring that innovative telehealth services are now part of the basic benefit.

Revising policies to support rural providers

To support its technology initiative, CMS is also reviewing its policies and programs to identify how each will impact rural providers. Instead of considering rural populations as somewhat of an afterthought, CMS is proactively reviewing current policies to determine the intended or unintended consequences for rural physicians, hospitals and other healthcare providers. Additionally, [CMS recently enacted Medicare hospital inpatient prospective payment systems \(IPPS\)](#) which, among other things, aims to address the wage index

disparities impacting low wage index hospitals typical in rural locations. This change will decrease the delta between rural and urban hospitals and will empower rural hospitals to better attract talent, improve patient care quality and give patients greater access.

Take a Page from the CMS Playbook

Clearly, technology is having a significant and positive impact on healthcare outcomes in rural areas, and CMS continues to make strides in expanding access and improving adoption. State health IT execs are urged to take a page from the [CMS playbook](#) and apply similar thought processes in their own organizations so that their rural citizens can experience the best care possible.

Need insights on best practices for using technology to deliver healthcare to citizens in your rural communities? [Get in touch](#) to learn more about how CNSI can help your organization.

CNSI, Grateful For You

As the holiday season approaches, we'd like to take a moment to say thank you to all of the employees, clients and partners who have had an impact on CNSI's success this year.

Our Employees: Thank you for your continued dedication and passion for technological innovation and business transformation. Your hard work is noticed and appreciated. You always have been and always will be our most important asset. We are thankful for your service.



Our Clients: You are the reason why we do what we do, and we are thankful to have earned your trust—but it's not something we take for granted. We look forward to continuing to serve you and help enable your success in 2020 and beyond.



Our Partners: Your talents help allow us to provide comprehensive solutions that make our clients successful. Thank you for continuing to be an integral part of our team.



Market Outlook: 2020 Power Breakfast Brings Powerful Insights

Recently, CNSI chief executive officer Todd Stottlemeyer joined other health IT executives for a [Market Outlook: 2020 Power Breakfast](#) in Tysons Corner, Virginia. At the breakfast, Todd spoke on the power of IT-enabled health care. He also identified six key trends health IT executives should be aware of—and poised to capitalize on—in 2020. Read for a recap of Todd's insights.

Modular solutions: Modular solutions are a trend that started 3-4 years ago and will progress into the future. Expect a renewed focus on modular solutions that integrate well with other components.

Interoperable solutions: With modularity comes interoperability – the ability for systems to exchange

information. Expect to see more open APIs and similar ways to help information flow between systems.

Configurable solutions: Healthcare IT solutions need to be highly configurable, reducing the amount of customization. The Centers for Medicare and Medicaid Services (CMS) is highly focused on systems that are scalable and adaptable to allow for future policy and regulatory changes.



Empowering consumers: Putting more actionable information into the hands of consumers will enable them to make more informed and better decisions about their health, their health providers, and their choice of health plans.

Data analytics: If data is not actionable, it's not relevant. There is plenty of data out there – claims, clinical, public health, provider, outcomes, and social determinants. The key is how you transform the data into actionable information so you can realize better individual and population health outcomes and reduce healthcare costs.

Security: As malevolent forces elevating their sophistication on data hacking, security measures must also elevate. Businesses and agencies must be consistently evaluating and improving their data protection on both a personal and broader

level.

According to Todd, it's an exciting time to be in healthcare IT. "We are still in the top of the first inning from a disruption standpoint."

NAMD 2019: A Focus on Partnerships

Yesterday the [National Association of Medicaid Directors](#) (NAMD) kicked off its annual conference. When looking through the [two-day agenda](#), you'll see aspirational words like Advancing, Strengthening, Supporting and Partnering (with heavy emphasis on the latter). But what you will also see is a wide cadre of states giving real-world, implementable solutions to achieve common goals for quality care at sustainable costs for those most in need in our communities.

Take for example, Arizona Medicaid Director, Jami Snyder. In one of the first sessions, Snyder describes how their Arizona Health Care Cost Containment System (AHCCS) program is tackling the state's growing chronic homelessness and unsheltered population.

"The governor set a goal of decreasing the homeless population by 80 percent. AHCCCS collaborating in a way that allows us to move forward, including learning each other's language, in order to successfully lower the rate of homelessness," said Snyder.

She went on to describe a web of partnerships that included Arizona Medicaid health plans, local public housing authorities, federal Housing and Urban Development support, the state's department of economic security, Arizona State university, the Crisis Response

Network and the United Way—each filling in a critical need to supply services, funding and housing permanency.



Most sessions of the conference featured the stories of those whose health and stability have been improved through these collaborative efforts. In Arizona, it was a timeline story of “Dave” who was found on the streets blinded with cataracts. Through information sharing, Dave was able to receive treatment for his high blood pressure, which led to two successful eye surgeries then transitional housing. It took less than nine months for Dave to find permanent housing and a new outlook on life.

What was apparent in day one of NAMD, is that all states recognize that the power to change lives rests on their ability to share information across programs and agencies. At CNSI, we recognize the role in which technology plays in facilitating that sharing. Whether its creating a partnership between two states to leverage the same Medicaid system or using cloud technology to increase interoperability across business functions, we are proud to support our clients in improving health outcomes for all the “Daves” in the US. Thank you NAMD for providing this platform for these partnerships to flourish.

NCSAM is Over. Focus on HealthIT Security is Not.

October has come and gone and so has yet another [National Cybersecurity Awareness Month](#) (NCSAM). But this collective effort between government and industry to make us all safer online didn't end on the 31st.

Almost \$8 million dollars. That's the average US cost to mitigate and resolve a data breach, according to a recent study by the [Ponemon Institute](#). And the healthcare industry's breach costs are higher than any other industry, at an average \$408 per record. With numbers like these, it's not surprising that cybersecurity is on the minds of health IT executives. To improve your organization's cybersecurity, make sure you're following these data security best practices.

Have a Proactive Plan. The old cliché of “if you fail to plan, you plan to fail” holds true when it comes to healthcare cybersecurity. Develop your unique breach response plan before any such breach occurs by identifying the appropriate actions for mitigating the breach situation and keeping stakeholders informed.

Mobile Convenience vs. Mobile Risks. Risks are real when it comes to the increased usage of tablets and smartphones in the healthcare environment both on the provider and patient side. It is imperative that IT decision makers implement mobile device management (MDM) in their planning. MDM will allow you to administer, secure and enforce policies on phone, tablets and other mobile endpoints.

Knowledge is Power. Empowering your employees with security knowledge creates a front line of defense against data breaches and other cybersecurity issues. Providing best practices training for current and new employees to teach

optimal ways to handle sensitive data can present a united front against malicious hackers.

Seamless Upgrades. Hardware and software upgrades and patches need to be acted on immediately in order to avoid unnecessary risk. For best results, create and execute an update plan that includes all elements of your system, from mobile devices to Internet-connected healthcare equipment.

Limit Physical Access. When you think of a hacker, you likely think of someone gaining unauthorized access to your system via electronic means—like through an unpatched vulnerability in your network software. And while many times this is the case, the reality is that hacking and cybersecurity issues can and do occur when a malicious person gains physical access to your systems. A stolen laptop or damaged server can be just as dangerous as a network vulnerability when it comes to cybersecurity, so ensure that you control access to areas containing highly sensitive equipment.

Not If, But When. Today, the question for healthcare organizations is not if you will be the target of a breach but when. And by following data security best practices—like creating a response plan that includes mobile devices, training employees, quickly applying updates and patches and keeping physical control of access to your network—you'll be on your way toward improving your organization's cybersecurity.

To learn more about NCSAM and resources available to you and your organization, visit staysafeonline.org/ncsam/.

3 Tips for Successful Federal Health IT Modernization

When it comes to modernizing federal health technology, there are no shortage of challenges. From IT budgets that haven't kept pace with rising costs to changing regulations, federal health IT leaders have their work cut out for them. But the benefits of modernized systems—better patient outcomes, streamlined processes and reduced costs—mean that health IT leaders must devise strategies that will continue to move the agency forward. Let's take a closer look at three considerations federal health IT leaders should keep top-of-mind as you are moving forward with your own modernization activities.

A Phased Approach

There are plenty of roadblocks on the road to federal health IT modernization, with everything from security-challenging, resource-hogging legacy systems to IT budgets that stifle upgrade efforts standing in the way of necessary changes. Add to that the fact that many organizations are change-resistant, unwilling to say goodbye to technology that no longer serves them simply because it's "what they know," and you have a recipe for remaining static.

To sidestep these roadblocks, federal health IT leaders should consider a phased approach to any modernization projects. By developing a modernization plan that refrains from a "start from scratch" option and instead, works to create incremental improvements, there's a better chance of the modernization effort being accepted and successful. Think of it this way—running may get you to the finish line faster, but walking means that you're able to clearly see (and avoid) the inevitable potholes and pitfalls that are along your path.

A Realistic Roadmap

Building upon the phased approach concept, federal health IT leaders must also have a clear idea of the agency's current level of digital readiness. The reality is that different federal agencies have radically different levels of digital savvy, meaning that what may seem like a small change in your organization could be seen as a huge transformation at another.

Once you've ascertained your level of digital readiness, you'll be ready to map out your digital vision and roadmap, identifying digital goals and setting forth your digital vision. When you create that roadmap, focus on continually making progress toward your goals—including measurable metrics so you can determine success—and then plan on continually optimizing your technology based on what you learn.

Change Management

Just as with any kind of transformation, effective change management is necessary to ensure the success of the initiative. And while many organizations spend a lot of money and time implementing new technology, oftentimes the very real need to invest in change management is overlooked.

To effectively get your organization ready for the many changes that will occur as a result of health IT modernization, transparency and inclusion are paramount. Work with representatives from all levels of the organization—from those in-the-trenches serving patients to those in the C-suite—to gather information and ideas and listen to concerns. The time that you invest in getting buy-in early will pay dividends when it's time to implement the solution.

Strategic Planning Helps with Avoiding Common Issues

Clearly, federal health IT leaders are fully aware of the many challenges that stand between their agency and a digital transformation. But with a little planning, you can avoid many of the common issues that plague digital initiatives. Consider a phased approach to help your agency ease into your new technology, and be realistic when it comes to your digital readiness. Finally, don't underestimate the value of effective change management in driving the adoption—and ultimately the success—of your upgraded digital elements. By following these tips, you'll be putting your agency on the road to digital transformation success.

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Ready to bring a digital transformation to your federal agency, but need assistance making it happen? CNSI can help. [Get in touch with us today.](#)

Implementing Health Information Technology

Implementing Health Information Technology

It's no secret: state health IT has so many stakeholders and moving parts, it makes it easy for the fundamentals to get lost in the noise. So how is a state health IT leader supposed

to know where to get started? Let's take a closer look at the five most common steps to implementing health IT in a way that leads to success.

1. Bring together the right players

One of the first things any state health IT leader should do is to identify and bring together all of the stakeholders who are likely to be impacted by changes in the technology, from the physicians and nurses in-the-trenches to administrators, IT staff and even patient advocates. Additionally, don't forget to tap into vendors and consultants with whom you have good relationships, as they can bring solid expertise and real-world experience to the table and can help you implement changes more quickly and efficiently than tackling them on your own.

By ensuring that all of the stakeholders are adequately represented at the beginning of the project, you'll be able to get all-important buy-in and can ensure that you don't miss something big as you're moving forward.

2. Develop a plan with clear goals and measurable impacts

As any state health IT leader knows, the most successful plans are those that can prove impact. Understanding that it's impossible to do everything all at once, work with your stakeholders to develop a plan that takes advantage of a phased approach, tackling your highest priority tasks first.

Within the plan, identify important benchmarks and metrics that you'll use to help measure areas of success and areas where improvement is possible. Set up specific intervals where the stakeholders will reconvene to review metrics and discuss what's working, what isn't, and how to best optimize efforts.

3. Determine your budget

Another important aspect of implementing health information technology is determining (and sticking close to) the budget. Work with your stakeholders to create a realistic, sustainable budget that considers costs for not only hardware and software, but also ongoing training, maintenance and support. And don't be fooled into thinking that open source software is "free" – while there may not be a cost associated with licensing, there are certainly still ancillary costs that you'll need to plan for, so keep that in mind.

4. Implement and drive adoption

Once you've chosen a path forward and created a plan, it's time to implement and integrate it throughout your organization. The phased approach will go a long way toward helping your team members adapt to the change in a positive way. Work with your vendors and consulting team to provide your staff with the training and resources necessary to ensure their success using the new technology, being certain to help them understand the benefits not only to the organization but to themselves. Set clear goals for implementation and integration, and document new processes and procedures so it is easy for staff to refer to the documentation if they find themselves temporarily confused on how to accomplish a specific task. Provide staff with a feedback mechanism for sharing their thoughts on how the new technology is working, ways in which it can be improved and areas in which it has provided wins for patients—then share this information throughout the organization to encourage continued adoption.

5. Measure and optimize

After you've put your plan in motion, it's time to see how it's performing and make tweaks to improve it. The technology

you have in place will actually allow you to communicate with all of your different audiences—from your stakeholders to your patients—so that you can continually ask for their feedback via patient portals, your website, your intranet, printed handouts, in-office iPads or any other technology mechanism you use. Consider any patient touchpoint as an opportunity to gather feedback on what's working and what isn't, and make changes based on your findings. Then, incorporate the data you gather into your marketing efforts to help drive even greater conversions. The more you continue to optimize, the more effective your marketing will be.

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Need assistance in developing your health information technology plan or implementing HIT in your state? CNSI can help. [Get in touch with us today.](#)