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.

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."

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