Meadows Regional Medical Center enhances patient safety by moving to the cloud

CloudWave delivers secure cloud-based MEDITECH solutions powered by HPE

Objective
Ensure compliance with the 2009 Health Information Technology for Economic and Clinical Health (HITECH) Act and qualify for Meaningful Use incentive payments to help enhance the physician experience and improve patient safety.

Approach
Leverage CloudWave’s OpSus Cloud Services built on HPE BladeSystem 7000 and 3PAR storage technologies to ensure compliance, performance, and scalability.

IT Matters
• Enabled seamless transition from MEDITECH MAGIC on-premises to MEDITECH 6.0 in the cloud
• Increased IT capabilities by moving to a highly available and scalable hosted environment
• Leveraged partner talent pool to compensate for limited available IT resources

Business Matters
• Ensured compliance with 2009 HITECH Act to enhance patient care and safety
• Gained access to over $3 million in Meaningful Use incentives to cover migration costs
• Assured availability of scalable compute resources for future expansion and upgrades

Meadows Regional Medical Center is the only accredited hospital in the Montgomery, Toombs, Treutlen, and Tattnall counties in Georgia, USA, to meet strict national standards. With limited access to IT resources and the need to comply with the 2009 HITECH Act, they migrated their on-premises MEDITECH MAGIC environment to MEDITECH 6.0 running on CloudWave’s OpSus Cloud powered by HPE ProLiant servers with Intel® Xeon® processors.

Leveraging compliance to drive improved patient care and safety

“We were using MEDITECH MAGIC running in our on-premises facilities, but not to its full potential,” states Stephen Smesny, Director of Information Services at Meadows Regional Medical Center. “While our nurses were fully invested in using the system to improve patient care, adoption by doctors was slower than we would have liked. The passing of the Health Information Technology for Economic and Clinical Health (HITECH) Act in 2009 was exactly what we needed to kick-start the next step.”

Established in 1963 as the Dr. John M. Meadows Memorial Hospital, Meadows Regional Medical Center is a 65-private patient suite, non-profit hospital that recruits skilled doctors from across America and uses the latest medical advancements to provide cutting-edge healthcare for cancer, heart attack, kidney disease, and stroke patients, among others.

“As part of the HITECH Act, the government introduced the Meaningful Use program which required health care providers to show ‘meaningful use’ of a certified Electronic Health Record (EHR) system,” explains Smesny. “While offering significant incentives...”
"If it wasn’t for our relationship with CloudWave, we probably would never have been able to prove ‘meaningful use’ within the time allowed, and likely would have incurred penalties. As it is, we qualified for over $3 million in Meaningful Use incentives which covered the cost of our migration to MEDITECH 6.0—with over $200,000 to spare."

— Stephen Smesny, Director of Information Services at Meadows Regional Medical Center

Choosing the right partner

“It was also an opportunity to reevaluate our current IT environment to meet the needs of our new 194,000 square feet facility,” adds Smesny. “We had always enjoyed a good relationship with CloudWave who were responsible for looking after our on-premises MEDITECH environment. They had done a superb job during the move, but implementing MEDITECH 6.0 to meet our ‘meaningful use’ goals was a whole different ball game. The migration meant moving from 5 to 65 virtual servers, a significant migration and operational task in view of its complexity and the lack of skilled resources available in what is really a farming community.”

After evaluating different options, Meadows Regional Medical Center chose CloudWave—an HPE Preferred Healthcare Network Partner—to host their existing MEDITECH MAGIC platform prior to upgrading to MEDITECH 6.0. CloudWave is a designated MEDITECH Collaborative Solutions Provider, and has a long history of providing on-site private cloud solutions for healthcare organizations. In addition to managing on-premises infrastructure, CloudWave provides OpSus Cloud Services, a healthcare cloud powered by HPE ProLiant servers with Intel® Xeon® processors, designed and delivered by healthcare people, for healthcare people. Focused on meeting the security, reliability, and compliance required by healthcare, the OpSus cloud meets and exceeds the standards for HIPAA and HITECH compliance, achieving SSAE16 SOC1 Type II attestation.

“After looking at the options, we decided to move to an Infrastructure-as-a-Service (IaaS) solution with CloudWave,” says Smesny. “We didn’t have the space in our in-house facilities and lacked the resources we would have needed to run the system at the optimal levels the hospital requires. And once we did the cost justification for on-premises vs. cloud, it became obvious that the right decision was to migrate to MEDITECH 6.0 running in the OpSus Cloud.”
Choosing the right platform

CloudWave’s OpSus Cloud Services are a suite of cloud-based solutions architected specifically for healthcare,” explains Mark Middleton, VP of Cloud Services at CloudWave. “Designed to achieve operational sustainability, OpSus Cloud Services are built on an optimized, hybrid private cloud model that allows healthcare enterprises like Meadows Regional Medical Center to source IT services from us while maintaining full control over their mission-critical applications. It enables them to leverage the scalability and cost-efficiency of cloud while providing secure, sustainable services at a predictable cost—all without surrendering their autonomy.”

To meet the availability, flexibility, performance, and scalability demanded by their customers, CloudWave built their OpSus Cloud Services on HPE BladeSystem 7000 chassis—powered by HPE ProLiant BL460 Gen8 and Gen9 blade servers with Intel® Xeon® processors—and HPE 3PAR StoreServ Storage. CloudWave leverages the financial flexibility offered by HPE Financial Services and the 24x7 support of HPE Foundation Care to meet the demanding SLAs of the healthcare industry. Furthermore, for more than 20 years HPE and MEDITECH have worked closely to test and certify HPE storage solutions—backed by seamless support from HPE Pointnext services—with MEDITECH software. Testing a variety of use cases ensures healthcare providers the level of availability and performance they’re looking for, while optimizing cost and reducing risk.

“OpSus runs on HPE’s MEDITECH certified hardware in our top-tier data centers with advanced management tools to the standards of ITIL management,” notes Middleton. “The result is a suite of sustainable solutions which enable customers to focus on their healthcare and enterprise applications instead of the everyday management of servers, storage, backups, and business continuity.”

Delivering the right capabilities

“Our close partnership with HPE allows us to test and validate end-to-end MEDITECH configurations in our lab,” says Middleton. “This close collaboration results in cloud and infrastructure solutions that deliver the resilience, high availability, security, and compliance that our healthcare customers are looking for.”

“Meadows Regional Medical Center’s MEDITECH 6.0 environment runs out of CloudWave’s data center in Texas, with mirroring across the continent to our second data center in Ohio using HPE 3PAR’s replication technology,” continues Middleton. “This helps ensure the 24x7 availability of Meadows Regional Medical Center’s EHR which helps increase patient safety and raise the level of care that all of us are looking for from our healthcare providers.”

“When CloudWave helped us to move our IT to our new facilities at Vidalia,” adds Smesny, “the execution was flawless. And it wasn’t just the servers and storage that needed to be moved, there was also the 650 virtual desktops—running on VMware—that enables our staff to access the MEDITECH system. In addition, CloudWave also looks after all of our backups and disaster recovery, including biannual testing of the end-to-end business continuity environment. We trust them to keep our business up and running and they haven’t let us down.”
Improving patient safety and enhancing the physician experience

“The move to MEDITECH 6.0 was a real success,” states Smesny. “It offers a much safer environment for our patients with built in checks and balances that minimize the risk of human error. For example, it automatically checks each prescribed medication against the patient’s allergies as well as any other medications they’re taking, raising a flag if there’s a potential problem.”

Moreover, now everyone is using the system, not just the nurses,” continues Smesny. “The doctors have seen the benefits and really bought into it. All individuals involved in a patient’s care has all the information they need at their fingertips. MEDITECH’s Web Ambulatory—a complete web chart that gives physicians and nurses instant access to all patient records and relevant information in one place—has enhanced not just patient care, but also the physician experience.”

Realizing the vision and driving business growth

By utilizing OpSus Cloud Services built on HPE BladeSystem with ProLiant servers including Intel® Xeon® processors and 3PAR storage, Meadows Regional Medical Center’s is now able to deliver an enhanced level of care over and above what their patients had come to expect—and for which they’ve received numerous awards.

“If it wasn’t for our relationship with CloudWave,” adds Smesny enthusiastically, “we probably would never have been able to prove ‘meaningful use’ within the time allowed, and likely would have incurred penalties. As it is, we qualified for over $3 million in Meaningful Use incentives which covered the cost of our migration to MEDITECH 6.0—with over $200,000 to spare. We’re now in the process of preparing to upgrade to 6.15, and over time will convert all of our systems to MEDITECH as modules mature to realize the full benefits of an integrated system.”

Smesny sums up the overall experience: “CloudWave is definitely one of our best partners. They have talented, responsive support staff, and we’ve yet to come across a problem they couldn’t resolve. The core infrastructure—OpSus Cloud Services powered by HPE infrastructure—is extremely stable, and, despite incorporating a complex three-tier delivery model, provides the availability, performance, and security we need. We’ve grown from 5 virtual machines to over 120—including over 650 virtual desktops and 30TB of storage—and the process has been seamless. As an organization who expects the same level of service from our partners as our patients demand from us, we really don’t have any complaints.”

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