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# INNOVATORS



**MEDITECH** | CUSTOMERS IN ACTION



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## TABLE OF CONTENTS

- 4** **Clinical Efficiency**  
*Ease Demands on Physicians, Nurses, and Other Clinicians*
- 26** **Patient Engagement and Experience**  
*Offer the Modern Consumer Experience Your Patients Expect*
- 38** **Population Health**  
*Manage Your Communities' Health Risks and Chronic Conditions*
- 44** **Quality Outcomes**  
*Deliver Higher Quality Care More Consistently*
- 61** **Predictive Analytics With Clinical Surveillance**  
*Use predictive analytics to help clinicians prioritize care*
- 70** **Data-Driven Decision-Making**  
*Visualize Data to Measure and Improve Performance*
- 82** **Interoperability**  
*Bridge the Gaps Between Care Transitions*
- 87** **Fiscal Responsibility**  
*Drive Long-Term Financial Sustainability*

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## INTRODUCTION

In 28 countries and territories, healthcare organizations of all kinds are doing amazing things with our software. “Innovators: MEDITECH Customers In Action” introduces you to several, so you’ll get a glimpse of how they’re using our EHR to improve processes, quality, and most importantly, patient outcomes.

Our customers’ experiences illustrate why we’ve been recognized for the 11th consecutive year as Best in KLAS® by the global healthcare research firm. Expanse ranked first for Acute Care EHR & Patient Accounting: Small (1–150 beds) in the **2025 Best in KLAS Awards: Software & Services report**.



In addition, MEDITECH was recognized in the top two for Overall Software Suite as well as a Top Performer for Acute Care EHR: Midsize (151– 400 beds), Ambulatory EHR (Health System Owned), and Practice Management (Health System Owned).

“Innovators” highlights our customers’ successes in feature-length articles and case study summaries. We hope the summaries inspire you to download the full case studies; just look for the link at the end of each synopsis.





**MEDITECH**  
**Clinical Efficiency**

*Ease Demands on Physicians, Nurses, and Other Clinicians*

## Frees Up Nurses' Charting Time by Almost 1,600 Hours Annually in Expanse

### About

Located in northeastern Ohio, Wooster Community Hospital Health System is the largest nonprofit healthcare system in Wayne County. It comprises a 173-bed acute care hospital and several clinics offering a full range of inpatient and outpatient services. WCH is independent and locally governed.

### Challenge

After implementing MEDITECH's Expanse EHR in 2021, Wooster Community Hospital Health System dedicated time and resources to optimizing its new platform for physicians. Results from a KLAS Arch Collaborative survey given to WCH clinicians in December 2023 indicated that the investment had paid off: Providers gave Expanse high marks. Next, WCH leaders turned their focus to nurses. The leaders inferred from survey results that nursing engagement in software governance initiatives had declined since the pandemic, contributing to documentation challenges.

### Execution

Chief Information Officer Eric Gasser, RN, assembled a multidisciplinary team of clinical analysts, IT staff, and nurse representatives to reengage nurses by soliciting their feedback on nursing workflows. The Free Up Nurses' Time, or FUN Time, initiative enabled nurses to submit

suggestions for nursing workflow improvements, leveraging the Expanse EHR's flexibility to solve documentation and charting challenges. MEDITECH senior analysts collaborated with WCH's IT team and KLAS representatives to review WCH's nursing survey data and provide feedback on documentation burden and user personalization.

### Results

WCH improved satisfaction and met staff needs by personalizing Expanse for its nurses, increasing their Net EHR Experience Score by 20.1%. In addition, the initiative helped nursing governance regain momentum post-pandemic through routine engagement and meetings. Gasser notes that giving nurses a voice has made a significant difference.

#### Total Estimated Nursing Time Saved

- Estimated documentation time saved per year: 1,555.55 hours
- Fields/choices removed or no longer required to be documented: 96
- Estimated clicks reduced per year: 2,759,805

**"As an independent healthcare system, maintaining our autonomy is incredibly important, and having full control over our EHR is a key part of that. The flexibility of MEDITECH Expanse allows us to make meaningful changes that align with our goals, support our clinical teams, and improve overall usability."**

**Eric Gasser, RN**  
Chief Information Officer  
Wooster Community Hospital Health System



## Focuses on Providers Through Effective Initial and Ongoing EHR Education

A KLAS Arch Collaborative case study in partnership with Ozarks Healthcare

### About

Ozarks Healthcare (West Plains, MO) is a rural healthcare system encompassing primary care and specialty clinics, along with complete rehabilitation, behavioral healthcare, and home health services. Every year, the 114-bed acute care hospital receives more than 5,400 admissions, while the health system receives more than 364,000 outpatient visits in South Central Missouri and northern Arkansas.

### Challenge

When Ozarks Healthcare went live with MEDITECH's Expanse EHR in January 2020, its leaders wanted to ensure that physicians used the Expanse EHR to its full potential. The healthcare organization turned to the KLAS Arch Collaborative for guidance in training physicians to optimize usage and improve efficiency.

### Execution

Ozarks Healthcare's approach consists of both onboarding and ongoing EHR education for physicians.

New physicians receive two to four hours of one-on-one training, occasionally provided remotely. Within a week, these physicians undergo follow-up training to identify gaps and opportunities for improvement.

Medical staff must undergo at least three hours of ongoing education every year, including EHR training. Ozarks Healthcare CMIO Priscilla A. Frase, MD, has taken a leadership role in training and education. She reviews reports on off-hours documentation time and chart completion lag time and reaches out to those who need assistance.

### Results

Since its Expanse EHR went live in January 2020, Ozarks Healthcare has measured with the Arch Collaborative three times. The organization's Net EHR Experience Score, or NEES, increased by 25.8 points from 2019 to 2021 when it replaced another vendor's EHR with Expanse, and again by 21.2 points from 2021 to 2024 following further optimization.

The 2024 measurement indicated Ozarks Healthcare providers agree with the following:

- Initial training was sufficient: 99th percentile
- Ongoing training is sufficient: 95th percentile
- Training was workflow specific: 98th percentile

KLAS Arch Collaborative members can [read the full case study here](#).

**"Participating in the Arch Collaborative enabled us to learn what and where we needed to improve and use that information to optimize workflows for all our end users. Other healthcare organizations should be able to achieve the same outcomes by following the Arch Collaborative's evidence-based guidelines."**

Priscilla A. Frase, MD  
Chief Medical Information Officer  
Ozarks Healthcare



## Reduces Provider Burnout Using MEDITECH's AI Solution With Google Cloud

### About

Mile Bluff Medical Center (Mauston, WI) is a 40-bed acute care hospital in rural South Central Wisconsin. It serves a population of more than 55,000 residents in an eight-county region throughout its care network, including two nursing and rehab centers, two dialysis centers, and five outreach medical clinics.

### Challenge

Mile Bluff Medical Center transitioned to MEDITECH's Expanse EHR in 2021, providing staff with one source of truth after clinicians expressed frustration at navigating between two separate EHRs. This change also allowed Mile Bluff to pilot Expanse Navigator, built on Google Cloud, an innovative solution designed to reduce clinician burden and improve patient care by searching multiple sources, from legacy data, faxes, and scanned documents to handwritten notes, shorthand, and acronyms.



### Execution

Mile Bluff became an early adopter of Expanse Navigator in 2022, joining a partnership between MEDITECH and Google. Pilot user groups comprised diverse healthcare professionals, including doctors, physician assistants, registered nurses, and patient care specialists. Additionally, clinical champions throughout the medical center evaluated the solution's adaptability to various workflows. The pilot program garnered interest from beyond the typical testers, such as HIM and revenue cycle staff, demonstrating widespread enthusiasm for the solution.

### Results

Findings from the Expanse Navigator pilot showed significant time savings, increased efficiencies, and a high user satisfaction rate. Mile Bluff clinicians save an average of 7.5 minutes in prep time per patient, and 86% of users reported being somewhat or very satisfied with the solution:

- Sleep medicine providers save 3 – 6.5 hours per week.
- HIM staff save an average of 16.7 hours per week.
- Pediatricians save approximately 5 minutes per patient, or 7 hours per week.
- Acute care department leads use the solution for sepsis review and reporting of quality items. They save 5 – 7 minutes per chart, or 3 hours per quarter.

**"The response [to Expanse Navigator] was overwhelmingly positive. Onboarding went smoothly with the provisioning of users and training. After witnessing [Expanse Navigator's] impact on their colleagues' workflow, we received multiple requests for access, ending up with 176 users and expanding to 23 departments."**

**Randall Brandt, PA-C**  
Physician Assistant and Pilot Lead  
Mile Bluff Medical Center



## Streamlines Genetic Test Ordering and Result Processes by Over 50% Using Expanse Genomics

### About

Frederick Health Hospital (Frederick, MD) is the hub of Frederick Health and the only acute care hospital in the county. Located 50 miles from Baltimore, this nonprofit, 269-bed facility and its outpatient services account for 285,000 visits every year. Frederick Health Hospital was recognized by CHIME as a Digital Health Most Wired Level 8 organization.

### Challenge

Physicians at Frederick Health faced the same challenges that have historically made it difficult for clinicians at other organizations to access and use genetic data in their practice of medicine. Ordering a genetic test required them to leave the EHR and launch a separate application to perform the entire ordering process, including reidentifying the patient, selecting the test, and submitting the order before returning to the EHR to document that the order had been placed. The result process was equally cumbersome. Prior to Expanse Genomics, administrative staff would receive an email letting them know results were available; they would log into the laboratory's portal, download the PDF report, upload it into the patient's chart in the EHR, and notify the provider, who would then launch a separate viewer for reading through lengthy reports to find salient information, with little to no interpretation or guidance.

### Execution

Frederick Health worked with MEDITECH to implement Expanse Genomics, an EHR-based genomics solution that allows genetic test ordering, as well as storage of discrete genetic test results, directly within the Expanse EHR. Today, any physician at the organization can order genetic tests from their preferred reference labs (just like any other test), receive and store genetic results in their patients' charts, display results in meaningful and actionable ways, perform pharmacogenomic drug-gene checking automatically, and even match oncology patients with the best therapy or clinical trial — all without leaving their EHR. In addition, clinicians now have access to embedded interpretation and guidance at the point of care to help them understand and apply the findings.

### Results

Following the implementation of Expanse Genomics, Frederick Health experienced significant time savings and process improvements for both test ordering and results processing workflows:

- 25+ minutes saved during the genetic test ordering process
- 50% reduction in steps for receiving, importing, and displaying genetic test results in the EHR
- Increased patient throughput
- Improved clinician satisfaction

"The integration of genomic data into MEDITECH represents a transformative step in enhancing patient care. Our healthcare providers can now access vital genetic information directly within the patient's record in MEDITECH, enabling precise diagnosis, personalized treatment plans, and proactive disease prevention strategies."

Saro Sarkisian, MD, MHA  
Hematologist and Oncologist  
Frederick Health



## Facilitates Communication Between Acute and Ambulatory Settings With Expanse Oncology

Jill Cole, MD, an oncologist at Major Health Partners, makes a point of meeting with her patients before every single infusion. She believes in maintaining an open dialog with her patients – a testament to the hands-on care she provides. Equally important is keeping patients' care teams aligned.

"Quality cancer care isn't just about patient-provider communication. It's about communication among the entire care team, regardless of whether they're in the acute or ambulatory setting," said Dr. Cole.



To improve information sharing across care settings, MHP's leadership team took advantage of the opportunity to implement MEDITECH's Expanse Oncology as an early adopter. Live since April 2021, MHP is realizing considerable benefits from the solution.

**"Communication between our acute and ambulatory settings has created a sense of inclusiveness," said Director of Oncology Travis Reeves. "It has been one of the biggest improvements MHP has seen since going live with Expanse Oncology."**

### Keeping care teams connected

MEDITECH's inherent integration has helped to make these improvements a reality. Because Expanse Oncology is an integrated solution within MHP's Expanse EHR, care teams in the oncology clinic and the hospital are always on the same page. Information is shared in near-real time; the entire organization can see documentation, messages, and tasks instantaneously, improving the quality of care.

## AT A GLANCE

Located in Shelbyville, IN, Major Health Partners is a leading healthcare provider serving communities across central and southeastern Indiana. It consists of an 89-bed medical center and a full range of specialty services and clinics.



"Expanse Oncology provides a modern 'click and go' experience that we have become accustomed to in today's world. Securely accessing patient charts via the web allows me to prepare my session on my computer in advance, and then I can access it with one click while I'm in the room with my patient."

**Jill Cole, MD**  
Oncologist  
Major Health Partners

**“Nurses no longer need to serve as go-betweens,” said Medical Oncology Manager Jill Blankinship, RN. “Oncologists and other providers are aware of any other care their patients may receive.”**

As a complete outpatient solution, Expanse Oncology brings oncologists into the ambulatory setting, while providing full ambulatory functionality to support front-end staff. In addition, nurses are able to leverage status boards, nursing assessments, and other features available in Expanse Patient Care.

### **Enhancing efficiency through communication**

Keeping everyone on the same page can be challenging, especially when the number of patients has soared and staffing remains consistent.

**“We used to have 30 patients on oral chemotherapy, but that number has grown to almost 50 patients,” said Blankinship. “We’re also maxing out on consults, but improved communication has had a positive impact on efficiency.”**

One feature that has proved invaluable to Dr. Cole is Workload Tasking and Messaging. Through this centralized workload area, Dr. Cole is able to communicate across the entire MHP organization.

“Workload Tasking and Messaging has been really helpful,” she said. “It reduced my sticky notes dramatically. Plus, it’s more efficient and trackable.”

Acting as a physician inbox, Workload centralizes oncologists’ messages, tasks, addendums, cosigns, lab results, and patient portal messages. Time parameters can be assigned to communications, so all parties know when items are overdue or must be reviewed. As a result, dictations are completed and approved almost immediately.

“The clinic’s volumes have skyrocketed in recent years,” said Director of Clinical Informatics/Technology David Augsburger. “But they’ve been able to handle the growth with support from Expanse Oncology.”



## SOUTH OKANAGAN GENERAL HOSPITAL

### Enhances Nurses' and Patients' Experience With MEDITECH Expanse Point of Care

WOWs, or workstations on wheels, are often bulky, hard to maneuver, and disruptive to sleeping patients. What's more, patients may not feel "seen" when their clinicians are facing a computer screen.

To overcome these challenges, South Okanagan General Hospital embraced the opportunity to implement Expanse Point of Care. Bringing a mobile, modern experience to both nurses and patients was the driving force behind this longtime MEDITECH customer's decision.

**"We could see POC's potential and the benefits of having a pocket-sized device staff can easily take into a patient's room without disruption," said Teresa Fortune, the clinical operations manager at SOGH. "It would also untether our clinicians from their WOWs and enable them to spend more time engaging with patients at the bedside."**

#### Putting devices to the test

Nurses who were selected to participate in the POC pilot at SOGH were eager to try handheld devices that promised to help them spend less time on WOWs, while giving them convenient, bedside access to MEDITECH's EHR.

SOGH's digital health team, which included a clinical practice educator, quickly implemented the POC solution and trained staff on the handheld devices. Since the new hardware is similar to a smartphone, it didn't take long for the nurses to orient themselves.



Photo credit: © South Okanagan General Hospital

## AT A GLANCE

South Okanagan General Hospital (Oliver, BC), part of Interior Health Authority, is a Level 1 Community Hospital in the Okanagan health service area. It was the first Canadian site to achieve Stage 6 EMR adoption recognition from HIMSS Analytics.



#### Keep moving forward

Increase mobility, decrease cognitive burden, and save money with MEDITECH Nursing solutions.

[Read more.](#)

Using POC handheld devices at the bedside, nurses on the inpatient unit:

- Stay organized with up-to-date worklists.
- Record vital signs and document other critical information at the bedside, in real time.
- Administer medications to resting patients with minimal disruption.
- Access lab results for informed decision-making.

The digital health team expected the POC solution to lead to time savings because nurses perform these activities multiple times during a shift.

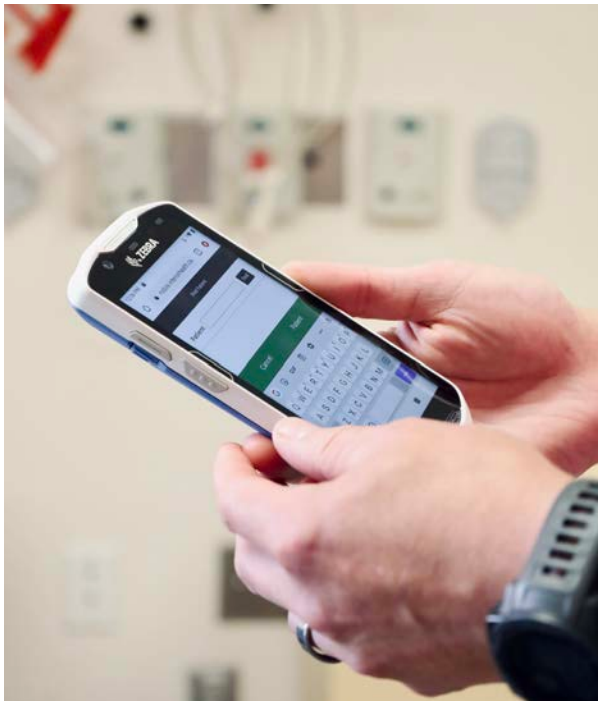


Photo credit: © South Okanagan General Hospital

## Qualifying the results

Feedback from the pilot survey focused on how the POC solution impacted nurses and their workflow. Participants said the efficiencies gained from using the smaller device enabled them to have more quality time with patients. They felt the solution helped them to administer safer, more efficient care at the bedside because everything they needed was at their fingertips. Night shift nurses stated they were able to deliver quicker, less disruptive care with a handheld device than a cumbersome WOW.

Since testing new technology also affects patients, SOGH prioritizes patients' feedback in its pilot evaluations. POC devices were far less intrusive, patients said; they appreciated that staff could walk in the room without a bulky WOW, and felt nurses were more engaged because they didn't have a big computer in front of them.

"The advantages of time savings and user satisfaction are soft metrics that are hard to quantify but really matter because healthcare is about people," said Fortune.

## Optimizing digital technology

Since the pilot, SOGH has also been using the POC solution in its small but busy emergency department. Adding handheld devices as an option enables nurses to maneuver through tight spaces as they care for their patients.

**"I'm glad the POC devices enhance the nurses' workflow and improve patient care and satisfaction," said Fortune. "It's difficult to find WOWs that are truly user friendly and offer a smaller footprint. Even the new ones didn't fit through some of our doorways."**

The positive reaction from staff and patients has allowed SOGH to set the standard for other Interior Health Authority hospitals. According to IHA Executive Director of Clinical Informatics Grace Bole-Campbell, POC aligns with the organization's strategy to optimize digital technology.

**"We're always looking to get the most up-to-date technology and devices, and POC is a great example of this," she said. "It enhances the patient experience and provides nurses with modern technology that amplifies their practice."**

## Automates Collection Processes With MEDITECH's Mobile Phlebotomy

Manual collection processes at DCH Regional Medical Center hampered its phlebotomists' workflow, adding steps as well as extra blood draws for patients. In addition, DCH was challenged by workflow disruptions and care delays caused when patients who were transferred from other facilities continued to wear the older wristbands.

What's more, manual processes resulted in occasional mislabeling of specimens, which wasted supplies and necessitated resticking patients for new draws.

### Getting the right tools in place

As part of the medical center's move to MEDITECH Expanse in 2021, laboratory leadership set out to overcome the challenges associated with manual blood collection processes. They implemented MEDITECH's Mobile Phlebotomy solution, part of the Expanse Laboratory Information System, to provide staff with technology that would enable them to work more efficiently while improving the patient experience.

Approximately 26 phlebotomists at the medical center are responsible for all blood draws on the floors to which they are assigned. With the mobile solution, they're able to review and prioritize the patients on their individual lists, and view stat orders, new orders, and overdue specimens.

Since all pertinent information is found in one tool, staff can prepare the right equipment and collection tubes, saving both footsteps and workflow steps. They can also help other staff with their patient lists, if needed, because everyone is looking at the latest information.

**"Expanse Mobile Phlebotomy provides staff the ability to document right at the bedside and view when new items are added for collection because it's all documented in the handheld," said DCH Laboratory Supervisor Kathryn Smith. "With information at their fingertips, staff can focus on where they need to be and on each individual patient."**

## AT A GLANCE

Central to DCH Health System (Tuscaloosa, AL), DCH Regional Medical Center is a 583-bed hospital with an advanced trauma center. Located in West Alabama, DCH is one of only two hospitals in Alabama to achieve CHIME Digital Health Most Wired Level 8 or higher in both the acute and ambulatory settings.



### With Expanse Mobile Phlebotomy, DCH has experienced:

- A 92% to 93% wristband scanning rate, closing in on its goal of maintaining a 95% scanning rate.
- Substantially fewer mislabeled specimens, as labels are created based on patients' wristbands.

## Creating better processes for staff and patients

Wristband scanning has led to safer, more effective processes at DCH: Upon identifying patients via their wristbands, phlebotomists are presented with collection instructions, specimen amounts, and tube types.

Technology that supports specimen collection at the point of care helps staff make the right collections the first time around. Moreover, patients like how the phlebotomy solution contributes to more coordinated care by eliminating redundancies that lead to additional blood draws.

**“Staff value the efficiencies the Mobile Phlebotomy solution brings to their workflow,” said DCH Health System Laboratory Manager Pamela Mayton. “Everything they need is found in one tool, including the most up-to-date information for all the appropriate blood draws. This helps to eliminate things like extra needle sticks for patients, which they greatly appreciate.”**

Because labels are based on the patient's wristband and can be printed at the bedside, the medical center has witnessed a substantial decrease in mislabeled specimens. Wristband scanning also helps to eliminate care disruptions when patients are still wearing wristbands from other facilities.

## Transforming specimen collection

MEDITECH's Mobile Phlebotomy solution has transformed specimen collection processes and increased patient satisfaction at DCH Regional Medical Center.

**“The web solution has streamlined our phlebotomists' workflow, enabling us to create greater efficiencies that have also proven to be a patient satisfier,” said Mayton. “We can't imagine turning back to manual processes.”**



## Expands Behavioral Health Services With MEDITECH Expanse

Amid a statewide loss of behavioral health practitioners, Ozarks Healthcare was able to accomplish something extraordinary: Its Behavioral Health Center opened a new Crisis Stabilization Center in February 2023. Funded by the Missouri Department of Mental Health, the center offers no-fee services to anyone who walks in, helping to keep them out of the emergency department.

According to the Rural Health Information Hub, the prevalence of mental illness is comparable in rural and urban residents, but rural communities often lack adequate services to support the needs of mental health patients.

“Everyone on the leadership team recognized that mental healthcare must be included in our single EHR strategy to provide clinicians with a more holistic view of their patients’ health,” said Priscilla Frase, MD, the CMIO at Ozarks Healthcare. “Thanks to the integration and efficiencies we achieved with MEDITECH’s Expanse EHR, we were able to unite the Crisis Stabilization Center with the rest of the organization.”

### One patient record

Before implementing Expanse, Ozarks Healthcare’s Behavioral Health Center lacked a uniform medical record across care settings.

Inpatient services used a legacy system and the outpatient unit used paper processes, resulting in costly and inefficient redundancies.

**“Neither system was connected to the hospital or practice, and clinicians had no efficient way to share patient information,” said Dr. Frase.**

Ozarks Healthcare selected MEDITECH’s Expanse EHR for its integration and flexibility. Clinicians would benefit from a single EHR across all facilities, including the Behavioral Health Center, as well as the ability to personalize workflows around behavioral health needs.

### Personalized user experience

Ozarks Healthcare’s behavioral health team and IT specialists worked with MEDITECH to personalize documentation templates to support both provider preferences and patient confidentiality. They also verified the system captured all state-required information.

Integrating patients’ behavioral health data with data from other departments, while protecting sensitive mental health information, was crucial to the team’s strategy. Medications, allergies, and other patient information is shared across

## AT A GLANCE

Ozarks Healthcare (West Plains, MO) is a rural healthcare system encompassing primary care and specialty clinics, along with complete rehabilitation, behavioral healthcare, and home health services. Every year, the 114-bed acute care hospital receives more than 5,400 admissions, while the health system receives more than 364,000 outpatient visits in South Central Missouri and northern Arkansas.



“With Expanse we have exceeded our goals. The efficiency and quality of care that we provide continues to improve, and we are always looking for other specialty care areas we can personalize using the flexibility of the platform.”

**Priscilla Frase, MD**  
CMIO  
Ozarks Healthcare

settings, helping to avoid duplicate testing and adverse events. Behavioral health providers can also view pertinent details that may be contributing to a patient's mental state, such as lipid panels or weight fluctuations.

Providers in the Behavioral Health Center can shield confidential visit information so clinicians outside the clinic see only that a patient is receiving psychiatric care – not the details. By identifying those queries they choose to share across settings and those restricted to mental health clinicians, the organization addresses the need for preventive care and avoids the stigma often associated with mental health issues.

### Benefits of integration

Dr. Frase witnessed the impact of behavioral health integration immediately. She recalled how one patient presented in the ED with a rare side effect of a psychiatric medication that required an inpatient stay.

“The patient's record indicated they were undergoing psychiatric care, which I suspected might be contributing to their condition,” she said. “By coordinating with the patient's mental health provider, I was able to determine the root cause and we discontinued the medication. It was an eye-opening experience. Without the integration provided through Expanse, this crucial detail would be far more difficult to track.”

MEDITECH's integration has facilitated Ozarks Healthcare becoming a Certified Community Behavioral Health Clinic, a federal designation emphasizing comprehensive mental healthcare.

**“One of the biggest challenges for us has been the complicated CCBHC billing process due to its fixed rates and multiple payers,” said Dr. Frase. “But MEDITECH has been very helpful getting the billing to work for our organization.”**

Ozarks Healthcare plans to hire 20 therapists to support its expanding mental health services. It's also looking to bridge the information gap from patients seeking mental health services from communities outside the network by connecting with CommonWell Health Alliance®.



## Sees 30% Time Savings on Home Medication Verification in the ED With Expanse Patient Care

### About

Major Health Partners (Shelbyville, IN) is a leading healthcare provider serving communities across southeastern Indiana. It consists of an 89-bed medical center and a full range of specialty services and clinics.

### Challenge

After bringing MEDITECH's Expanse EHR LIVE in 2019, MHP leaders seized the opportunity to become an early adopter of Expanse Patient Care. As a longtime collaborative partner with MEDITECH, MHP was eager to improve its clinicians' workflow efficiencies while helping to shape the new web-based nursing and therapy solution.



### Execution

MHP's emergency department uses medication reconciliation technicians to collect patients' home medication lists. These clinicians were among the first staff to use Expanse Patient Care. Anecdotal evidence supported time savings and high user satisfaction, but MHP and MEDITECH wanted to measure the workflow's effectiveness in a System Usability Study.

### Results

Findings from the Expanse Patient Care usability study showed significant time savings and overall process improvements as well as a high rate of user satisfaction. Expanse Patient Care helped MHP's medication reconciliation technicians to:

- Save more than three minutes on home medication list verification per ED patient.
- Improve the average time to verify home medications by 29.4%.
- Gain efficiencies and time savings that move the healthcare organization closer to its goal of reconciling home medications on every ED patient.

Expanse Patient Care achieved a System Usability Score of 89 (well above the 68-point industry threshold), indicating a strong degree of user satisfaction.



**"Now we're all using the same patient chart, locating information from the same source, and directing that patient's care more effectively across the continuum. But we won't stop here. We're always looking at ways to improve, and plan to build on Expanse's capabilities throughout MHP"**

Sara Lewis, RN  
Clinical Informatics Specialist  
Major Health Partners

## Implements MEDITECH Expanse Surgical Services in Three Critical Access Hospitals

### About

Nestled in the northernmost region of New Hampshire, North Country Healthcare is an alliance of three Critical Access Hospitals and a home health and hospice agency. Formed in 2015, the alliance serves a population of 30,000, ensuring these communities have access to surgical care and medical services.

### Challenge

In 2018, as part of its mission to transform healthcare delivery to the region, NCH moved its three partnering hospitals to one shared MEDITECH Expanse EHR, including the Surgical Services solution. NCH's Governance Committee knew that standardizing processes for three hospitals of different sizes, with their own specialties and unique cultures, would involve give-and-take.

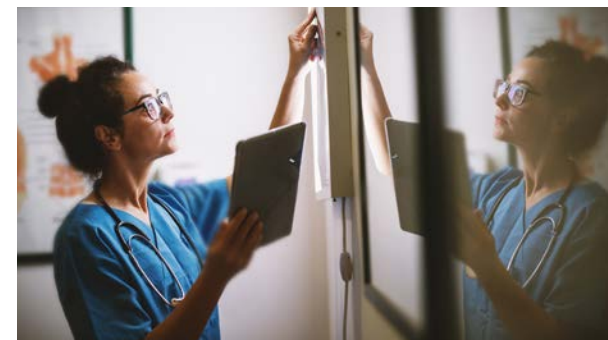


### Execution

Conforming to one standard often required compromise, but the committee agreed early on that streamlining the documentation process was a primary goal. Standardized processes streamlined the workflow for surgical staff and ensured consistency – in both processes and patient information – among the three hospitals.

### Results

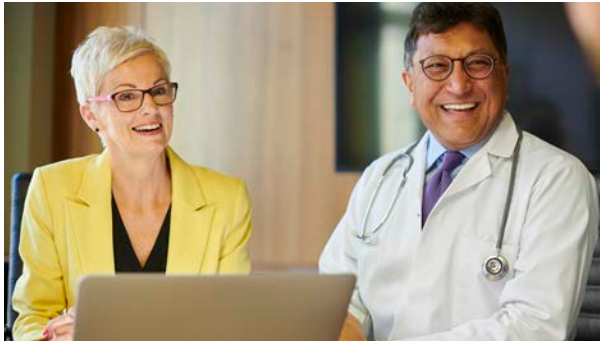
Streamlined workflow gives surgical staff more time to focus on other responsibilities. Physicians and nurses feel they can travel to any of the three hospitals and know exactly what to expect. By sharing records across the organization, information is consistent – a factor that not only saves providers and patients time but improves patient safety. Transitioning to virtual preadmission testing calls has also reduced the burden on patients, who no longer need to travel for preoperative visits.



**"The MEDITECH Expanse EHR is truly interactive and connects all North Country Healthcare facilities. Providers have a much better understanding of their patients' overall health, while all patients can view their records, manage their care, and interact with their clinicians regularly through just one secure patient portal — with no need to juggle multiple usernames and passwords."**

Darrell Bodnar  
Chief Information Officer  
North Country Healthcare

## Aligns Workflows Across Care Settings With MEDITECH



### About

Frederick Health Hospital (Frederick, MD) is the hub of Frederick Health and the only acute care hospital in the county. Located 50 miles from Baltimore, this nonprofit 269-bed facility and its outpatient services account for 285,000 visits every year. Frederick Health Hospital was recognized by CHIME as a Digital Health Most Wired Level 8 organization.

### Challenge

Frederick Health implemented MEDITECH Expanse to create one centralized patient record across its acute care and ambulatory settings. Bringing all the care areas together meant it would be necessary to standardize and optimize care across the organization, especially among providers.

### Execution

After implementing Expanse to replace disparate EHRs within its ambulatory practices, Frederick Health executive leadership appointed their first chief medical information officer to help establish standards and align workflows across care settings.

To help set the new CMIO up for success, Frederick Health expanded its partnership with MEDITECH to include Physician Peak Performance Program CMIO Advisory Services for onboarding, mentoring, and physician-related support services.

### Results

MEDITECH supported Frederick Health's CMIO in establishing standardization and aligning tailored workflows across care settings. Together, they:

- Eliminated silos by implementing a single, integrated record.
- Increased provider efficiency and satisfaction.
- Personalized provider workflow through specialty-driven widgets.



**"MEDITECH Professional Services working with our IT team has provided a platform for great project communication for quick issue escalation and problem resolution."**

**Jackie Rice**  
Vice President and Chief Information Officer  
Frederick Health

## Gives Back 100+ Hours to Nurses With MEDITECH Expanse Patient Care

### About

King's Daughters Medical Center (Brookhaven, MS) is a nonprofit, acute care hospital with 99 beds. Located 60 miles from Jackson, it offers primary and specialty care across five clinics. KDMC serves a five-county region with a population of 100,000.

### Challenge

Giving nurses time back in their day has never been more important as it has in recent years, as these clinicians continue to cope with staff shortages, burnout, and the COVID-19 pandemic. Like many healthcare organizations in early 2020, KDMC was dealing with the complications and heavy workloads that come with rising volumes of higher acuity patients. Facing overwhelm, KDMC nurses needed immediate relief.



### Execution

As part of its digital transformation strategy, KDMC wanted nurses to have an EHR experience consistent with their physician colleagues, who were already using MEDITECH Expanse. As an early adopter of MEDITECH's Expanse Patient Care solution, KDMC nurses and leaders had the opportunity to contribute clinical input to the development of the solution and ensure nurses' needs were incorporated. MEDITECH also assisted KDMC with a usability study to confirm both short- and long-term efficiency improvements.

**"The thing I love the most about Expanse Patient Care is that when you open the patient's chart, there is so much information right in front of you and if you need more, you can click on it from the first page and it will take you directly to what you need."**

**Brianna Errington, RN**  
King's Daughters Medical Center

### Results

Upon go-LIVE, Expanse Patient Care provided immediate results for nurses, improving workflows and giving them easy access to important information. While KDMC staff and leaders could see the benefits of Expanse Patient Care firsthand, the usability study collected quantitative data proving the solution's effectiveness, such as:

- More than 100 hours of saved time (over the course of six months) for nurses, allowing them to focus on direct patient care instead of spending time on their EHR.
- A 60,000-pixel reduction in mouse movement and a 33% decrease in clicks, indicating upward trends in nurse efficiency.
- A System Usability Score of 88.13, well above the 68-point industry threshold for acceptable usability, which indicates a strong degree of user satisfaction with the EHR workflows.
- Closer collaboration between nurses and physicians. Workflows have become more cohesive and consistent due to the use of similar tools.

## Captures the Continuum of Care With Expanse Labor and Delivery



Northeastern Vermont Regional Hospital (St. Johnsbury, VT) is one of only two Vermont hospitals certified Baby-Friendly by the World Health Organization. This designation illustrates NVRH's commitment to providing compassionate care in its labor and delivery unit. To maintain these high standards, the health system realized that ensuring continuity between pre- and postpartum care would be a necessity for its MEDITECH EHR.

That's why NVRH chose to expand its EHR with MEDITECH's then newly developed Expanse Labor and Delivery solution; the high level of system integration would enable clinicians to provide care more efficiently throughout the entire continuum.

### Improving continuity of care

Previously, NVRH had different systems in the labor and delivery unit and the hospital, which posed some challenges with continuity of care as patients transitioned from labor to postpartum.

When MEDITECH announced the development of the Labor and Delivery solution, NVRH jumped at the opportunity to be an early adopter and provide better connected care. The organization wanted a solution that would easily share a mother's record from labor to postpartum, keeping the transition safe and seamless.

Now, a mother's documentation flows discretely to newborn charts, allowing previously siloed data to be recalled in a clinically meaningful way.

### Implementation process and insights

As an early adopter of Labor and Delivery, NVRH worked with MEDITECH to identify helpful points of integration. For example, during the implementation process, NVRH discovered the advantage of connecting prenatal records with MEDITECH Expanse Ambulatory.

Hospital staff and MEDITECH's Development team collaborated on data capture changes to enhance the flow of information between Ambulatory and Labor and Delivery. With a successful

## AT A GLANCE

Located in St. Johnsbury, VT, Northeastern Vermont Regional Hospital is a not-for-profit, rural health system that consists of a Critical Access Hospital, a birth center with LDRP rooms, and several primary care clinics. NVRH is certified as Baby-Friendly by the WHO.



### MEDITECH's Labor and Delivery helps nurses welcome their newest patients

- Provides continuity of care for mothers and babies, from prenatal to postpartum and the newborn's transition to pediatric care
- Links mothers and babies to recall critical data for newborn care
- Collects data for reports and clinical decision-making
- Allows for customizing documentation to reflect policies and workflows
- Interfaces with fetal monitors and other systems

[Read more.](#)

Expanse implementation under her belt, Clinical Informaticist Donna Laferriere, RN, brought her MEDITECH product knowledge to the project.

“As I was building the L&D templates, it just made sense to bring in the prenatal information,” said Laferriere.

Laferriere knew that these templates needed to pull in critical Ambulatory information from previous months’ visits to provide a clear story for future care interactions.

**“I saw it all as a big jigsaw puzzle covering multiple care spaces. But by following that data, where it comes from and where it’s headed, we can cater the information to our caregivers, showing only what they need to see. This was crucial for us.”**

NVRH targeted two other important areas of connectivity:

- MEDITECH’s fetal monitor interface pulls fetal monitoring data into the EHR.
- Bidirectional integration feeds the mother’s record into the newborn’s chart prior to the first pediatric visit.

### Streamlined workflows

During the COVID-19 pandemic, NVRH underwent a virtual LIVE to ensure they could optimize usage within weeks.

“Usually when you implement something, you have weeks of putting out fires. But after just two weeks post go-LIVE, we had already started optimizing,” said Laferriere. “I honestly haven’t heard any negative feedback. It’s rewarding to see people finding value in what we’ve done.”

The streamlined workflows enabled by the new Labor and Delivery solution have been well received by staff. Working in one system makes information easier to find and customize. Plus, staff can pull information from across the EHR and analyze it using centralized dashboards, rather than searching for data in individual patient charts. The bidirectional interface between MEDITECH and PeriWatch®, the hospital’s fetal monitoring software, is also helping data to flow more seamlessly.

### Integration benefits

Expanse Labor and Delivery enables nurses to easily view and trend data to prioritize their workloads and determine where they are most needed at any given time. A status board empowers nurses to manage their workflows, receive alerts, and efficiently hand off patients when a labor extends beyond their shift. Nurses at NVRH have customized the status board to pull data from the ambulatory prenatal clinic into a detailed section that clearly links information from mother and baby. Other benefits include being able to customize MEDITECH Standard Content as needed and recalling delivery information into babies’ charts to help increase nurse efficiency.

The value of Labor and Delivery is also being felt beyond the floor, now that improved data pathways are facilitating collaboration and communication. Providers have quick access to documentation from the delivery unit — an important benefit. Workload messages with canned text notify them when nursing completes their documentation, indicating it’s ready to review and sign. NVRH previously experienced a lot of signature deficiencies, but that’s no longer the case.

“Our ED providers are benefiting because they can more easily find the information that was documented in Labor and Delivery,” said Laferriere. “By honing information to what’s necessary for the provider to make a clinical decision, we’re already experiencing efficiency improvements.”

### Looking ahead

Presently, NVRH is in the process of editing documentation to align with state designations. The hospital is also rolling out Expanse Point of Care on smartphone-like devices.

**“The OB department is using a laptop on wheels right now, so I know Point of Care’s mobility is going to free them up,” said Laferriere. “The continuity of care is great. From mom’s prenatal visits, all the way to the pediatrician, this whole multi-day care experience is seeing benefits.”**

## Mobilizes Nurses and Therapists With MEDITECH's Expanse Point of Care



### About

King's Daughters Medical Center (Brookhaven, MS) is a nonprofit, acute care hospital with 99 beds. Located 60 miles from Jackson, it offers primary and specialty care across five clinics. KDMC serves a five-county region with a population of 100,000.

**"With Expanse POC, we no longer need to choose between effectiveness and efficiency... the hospital can live at an intersection of the two."**

**Joe Farr, RN**  
Clinical Applications Coordinator  
King's Daughters Medical Center



### Challenge

Government mandates such as Meaningful Use required KDMC to ask for more from its nurses and therapists, as regulatory requirements increased their workloads. KDMC's traditional methods of documentation and medication administration were safe but time-consuming, and limited the time nurses could spend facing their patients.



### Execution

KDMC chose to become an early adopter of MEDITECH's Expanse Point of Care software. Nurses and therapists were able to quickly conduct lab review, order review, nurse/therapist documentation, and medication administration using handheld mobile devices. This technology helped to make patient interactions more meaningful, as clinicians no longer needed to turn away from patients to use desktops or WOWs. Although the software was introduced on an opt-in basis, KDMC leadership saw impressive rates of adoption throughout the hospital.

### Results

After implementing Expanse Point of Care, nurses at KDMC realized the following benefits:

- The software decreased clicks and motion counts, and provided nurses the opportunity to be more engaged with patients.
- The streamlined single sign-on process saved nurses time.
- In one test, the software reduced single medication administration steps from eight down to four.

## Improves Transitions With SBAR Tool

**“Clinicians, clinical information and IT managers, and other staff agreed MEDITECH had the mental health functional tools, support, and experience required to meet our unique needs. The ability to integrate and support various ministry and healthcare reporting requirements were also factors in the final decision.”**

**Lorraine Smith**  
Vice President of Corporate Services  
Waypoint Centre for Mental Health Care



### About

Waypoint Centre for Mental Health Care (Penetanguishene, ON, Canada) is a specialized mental healthcare research and academic hospital with 301 beds. Located almost 95 miles from Toronto, it provides an extensive range of inpatient and outpatient mental health services, including Ontario's only high secure forensic mental health program.

### Challenge

In previous years, the Waypoint Centre for Mental Health Care struggled with care transitions. They relied on paper Kardex at shift changes — a slow process that could take up to 40+ minutes for each hand-off. This was extremely frustrating for staff and patients alike. Waypoint also experienced several incidents indicating a need for a more efficient transfer of care process and better staff education on risk factors.



### Execution

Waypoint determined that an SBAR format would be the most effective workflow for overcoming its care transition challenges. Waypoint combined the information transfer at care transitions, the Kardex, and chit sheet into an electronic SBAR intervention. By collaborating with partners who had already experienced success with MEDITECH, its clinicians could close gaps related to patient transitions.

### Results

Waypoint went LIVE with MEDITECH and SBAR using no paper during shift changes across 14 inpatient units, from day one. Staff was initially concerned about how long it would take to document online, but soon found the new electronic process took between 10-15 minutes, compared to the 40+ minutes for paper documentation. Other positive results from Waypoint's successful implementation include:

- Significant reduction in the length of shift reports.
- Improved patient satisfaction, since patients no longer have to wait for reports to be completed.
- Improved clinician satisfaction.

## Transforms Cancer Care

### About

Located in northwestern England, The Clatterbridge Cancer Centre is a leading cancer center in the UK, providing nonsurgical oncology services to 2.4 million people in Cheshire, Merseyside, and neighboring areas. The CCC consists of three specialist cancer centers, including a 110-bed inpatient ward, specialist chemotherapy clinics, and home care services.

**“Prescribing is much quicker, having access to one source for information is good, and being able to see nursing documentation is a positive. Also, we appreciate that referral documents are scanned in quite quickly now. We have confirmation of diagnosis before the letters are typed for a high proportion of patients, which, given the complexity of inclusion criteria for meds, helps us to ensure we’re complying.”**

Helen Flint  
Senior Pharmacist  
Clatterbridge Cancer Centre

### Challenge

The facility previously used a hybrid system of paper medical records and limited electronic capabilities for notes and prescribing. Staff faced six main issues related to the hybrid approach: cumbersome e-Prescribing, lack of clinical decision support, limited access to patient information, inconsistent documentation, prescription authorization delays, and regulatory compliance issues.

### Execution

Leadership realized that CCC required a digital infrastructure and clinical decision support to meet the demands of delivering complex anti-cancer treatments. Once LIVE on a fully electronic system, oncology staff across 11 sites could access clinical information, place orders, and administer treatments more effectively. CCC followed MEDITECH's implementation guidelines by creating a comprehensive program of staff engagement, education, and training, outlined in prototyped clinical stages — each of which required clinical sign-off. By enabling the medical staff to experience the LIVE system in advance, outside of the pressure of their busy clinics, CCC migrated from its legacy systems to MEDITECH's EPR over a single weekend.

### Results

Transitioning from paper-based medical records and limited e-Prescribing capabilities to MEDITECH's fully integrated electronic system has benefited CCC by:

- Providing oncologists with immediate access to patients' medical records and stronger clinical decision support for cancer therapies.
- Enabling staff to achieve a 20% higher influx of immunotherapy volume.
- Eliminating system response time issues.
- Reducing the ordering process for those chemotherapy orders requiring multiple cycles from between 15 to 90 steps, down to just 8.

CCC's experience demonstrates that integrating Oncology into your EPR improves care team collaboration, leading to more efficient cancer care delivery. CCC continues to extract MEDITECH's rich functionality to help clinicians make better and more timely decisions. Ongoing technology projects will further streamline workflows and reduce clinical administrative time.



**MEDITECH**  
**Patient Engagement and Experience**  
*Offer the Modern Consumer Experience Your Patients Expect*

## Reduces Infusion Times by 37% in Pediatric Gastroenterology With Scheduling and Managing Infusions in Expanse



Recognizing their position as one of the only providers of pediatric infusions in northern New Jersey, Valley Health System's process improvement team understands the importance of comprehensive and streamlined care for pediatric patients and their families.

In 2022, the team discovered that their pediatric gastroenterology clinic's baseline chair time for regular infusion treatments had risen to four hours. As a result, their patients — typically

9-year-olds to 15-year-olds with conditions like ulcerative colitis and Crohn's disease — often missed school or extracurricular activities. This was frustrating for patients, families, and care teams.

Targeting baseline chair time as an area to improve, the team identified functionality in Expanse Oncology that could help and engaged stakeholders to make workflow improvements.

**"We saw it as a quality improvement project and MEDITECH was an important part of the solution to the problem," said Pediatric Gastroenterologist Antonio Quiros, MD, the chair of Children's Services at Valley Health System. "Overall, Expanse has performed incredibly well and our patients have benefited greatly from this process change."**

Working closely with their physicians and nurses, the team reduced the total time of pediatric GI infusions from four hours in August 2022 to two and a half hours by July 2023.

## AT A GLANCE

Valley Health System is a regional healthcare system that comprises Valley Medical Group, Valley Home Care, and The Valley Hospital, and serves residents in northern New Jersey and southern New York.



### Keep moving forward

- Recognized by CHIME for the 23rd consecutive year as a Digital Health Most Wired healthcare organization
- Developing a new **patient-centered smart hospital** set to open in early 2024

## Taking a new approach to pain points

Prior to Expanse, providers couldn't enter infusion orders, premedications, dose rounding, and rate adjustments until the patient arrived at the clinic. Consequently, they were often interrupted at inopportune times to review patient information prior to signing orders. Since pharmacists could not begin verifying and compounding infusions until orders were signed, patients were required to wait for orders to be entered, received, reviewed, signed, and filled before their infusion even began.

Following its success using Expanse Oncology in other areas, Valley Health System implemented the same infusions infrastructure in its Pediatric Gastroenterology clinic, with the following objectives in mind:

- Decrease patient chair time
- Ensure minimal disruption of patient and caregiver schedules
- Prioritize patient experience
- Increase staff efficiency

## Maximizing time savings

Since adopting Expanse Oncology's infusion and scheduling functionality and making additional workflow improvements, the clinic has streamlined the ordering process for both providers and pharmacists. Providers are able to place orders in advance, at their convenience, allowing pharmacists to begin preparing the orders the moment a patient checks in.

**“The time saver is that they know that those orders are waiting for the patient to arrive,” said Pharmacy Application Analyst John Heeren, RPh, MS. “They know this patient is scheduled and is coming in, so they make sure they have all the supplies ready to go.”**

Providers can also place orders once and repeat them as needed, enabling more flexibility to adjust treatment days to patient needs. Additionally, the rounding process on dosing preparations has been improved. Gastroenterologists and pharmacists can round off dosing based on built-in protocols when placing orders, reducing rework for their pharmacists.

With infusion orders placed and released in advance, the clinic staff and pharmacy team are better prepared for evening clinics, taking preventive measures to minimize delays and ensure staff and resources are available to accommodate increases in patient volume.

Expanse has helped the clinic's previously reactive workflow become more proactive. During the day, pharmacists can procure enough anticipated product for the evening, and use dose rounding to minimize drug waste.

These improvements have been particularly helpful for moving patients to accelerated infusion protocols. Providers and staff can now monitor, document, and track in Expanse which patients tolerate infusions at a standard rate. Once all criteria have been met, clinicians can easily increase the rate for future infusions, further reducing appointment chair time.

## Surpassing their goals

In less than a year, the process improvement team at Valley Health System was able to achieve its objectives of reducing chair time, improving the patient experience, and increasing staff efficiency. Chair time has been reduced nearly 40%, feedback from patients and families has been positive, and clinicians report lower levels of stress.

**“My patients are thrilled with it,” observed Pediatric Gastroenterologist Lauren Jarchin-Dankner, MD. “We've improved the patient experience without compromising safety. Everyone's happy with the streamlined process.”**

Dr. Quiros agreed. “We have patient satisfaction, nurse satisfaction, and physician satisfaction. The level of stress has gone down dramatically.”

## Increases Patient Engagement With Expanse Patient Connect

Phoning patients with appointment reminders can be time consuming for everyone involved, and often results in a frustrating game of phone tag. However, Hancock Health has been able to improve patient outreach and engagement through Expanse Patient Connect, MEDITECH's automated communication solution.

In a few short months, Hancock Health is already seeing noticeable benefits, including increased patient satisfaction, reduced no-show rates, and improved staff efficiency.

### Recognizing the need for a robust solution

Communicating with patients through another vendor's bidirectional texting tool was creating issues for Hancock Health.

**"We had issues with it integrating into the EHR," said Director of Information Services Angela Soliday. "We also couldn't control the frequency of texts or customize the content. We needed more flexibility to increase the usefulness for staff and patients."**

Soliday noted that the tool led to integration issues and the inability for disparate systems to communicate with each other, creating potential



gaps in care and workload redundancy. In addition, departments weren't able to define how many messages were sent and when, resulting in patients complaining about the volume of texts.

The healthcare organization needed a solution with advanced functionality that could be customized and tailored to its needs.

## AT A GLANCE

Hancock Health (Greenfield, IN) is an independent health network with 69 licensed beds. Located in Hancock County, the organization provides care to the residents of East Central Indiana.



"Expanse Patient Connect is the flexible and customizable communication tool we needed to bring our patient outreach to the next level. Staff and patients love it."

**Angela Soliday, MSN, RN-BC**  
Director of Information Services  
Hancock Health

### Reducing no-shows

Within three months, Expanse Patient Connect helped to reduce Hancock Health's no-show rate by 35%.

## Communicating more effectively with patients

Expanse Patient Connect seamlessly integrates with the rest of Hancock Health's MEDITECH EHR. Its flexibility allows the organization to control more aspects of patient communications, including defining message cadence and merging messages between departments and practices. By reducing the number of texts that patients receive, Hancock Health has addressed a pain point from its previous solution.

**"Everyone – staff and patients – loves Expanse Patient Connect," said Soliday. "It's easy to install and easy to use. Plus, it allows us to customize messages so we can control the volume and type of messages going out to our patients. We've just scratched the surface of its functionality and it has already exceeded our expectations."**

According to Soliday, more and more staff have requested access to Expanse Patient Connect because they want to incorporate the dynamic tool into their patient communications. The texts also drive patients to the patient portal for test results and messaging, which provides another avenue for continued engagement.

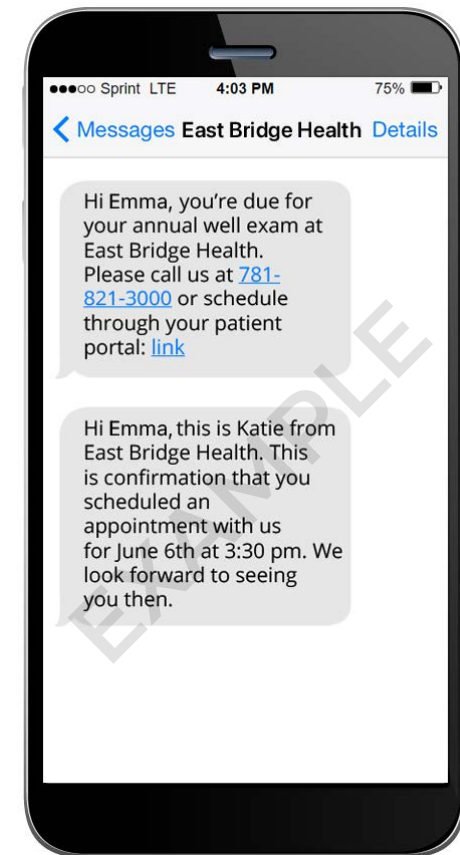
Hancock Health is also seeing measurable results since implementing Expanse Patient Connect. In the three months since going LIVE with the solution, the organization saw a 35% reduction in no-shows from the three months prior to implementation. By having patients cancel appointments via text ahead of time, Hancock Health can fill those empty slots with new appointments, reducing the potential for lost revenue.

## Taking patient outreach to the next level

In the near future, Hancock Health plans to take advantage of more advanced functionality to focus on population health initiatives. With approximately 10,000 patients overdue for mammograms, the facility aims to use targeted texting campaigns to remind those patients to schedule their test. In addition, staff can use campaigns to remind patients to get a flu shot or schedule an A1C test.

Soliday stated that Hancock Health also plans to leverage the MEDITECH solution for scheduling diagnostic imaging appointments and informing patients of facility closures due to inclement weather.

**"Expanse Patient Connect provides a vital communication link between our facility and our patients," said Soliday. "We've seen the benefits across the board, from reduced no-show rates to increased patient engagement and staff efficiency, and are excited to explore all the other ways it can help us."**



## Engages Outpatients With MEDITECH's Customizable Questionnaires



Meaningful client engagement has been a fundamental practice at Ontario Shores Centre for Mental Health Sciences since the organization implemented MEDITECH's Patient and Consumer Health Portal in 2014. As a leader in mental healthcare delivery, Ontario Shores is always looking for ways to engage clients in their own care. When the organization implemented MEDITECH's Expanse Ambulatory solution in 2022, the steering committee saw an opportunity to improve engagement – by replacing paper forms in outpatient settings with online questionnaires embedded in the portal.

### Bringing questionnaires online

No stranger to innovation, Ontario Shores became one of the first healthcare systems in Canada to adopt Expanse Ambulatory. This decision enabled the organization to bring questionnaires online, furthering its commitment to a paperless environment and extending its client engagement efforts.

Before beginning the initiative, Ontario Shores needed to ensure that questionnaires:

- Reinforced the healthcare system's recovery model of care standards for mental health, which includes the individual's hopes, wishes, and recovery goals.
- Were easily accessible and functional to patients and clinicians.
- Could be embedded in clinicians' workflow.

In addition, the healthcare system needed a method to quickly enroll patients in the portal and enable them to fill out these questionnaires.

## AT A GLANCE

Ontario Shores Centre for Mental Health Sciences (Whitby, Ontario) is a 346-bed public teaching hospital providing mental health assessments and treatment services that include interprofessional, recovery-oriented programs for individuals combating serious mental illness.



### Ahead of the curve

- World's first behavioral health organization to achieve HIMSS EMRAM Stage 7
- Second hospital in Canada to achieve HIMSS AMAM Stage 6
- First HIMSS Davies Enterprise Award recipient in Canada

## Developing a strategy

Ontario Shores' goal for bringing questionnaires online was to streamline and refine care delivery to its clients, who are managing mental health conditions, and reinforce its recovery model of care standards. To guarantee the initiative's success, the implementation team developed a strategy that included build workshops, rigorous testing, and enhanced portal enrollment workflows. They also included client input when formulating the questionnaires and designing the process. As a result, the team built more than 30 standardized scales and questionnaires for a number of different diagnoses:

- Patient Story
- Recovery Assessment Scale
- Life Events Checklist
- Patient Health Questionnaire - 9
- Generalized Anxiety Disorder - 7
- Various alcohol and drug use screening tools

Build workshops helped the team to verify that the clinicians could incorporate the new process into their clinical day-to-day workflow. Workshops consisted of a group of Ontario Shores staff walking through the process, offering feedback to optimize questionnaires for clinical workflows and daily administrative routines.

"These sessions brought the project team and clinicians together so we could determine what information got exchanged and learn more about their processes," said Bethany Holeschek, professional practice team member at Ontario Shores. "By collaborating, we got to hear directly from the clinicians and administrative staff, to find out what they wanted most from online questionnaires."

To confirm the questionnaires included all the information clinicians needed to help meet their patients' recovery model goals, Ontario Shores' team organized a "day in the life" of a client. The event also ensured that the questionnaires matched clinicians' workflow. This testing and behind-the-scenes work was vital to the initiative.

## Enrolling clients on the spot

Ontario Shores' approach to questionnaires encourages clients to become active participants in their own healthcare by fostering information transparency. To expand portal enrollment, the organization implemented MEDITECH's Quick Enroll option. Administrative staff can either email credentials to a client or define a username and password during the client's visit for enrollment on the spot.

Now that questionnaires are embedded into Ontario Shores' workflow, clients receive an email containing a link when they register for their visit. They can then access the portal to fill out the appropriate questionnaires.

## Reaping the benefits

Ontario Shores is committed to advancing client-driven care through online questionnaires, furthering its standing as a patient engagement pioneer. Today, 99% of the questionnaires are available online across eight clinics, for both in-person and virtual visits. Because they capture an exceptional amount of patient information up front, questionnaires help providers to better assess patient needs and determine the most appropriate treatment. In addition, online questionnaires have improved efficiency, saved time, and eliminated paper.

Since the introduction of questionnaires, portal usage has increased significantly, which has had a positive impact on care delivery. And enrollment continues to rise.

**"Our portal usage here at Ontario Shores feels really advanced," said Holeschek. "It's great to see how much we've optimized the portal, and we'll continue to use it as a tool to help drive recovery and wellness by making information transparent to clients."**

# Reduces ED LOS by One Hour Using MEDITECH Expanse

When King's Daughters Medical Center staff describe the hospital and its community of Brookhaven, "family" is the word that comes up most often. Neighbors care for neighbors in this small, regional hospital, whose mission — to provide quality health and wellness in a Christian environment — resonates with every employee.

**"Here at KDMC, it's all about taking good care of people and letting them know that you care about them," said CEO Alvin Hoover.**

So when hospital leadership determined that patients were spending about 200 minutes in the ED, they knew they needed to act, and moved to get the right talent and tools in place to improve the patient experience. Within the span of a year, the ED shaved an hour off door-to-discharge times.



## AT A GLANCE

King's Daughters Medical Center (Brookhaven, MS) is a nonprofit, acute care hospital with 99 beds. Located 60 miles from Jackson, it serves a five-county region with a population of 100,000.



**How KDMC is making improvements in the ED with Expanse and Point of Care**

[Watch the video.](#)

### The impact on patient care

|                                                                                                                                                                      |                                                                   |                                                        |                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------------|
|  ED door-to-discharge time dropped 1 hour, from 210 minutes to 151 minutes (39%). | ED door-to-doc time dropped from 38 minutes to 16 minutes (137%). | Visits beyond 6 hours plummeted from 175 to 50 (250%). | FTEs didn't increase, despite a 15% rise in patient volumes. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------------|

### Benefits felt by physicians and patients

-  Expanse's mobility makes it easier for KDMC physicians to enter orders and notes, schedule follow-ups, and view results at the point of care.





## A new direction

In 2016, KDMC replaced its stand-alone ED solution with MEDITECH's integrated EHR, providing clinicians with a single patient record across inpatient and ED settings. But it was their update to MEDITECH's web-based Expanse EHR in July 2018 that helped turn things around. This update coincided with the appointment of a new ED director, Stephen Brown, DO, who set out to shift the ED's culture to mobile, tablet-based workflows. Dr. Brown realigned ED staffing to help drive change: three new doctors, eager to embrace the latest technologies, worked the majority of shifts.

Standard templates and canned text save time by significantly reducing screen taps. Reports that used to take 15 minutes now take two to three.

Mobility also supports the hospital's mission of improving the quality of care in the community. Now physicians can engage with their patients the same way they do at the local hardware store — face-to-face.

**"It's very easy to take the tablet into the room and say, 'Here's your labs and your x-ray. We can look at this fracture right here and this is what we need to do,'" said Dr. Brown.**

Integration with the acute care setting also means admitting patients from the ED is seamless.

**"I'm getting great compliments from our patients," noted CIO Carl Smith. "It takes them less time in the emergency department or upstairs to get their healthcare, and they like that."**

## Mobile Clinic Uses MEDITECH's EHR to Deliver Better Care

Even though Palo Pinto General Hospital (Mineral Wells, TX) serves a rural community, its physicians and nurses see the same types of patients as clinicians in urban settings, said Maria Cantu, an NP at the hospital's urgent care center.

**"We see everything. Chronic conditions are essentially the norm in patient care all over this country, including here," said Cantu.**

The difference between Palo Pinto County and more populated areas is the distance to care facilities. For patients who don't own a car, getting to follow-up appointments can be a challenge.

Reaching out to this underserved population is such an integral part of the PPGH mission that its clinic network includes Bridge to Health, a self-contained and fully equipped mobile clinic.

All six clinics, including Bridge to Health, implemented MEDITECH's Expanse Ambulatory solution in 2017. Fully integrated with the hospital's MEDITECH EHR, the solution makes it possible for the entire organization to share a single, comprehensive record for each patient, improving communication and care continuity.



### Engaging the community

As a Department of State Health Services Designated Rural Health Clinic, Bridge to Health offers services some primary care physicians don't, such as the Texas Healthy Steps physical, required for all children who receive Medicaid.

## AT A GLANCE

Palo Pinto General Hospital (Mineral Wells, TX) serves communities in the Possum Kingdom region of Palo Pinto County. PPGH consists of a 99-bed acute care hospital, a Level IV Trauma Center, and several outpatient clinics.



**PPGH builds a 'Bridge to Health' for the underserved**

[Watch the video.](#)



"The mobile clinic has helped us adapt to the demand for healthcare in this area," said George Thomas, MD, the medical director for the clinic network. "It's a novel idea for a small-town hospital to do this. So what this mobile clinic does is, throughout the week, it goes from various locations, from high schools to smaller towns, like Graford, and basically provides care to the community that can't make it to our central location."

Bridge to Health visits local schools regularly, providing walk-in care and other services to students and faculty, such as DOT physicals for bus drivers. The schools are also an ideal location for reaching patients who don't have access to reliable transportation.

"A lot of our patients actually walk to us, which is one of the reasons why we partnered with the schools, because our schools are in our neighborhoods. We wanted to be seen there," said Tonya Crnkovic, the clinic supervisor.

If someone has an initial appointment in the urgent care clinic and follows up in the mobile clinic, staff have access to all of the same records, which has created a sense of cohesion beyond patient care.

**"I feel like with this system we're finally actually part of the clinic network," said Crnkovic, "because it is so easy to access the other clinic records."**

In addition to schools, Bridge to Health makes weekly stops at a supermarket and a Chamber of Commerce, and even makes appearances at special functions.

**"Since it gets a lot of publicity wherever it goes, we take the mobile clinic to health fairs and other health-related events," said Mary Howell, the PPGH clinic director. "It's a very friendly entity."**



## Advances Patient Engagement With MEDITECH

### About

Ontario Shores Centre for Mental Health Sciences (Whitby, ON, Canada) is a 345-bed public teaching hospital that offers mental health assessment and treatment services, including interprofessional, recovery-focused programs. Ontario Shores is the first Canadian recipient of the HIMSS Davies Enterprise Award and HIMSS Stage 7 designation.

### Challenge

Prior to Ontario Shores' EHR implementation, its patients had limited access to their own care data. Their health information requests were processed manually by the organization's health information management department, which could take weeks. Communication with caregivers between appointments was limited, and medical record information was not easily shareable with providers outside of Ontario Shores' network. Executives at Ontario Shores identified an opportunity to extend medical information access to patients, in support of maintaining care continuity and strengthening patient engagement.

### Execution

During the implementation of MEDITECH's patient portal, Ontario Shores focused on four primary patient engagement goals:

- Enhancing patient access to their care providers and their own care data
- Supporting the paradigm shift toward service-user-driven care
- Eliminating gaps in patient engagement and partnership between patients, families, and healthcare providers
- Evolving existing practices and culture from a provider-centric model to a patient-provider partnership

Clinicians, patients, and other healthcare professionals at Ontario Shores were involved with the design, planning, and implementation of the portal from the start.



**“The patient portal is a valuable tool that empowers patients to be active participants in their own care. Clinicians are able to partner with patients to further support their recovery goals and stay connected to their progress.”**

**Sanaz Riahi, MSN, RN**  
Senior Director, Professional Practice  
and Clinical Information  
Ontario Shores Centre  
for Mental Health Sciences

### Results

After implementing the portal, Ontario Shores observed significant, measurable benefits for both patients and healthcare organizations:

- Improvement in 7 out of 8 patient mental health recovery domains, including self-empowerment, basic functioning, and overall well-being
- 67% higher likelihood that portal users attend appointments
- 30% lower likelihood that portal users request information
- 16% improvement in patient self-assessment scores



**MEDITECH**

**Population Health**

*Manage Your Communities' Health Risks and Chronic Conditions*

### Prioritizes Health Equity and Improves Care Access With MEDITECH Expanse

Healthcare equity is a pillar of a just and compassionate society, yet achieving it remains formidable due to systemic and societal factors. With the help of its MEDITECH Expanse EHR, Humboldt Park Health renewed its commitment to whole-person care, to serve the unique social, environmental, and medical needs of its community.

“We knew that caring for our patients had to include addressing the long-term stressors and socioeconomic challenges they faced every day,” said CEO José R. Sánchez. “To improve health outcomes, we needed our EHR to give us a clear picture of our community’s needs and challenges, so we could develop specific programs to address them in all of their complexities.”

#### Measuring community needs

Central to Humboldt Park Health’s efforts was its ability to collect accurate data on an ongoing basis. To measure patients’ complex needs, the organization began gathering social determinants of health data during patient screenings and entering it into MEDITECH’s Expanse EHR. This information was visible across the continuum, so all inpatient and outpatient care teams could stay up-to-date on how food security, housing, employment, and other factors could be affecting patient health.

The organization confirmed that obesity was a contributing health factor for 38% of patients and 18% were diagnosed with type 2 diabetes — a rate twice as high as the City of Chicago. Getting a complete picture of patient needs and quantifying improvements were essential for Humboldt Park Health to establish its outreach programs.

#### Employing population health tools

Data analytics allowed Humboldt Park Health to quantify community needs in three key areas: hypertension, substance use disorder, and diabetes. Clinicians used Expanse’s patient registries to identify and monitor comorbidities like high blood pressure and abnormal lipid profiles, giving leaders a comprehensive view of their patient populations and allowing providers to monitor disease progression.

“Using patient registries in our EHR has been a crucial method of monitoring the needs of specific patients, like those with diabetes,” said COO Daisy Rodriguez, MSN, MPH, BS, RN. “With tailored dashboards, we’ve been able to track critical metrics like hemoglobin and A1C levels — as well as stratify this data by race/ethnicity and primary language.”

## AT A GLANCE

Humboldt Park Health is a 200-bed acute care, community-based hospital in Chicago, IL. Its service area covers nearly 500,000 residents, with 40% identifying as Hispanic/Latinx and 28% as Black/African American.



In 2024, Humboldt Park Health became the first hospital in the Midwest and 13th in the country to receive Healthcare Equity Certification from The Joint Commission. To expand its services, the organization opened a 45,000-square-foot wellness center in January 2025.

## Outreach programs for better health

As a safety net hospital, Humboldt Park Health relies on foundation funding and grants to help with outreach programs that address patients' needs.

"Our EHR was essential for capturing immunization data and other information via the organization's mobile units — fully equipped medical and dental vans that travel throughout the community bringing primary and dental care to low-income and homeless families," said Rodriguez. "This unique feature, used primarily for pediatric patients, provides free care for children ages 3 to 21. These mobile units have made 5,000 patient visits during the past year."

Humboldt Park Health also maintains partnerships with several nonprofits to improve access to healthy foods and participates in Wellness West, a collaborative of 40+ organizations providing resources to residents facing health, socioeconomic, and environmental challenges.

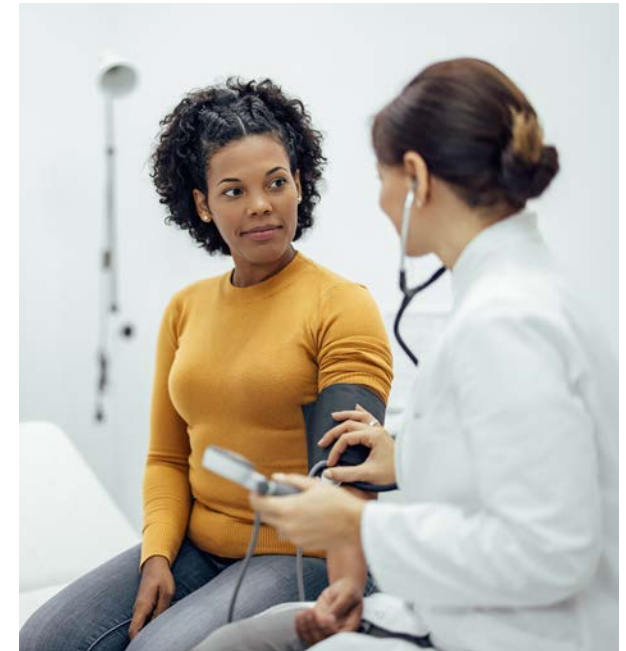
## Making a difference

Humboldt Park Health's focus on health equity is yielding concrete results. By using patient registry tools in its Expanse EHR, along with MEDITECH's Business and Clinical Analytics dashboards, leaders were able to examine groups of patients based on common risk factors.

"Knowing the highest rates of breast cancer nationwide occur in brown or black women, we sought to identify women in their community who were due for screening or follow-ups," said Rodriguez. "We then used outreach strategies like mailings, text alerts, and health fairs to offer technologically advanced 3D screening, to improve early diagnosis rates and prompt interventions."

Following these targeted campaigns, Humboldt Park Health measured a 40% increase in mammograms.

Humboldt Park Health became the first hospital in the Midwest to earn Healthcare Equity Certification from The Joint Commission in 2024 and opened its state-of-the-art wellness center at the beginning of 2025. The Wellness Center is the next step toward addressing social determinants of health in the Humboldt Park community.



# Uses MEDITECH Expanse Hypertension Patient Registries in Population Health Initiative



### About

Major Health Partners (Shelbyville, IN) is a leading healthcare provider serving communities across southeastern Indiana. It consists of a 89-bed medical center and a full range of specialty services and clinics.

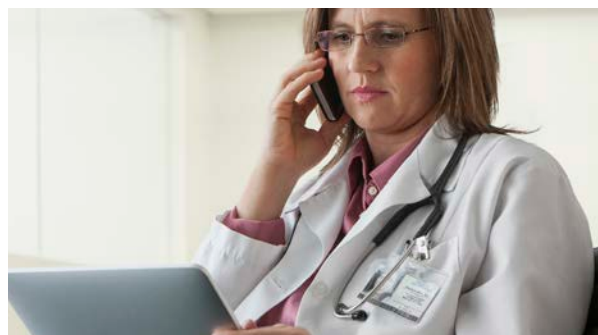
### Challenge

When MHP formed its Primary Care Council in late 2019, the organization assembled a multidisciplinary team to review chronic conditions. The committee envisioned creating a program that focused on tracking population health, but they lacked the means to aggregate panels of patients with the same disease.

### Execution

Upon implementing MEDITECH Expanse, MHP recognized that the availability of ambulatory registries provided a means to aggregate and stratify lists. By setting up patient registries, MHP could effectively identify the size and scope of patients with the same disease and prioritize which patient groups it wants to target.

The council identified the community's most common chronic health conditions it would track through the registry program and began by implementing a hypertension registry in MEDITECH Expanse. Using a tiered tracking system for the registry, MHP first targeted patients with a systolic blood pressure reading of  $\geq 160$ , extending in subsequent phases to patients with readings of 150–160 and 140–150.



### Results

After a year in the making, the hypertension program showed measurable results; blood pressure readings began to trend downward within a few weeks of implementation. MHP has routinely seen significant percentage drops for patients beginning the month with systolic BP above 160, and finishing the month below that number. In May 2020, 57% of patients monitored improved to below the under 160 threshold, and throughout 2020 monthly reductions averaged approximately 30%. The numbers are expected to rise and settle over the next several months as patients return to MHP, now that COVID-19 concerns have begun to ease.

**"I need to know where I'm at with all the quality measures to serve my patients best. Registries help us do that."**

**Emily Andaya, MD**  
Major Health Partners

## Makes Strides in Value-Based Care With MEDITECH

As the largest provider in northwest Arizona, Kingman Regional Medical Center is committed to delivering value-based care. Recognizing that patient management and clinical quality metrics are key to identifying areas for improvement, the healthcare system engaged MEDITECH to implement a robust, KPI-driven solution within six months; this initiative laid a solid foundation for KRMC's efforts to improve care quality while optimizing its financial return.

So far, the KPI-driven solution has streamlined clinical workflows for capturing discrete data and led to new strategies for preventive health management. Robust reporting mechanisms have helped to improve the quality of care while offering new opportunities for financial reimbursement from insurance payers.

### Targeting people, process, and performance

KRMC engaged a multidisciplinary committee of over 40 stakeholders including physicians, nurses, IT analysts, and IS staff in addition to the MEDITECH team. Together, they adjusted workflows to meet the needs of the hospital and align with MEDITECH's regulatory best practices, addressing operational efficiencies by incorporating workflows to facilitate access, assignment, and accountability.



Working with MEDITECH, KRMC staff received expert guidance and designated resources to help them make the required process changes and maximize the efficiency of new processes. In addition, KRMC learned quality reporting strategies from the team, enabling the hospital to tackle future projects independently.

"It was our first time working with MEDITECH, and they have been a tremendous help," said Arek Shennar, CIO of KRMC. "The most important part for me as a CIO is that we're being taught, enabling us to ask more sophisticated questions and work on more sophisticated projects."

## AT A GLANCE

Kingman Regional Medical Center (Kingman, AZ) is a 235- bed healthcare system located across multiple campuses. It is a Mayo Clinic Care Network Member and the sole nonprofit hospital in Mohave County.



### KPI-driven solution

With support from MEDITECH, KRMC used MEDITECH's registries and BCA solution to:

- Compile an accurate patient attribution list.
- Highlight clinical quality measures.
- Identify care gaps and missed opportunities.
- Maximize reimbursement through improved documentation and discrete data capture.
- More accurately document patient severity and associated resource utilization.

### KRMC wins Health IT Innovation Award

[Read more.](#)

## Partnering with payers to improve reimbursement

KRMC targeted Medicare Condition and Patient Management benchmarks, and identified Humana Medicare Advantage patients, the largest volume payer for this subset. For the project to succeed, onboarding Humana as a payer was vital.

“We’ve been working with Humana for a while, but we needed to function as partners to promote better outcomes, improve quality measures, and enhance reporting,” explained Shennar. “This project enabled us to do that, to work toward a common goal.”

KRMC looked to Humana’s 2019 Q4 Quality Recognition Program report for opportunities. The report calculated approximately \$16K in missed opportunities per quarter for diabetes HEDIS/Patient Safety Measures and Clinical/Strategic Initiatives. By implementing electronic clinical quality measure mapping and adjusting workflows for discrete data capture, KRMC could close gaps between opportunities and actual reimbursements from Humana.

## Improving and coordinating diabetes care

KRMC chose diabetes as the pilot condition, believing it presented a scalable use case with ample opportunity to build out, test, and train. Additionally, 60% of the organization’s quality measures, including eQMs, are linked to diabetes. The program aimed to provide

more comprehensive care — and more appropriate documentation of that care — to patients with diabetes, leading to improved reimbursement and Medicare star ratings.

To set organizational thresholds for improvement, KRMC implemented a Quality Vantage dashboard in MEDITECH’s Ambulatory solution to measure performance. The interactive dashboard displays in red text all metrics that require attention, allowing the organization to adjust criteria for condition management and wellness registries. For example, when the dashboard indicated eye exams were at 1%, KRMC targeted the metric by including eye exams as part of the follow-up care for patients with diabetes. In addition to helping staff manage diabetes quality measures for MIPS eQM reporting, the dashboard has eliminated surprises related to analytics.

## Fostering proactive health and wellness protocols

KRMC clinicians adopted new functionality in their ambulatory workflows to foster proactive condition and wellness management. They designed diabetes and wellness registries and health management protocols for preventive health management and HEDIS/Star quality metric tracking. A case coordinator role, referred to as a nurse navigator, was created to close gaps in care and understand opportunities using the new Humana Diabetes Patient Registry.

In MEDITECH’s Business and Clinical Analytics solution, MEDITECH created a Humana Membership Dashboard to assist KRMC with reconciling its payer roster with its MEDITECH EHR data — helping the organization address discrepancies to achieve 99% accuracy.

## Planning for the future

KRMC looks forward to establishing partnerships with other hospital payers in the future. With the knowledge gained from working with MEDITECH, the organization expects to address additional quality initiatives and expand the nurse navigator role to further improve outcomes and the patient experience.

As KRMC moves toward a complete value-based care solution, its engagement with MEDITECH continues; Shennar noted that his organization plans to extend the value-based care program with Humana to include cardiac and renal care, behavioral health, and hypertension management.

**“This is just the beginning of our journey,” said Shennar. “We experienced a very positive outcome from this [engagement] and fully expect to replicate it in other areas. I look forward to continuing to work with MEDITECH Professional Services.”**



**MEDITECH**  
**Quality Outcomes**  
*Deliver Higher Quality Care More Consistently*

## Focuses on Providers Through EHR Governance and Support

A KLAS Arch Collaborative case study in partnership with Ozarks Healthcare

### About

Ozarks Healthcare (West Plains, MO) is a rural healthcare system encompassing primary care and specialty clinics, along with complete rehabilitation, behavioral healthcare, and home health services. Every year, the 114-bed acute care hospital receives more than 5,400 admissions, while the health system receives more than 364,000 outpatient visits in South Central Missouri and northern Arkansas.

### Challenge

When Ozarks Healthcare went live with MEDITECH's Expanse EHR in January 2020, its leaders aimed to provide superior IT support to physicians and other clinician users, helping to ensure the platform's success. The healthcare organization turned to the KLAS Arch Collaborative for guidance in forming a robust governance model that would foster a sense of shared ownership among providers.

### Execution

Physician governance is crucial to an EHR's success. Ozarks Healthcare leaders formed a variety of advisory committees consisting of representatives from across the organization, beginning with a six-member physician advisory committee. These doctors meet every other month to direct projects and resolve concerns, which fosters a sense of ownership in the Expanse EHR.

In addition to its strong governance structure, Ozarks Healthcare's investment in relationship-building strategies such as face-to-face interactions with clinicians and accountability among providers have created a stronger alignment with IT and better EHR adoption.



### Results

Since its Expanse EHR went live in January 2020, Ozarks Healthcare has measured three times with the Arch Collaborative. The organization's Net EHR Experience Score, or NEES, has increased with each measurement.

Most recently, Ozarks Healthcare scored in either the 98th or 99th percentile for provider support, training, and user experience, indicating exceptional levels of physician satisfaction and comfort.

KLAS Arch Collaborative members can [read the full case study here](#).

**"Participating in the Arch Collaborative enabled us to learn what and where we needed to improve and use that information to optimize workflows for all our end users. Other healthcare organizations should be able to achieve the same outcomes by following the Arch Collaborative's evidence-based guidelines."**

Priscilla A. Frase, MD  
Chief Medical Information Officer  
Ozarks Healthcare

## Reduces Time to DKA Resolution by 25% With Nurse-Driven Protocol in MEDITECH Expanse

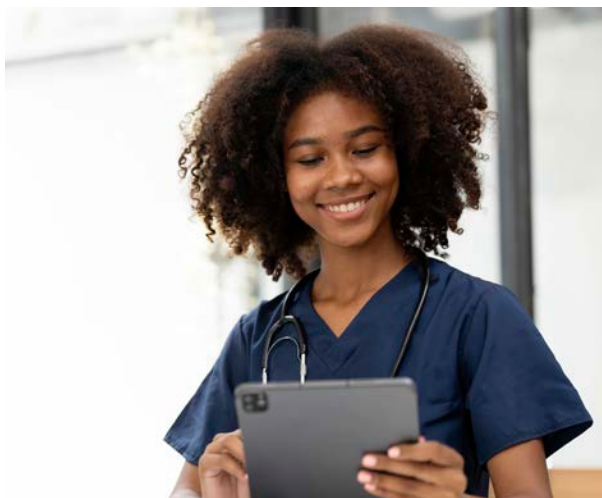
Patients experiencing diabetic ketoacidosis, a life-threatening complication of diabetes, require complex, labor-intensive care. At Appalachian Regional Healthcare, emergency and intensive care nurses treating patients with DKA were required to contact physicians several times throughout the course of therapy for dose adjustments and medication supplementation.

“To improve the quality of care for these patients, a multidisciplinary team researched best practices to develop a new DKA protocol and built the workflow into our Expanse EHR,” said CIO Montie Hodge.

Lead IT Physician Bradley Moore, DO, a family practitioner, noted the evidence-based protocol has garnered a lot of support from ARH physicians.

**“Patients spend fewer days in the ICU and less time on continuous insulin,” said Dr. Moore. “In addition, nurses aren’t calling physicians at home, in the middle of the night, nearly as often with questions about insulin adjustment and electrolyte replenishment.”**

“Automating much of the process in Expanse helps nurses feel more empowered when caring for these high-acuity patients,” added Hodge.



### Taking a multidisciplinary approach

After ARH clinicians found that basing DKA treatment solely on glucose levels was not enough, a multidisciplinary team of physicians, pharmacists, nurses, and IT analysts thoroughly researched DKA care guidelines to develop a new protocol. They collaborated on an evidence-based approach that treats acidosis and electrolyte imbalances in addition to controlling glucose.

Using MEDITECH’s Expanse Patient Care and Pharmacy solutions, the multidisciplinary team built the nurse-driven protocol into the system. ARH leadership chose to roll out the new protocol at three pilot sites.

## AT A GLANCE

Appalachian Regional Healthcare, the largest care provider in the region, serves more than 350,000 residents of southeastern Kentucky and southern West Virginia. This nonprofit healthcare system operates 14 hospitals as well as home health agencies, physician practices, retail pharmacies, and home medical equipment stores.



**“Our DKA protocol truly leverages the Expanse EHR’s abilities to guide evidence-based, multidisciplinary care guidelines for our patients. It takes into account evidence-based care, cost, and staffing concerns, and it continues to be refined.”**

**Bradley Moore, DO**  
Lead IT Physician and Family Practitioner  
Appalachian Regional Healthcare

**“Our educators conducted in-person training with simulated DKA events,” said Director of IT Education Solutions Sabrina Hicks. “Nurses practiced using the DKA flowsheet with realistic-looking data, making titration decisions based on the protocol. The training went very well, as it enabled nurses to gain hands-on experience while building confidence.”**

Here’s how the enhanced process works:

- DKA protocol orders are preselected in the system.
- Orders for appropriate maintenance fluids are reflexed using MEDITECH screens and rules to assess patient labs.
- A DKA flowsheet, which includes the protocol, drives interventions throughout treatment.

New lab results indicate the need for electrolyte replacement and insulin titration.

- Sections that don’t apply, based on previously entered data, are grayed out.
- The system suggests orders based on nurses’ documentation.

All 14 ARH facilities have been LIVE with the DKA protocol since July 2023.

## Gauging the new protocol’s success

ARH pharmacists recently compared the previous protocol to the new protocol using data based on chart reviews of approximately 100 patient cases.

**“The new DKA protocol takes about the same amount of time to reach a glucose level of less than 250 mg/dL. However, it reduces the amount of time to DKA resolution by approximately 25%,” said Clinical Pharmacy Informaticist Josh Vestal, PharmD.**

Vestal noted that an added benefit of the protocol is its reduction of hypokalemic events, which he attributes to “the built-in monitoring of potassium and the protocol for potassium replacement.”

By using its Expanse EHR to guide the new DKA protocol, ARH has not only improved outcomes for its patients, but reduced the care team’s burden of treating a complex, life-threatening condition.



**“The new protocol has drastically improved how we care for patients who are experiencing DKA,” said Dr. Moore. “Not only is it better for the patients, but it’s less stressful for the nurses, who are able to follow the protocol and manage the treatment effectively.”**

| Event                                           | Previous Protocol | Current Protocol |
|-------------------------------------------------|-------------------|------------------|
| Time to DKA resolution                          | 13.1 hours        | 9.8 hours        |
| Hypokalemic events (potassium level < 3.3 mEqL) | 17.8%             | 10.8%            |

## Reduces Unnecessary Urine Culture Orders by 29% With MEDITECH's Clinical Decision Support

When The Joint Commission updated its 2023 Antibiotic Stewardship elements of performance, Senior Medical Infectious Disease Director David Byers, MD, and his team saw an opportunity to reduce antibiotic use and save resources with help from Southern Ohio Medical Center's Expanse EHR.

**"The Joint Commission required that we pick two conditions and prove we had made an impact on one of them," said Dr. Byers. "We thought if we could leverage MEDITECH's clinical decision support and analytics capabilities to decrease and monitor treatment of asymptomatic bacteriuria, we could meet all the conditions outlined in that new update."**

### Leveraging Expanse to improve patient safety

SOMC worked with MEDITECH to create urine culture ordering screens and rule logic in Expanse that ensure patients meet the appropriate clinical criteria before clinicians place the order. By leveraging Expanse, the organization has been able to reduce unnecessary urine culture lab orders.

"It's basically using the system to help people make smarter, better healthcare decisions that result in fewer adverse effects for patients," said Dr. Byers.



Clinical Pharmacist Lara Ramey, PharmD, noted that SOMC's clinical pharmacy team conducted prospective audits as part of its previous process. They consulted with physicians on antibiotic orders – especially when prescribed for urinary tract infections – to improve stewardship.

"Treating asymptomatic patients with antibiotics when they don't need them could be detrimental and keeps them in the hospital longer," said Ramey.

## AT A GLANCE

Southern Ohio Medical Center (Portsmouth, Ohio) is a 211-bed hospital that serves a large, sparsely populated area in Southern Ohio and Northern Kentucky. The hospital and its 45 outpatient clinics support a community in which chronic conditions are prevalent and the poverty rate is high.



### Stewardship benefits

Clinical decision support has enabled SOMC to comply with The Joint Commission's elements of performance and achieve the following:

- Reduce antibiotic use related to asymptomatic bacteriuria.
- Save resources by eliminating unnecessary urine tests.
- Expand evidential documentation.

## Collaborating for quality care

Previously, SOMC and MEDITECH partnered on a project to automate the medical center's workflow for C. difficile testing, which led to a 30% relative change in hospital-acquired C. diff infections.



**“The knowledge transfer that occurred during that project was key to our success on this one,” said Dr. Byers. “We had an idea, but the team at MEDITECH helped us take that idea and make it workable in a system that has had a significant impact.”**

Confident in that knowledge, SOMC transitioned seamlessly to the new workflow, which was universally accepted among its care teams.

**“With help from the MEDITECH analysts, we were able to get the fancy three-part question to appear on the ordering screen,” said Clinical Informatics Specialist Michael Eldridge, RN. “Depending on clinicians’ responses to those questions, decision support capabilities determine whether or not the patient meets the criteria and the urine culture order can be placed.”**

Physicians have the ability to override the rule logic even if the patient does not meet the criteria, but other personnel – such as nurses – receive a hard stop.

Eldridge and his team kept staff informed through an SBAR communication brief and advised them to reach out to task force members if they had any questions, a testament to SOMC’s culture of transparency.

## Measuring the results

Lead Clinical Information Systems Specialist Gerard Givan created the Business and Clinical Analytics dashboard to visualize metrics such as the number of cultures ordered, the clinicians who ordered the cultures, and the clinical criteria they selected.

**“This is the key piece,” said Dr. Byers. “We talked about meeting Joint Commission requirements, but there’s also the expectation that we can prove an impact.”**

“There’s so much data here, and we can toggle through it very quickly to find information we need,” added Ramey.

Six months after implementation, SOMC reported a 29% decrease in urine culture orders in the acute setting. Eldridge and his team are currently fine-tuning the process on the ambulatory side.

“Our quality and safety leadership teams have been very excited about this initiative,” said Dr. Byers. “It’s a win for everyone.”

## Aims for Hepatitis C Elimination With Support From MEDITECH

Mohave County in Arizona is among the top 5% of counties nationwide considered to be most susceptible to an outbreak of the hepatitis C virus. But this rural county – the state's second largest in area – lacked a specialized clinic for patients who test positive. It's also a Medically Underserved Area, with a ratio of 1,890 patients to one primary care physician.

Leaders at Kingman Regional Medical Center knew that to improve the health of the community, it was time to establish a new initiative for HCV treatment and elimination. They formed an innovative model, which is led under the medical directorship of Richard Manch, MD, an award-winning hepatologist.

### Leveraging the Disease Management Clinic

"While hepatitis C is easily treatable, symptoms often do not present until liver damage has occurred. This could be as long as decades after initially contracting the virus," said Ambulatory Care Pharmacy Clinical Manager Linda Williams, PharmD.

"Failing to detect the virus early can result in serious long-term health effects like cirrhosis, liver cancer, and liver transplant. That's why it was important for us to establish our hepatitis C program."

Staffed entirely by pharmacists, KRMC's Disease Management Clinic leads the effort, partnering with regional healthcare providers through a collaborative practice agreement to increase access to care and extend provider services. A major part of the initiative is universal screening: All patients 18 and older are tested for HCV at least once in their lifetime.

### Customizing clinical tools

Dr. Williams engaged MEDITECH Professional Services for guidance on extending workflows in MEDITECH's Expanse EHR to more effectively screen, monitor, and treat patients.

"When we started out, our clinic hadn't received an HCV test referral in over a year. But then we worked closely with MEDITECH Professional Services to incorporate hepatitis C screening protocols into our primary care documentation," said Dr. Williams.

"Standard documentation was added to remind physicians to screen their patients and to document potential risk factors that may suggest a patient should have annual screenings. We also created standard order sets, referral options, a health protocol, and Disease Management Clinic documentation for those patients who tested positive."

## AT A GLANCE

Kingman Regional Medical Center (Kingman, AZ) is a 235-bed healthcare system located across multiple campuses. It is a Mayo Clinic Care Network Member and the sole nonprofit hospital in Mohave County.



"I really enjoyed working with MEDITECH Professional Services. It was eye opening to me. I really appreciate their guidance and support through the process to get our hepatitis C program up and running."

**Linda Williams, PharmD**  
Ambulatory Care Pharmacy Clinical Manager  
Kingman Regional Medical Center

Additionally, MEDITECH worked with KRMCM to create two registries that help monitor patients in the program.

“One registry tracks all patients who are positive for HCV. The other is used to track higher-risk patients, to make sure they are following through with annual screenings,” Dr. Williams said.

To track outcomes, MEDITECH also collaborated with KRMCM to personalize Business and Clinical Analytics dashboards to the program’s needs.

**“Interactive dashboards display the percent of patients screened, as well as results, age by decade, ethnicity, and other relevant patient details,” said Dr. Williams. “A geographic analysis dashboard helps to identify areas of potential outbreak, as well as areas where screening is light and more community outreach is needed.”**

## Overcoming barriers

KRMCM’s success hinged on making treatment affordable. The average cost for an HCV regimen of eight to 12 weeks averages \$20,000-\$50,000. Many adults in Mohave County do not have health insurance, but even with coverage, patients may still end up with high copay prices of \$1000 or more.

To overcome these obstacles, a care coordinator helps patients secure funding and navigate services needed to comply with payer requirements. Additional financial assistance through grants and commercial programs has enabled KRMCM to keep the average copay between \$0-\$10.

The initiative seems to be paying off. Since its launch in January 2021, approximately 165 patients per month have been screened for HCV, with a 6.5% positivity rate.

**“We now average 7.5 HCV referrals per month,” said Dr. Williams. “And as of May 2023, 75 patients have been cured of hepatitis C through confirmatory labs drawn 12 weeks after finishing antiviral therapy.”**

Noting that staff take great pride in this accomplishment, Dr. Williams said, “We’re always looking for opportunities to extend the program beyond Mohave County, to help even more people who suffer from this treatable disease.”



## Uses MEDITECH to Transform Sepsis Treatment

In late 2015, sepsis mortality, disability, and healthcare costs pushed this life-threatening condition to the forefront of priorities for US hospitals. The Centers for Medicare and Medicaid Services stepped in, aiming to standardize treatment through evidence-based bundles that could be used as guidelines for clinicians to treat sepsis patients. CMS also began requiring hospitals to track their own performance with sepsis care.

Newman Regional Health (Emporia, KS), a Critical Access Hospital and Level IV Trauma Center in East Central Kansas, understood the need for interventions to identify and treat sepsis early. In response to the CMS initiative, Newman Regional Health formed a multidisciplinary group of clinicians eager to understand the pathophysiology of sepsis and how to correctly treat it with the CMS-recommended interventions. The healthcare organization's sepsis compliance in October 2015 — before the initiative began — was 33%.

Newman Regional Health's results varied quarter to quarter, despite multiple meetings and in-person follow-ups with clinicians. So, in 2017, its leadership committed to a strategic effort for effective sepsis treatment for all patients. Across Kansas, tertiary hospitals including Newman Regional Health shared information and best practices. Through this collaboration, the organization learned that it was not alone in its challenges related to bundle compliance.



### A multidisciplinary approach

To overcome these challenges, Newman Regional Health devised improvement strategies such as clear compliance goals, data presentation, stakeholder engagement, and reviews of sepsis care execution. The hospital pulled from national benchmarks to set compliance percentage goals, and used driver diagrams to identify primary and secondary drivers that would promote and influence change within its system and the community.

## AT A GLANCE

Located in East Central Kansas, Newman Regional Health (Emporia, KS) includes a 25-bed, acute care hospital and Newman Medical Plaza, an outpatient facility. It primarily serves the residents of Lyon County and is the state's most clinically capable Critical Access Hospital.



**Newman Regional Health was one of only 14 hospitals statewide to receive the Kansas Healthcare Collaborative's "Highest Achievement with Distinction" award, in recognition of its efforts to combat sepsis.**

“We used a multidisciplinary approach to incorporating the sepsis toolkit recommendations in Expanse,” said Cathy Pimple, the CAO at Newman Regional Health. “Our team consisted of members from lab, pharmacy, nursing, providers, informatics and quality. Ironically though, we started this build and had most of it incorporated into our MAGIC system in 2016. When we went LIVE with Expanse, we simply rebuilt what we knew was already working, and added the Surveillance components to complete the package. This process continues to work well for our organization.”

### **Screening assessments and order sets**

Newman Regional Health included sepsis screening assessments in Emergency Department Management, Surgical Services, and Patient Care and Patient Safety. A Surveillance indicator that correlates to sepsis risk appears on these solutions' status boards and trackers. In Patient Care and Patient Safety, the Sepsis Risk Assessment is completed at least once every shift.

In the emergency department, providers choose from two order sets, depending on whether the patient presents with sepsis or the patient becomes septic while in the ED. On the inpatient side, providers can choose from a sepsis 6-hour bundle order set, a sepsis antibiotic protocol order set, and a lactic acid order set. Antibiotics, whether embedded within the order set or added to the order set, are categorized by source of infection.

To better serve its patients, Newman Regional Health attached a sepsis nurse protocol to the sepsis screening intervention. A positive sepsis screening will reflex order the appropriate order set. In addition, the hospital created a sepsis reevaluation template for providers, which includes an exam, lactic acid results, and an assessment/plan comment box. Canned text states that the antibiotic was dosed based on the patient's ideal body weight.

### **Staff education**

A small group of sepsis nurse champions drove the initiative. Their responsibilities included developing policy; reviewing all sepsis cases; facilitating workflow, documentation, and order set changes; and educating staff. These sepsis champions, with support from a handful of superusers, focused on educating nurses and providers via email, face-to-face communication, elbow support, and just-in-time education. In addition, a peer review process helped identify opportunities for improvement.

### **Community-wide efforts**

Public knowledge of sepsis continues to fall short. According to the Sepsis Alliance, only 17% of Americans can identify sepsis symptoms. To increase community awareness, Newman Regional Health used multiple media modalities. These included increased education among its own staff (550+ employees), published articles in The Emporia Gazette, radio advertisements, on-air interviews, and print advertisements.

The organization also broadened its focus by collaborating with emergency medical services and local nursing homes on the early identification and treatment of sepsis. Together, Newman Regional Health clinicians, EMTs, and nursing home RNs prepared quarterly sepsis case reviews. Patient-sensitive information was redacted, allowing for staff to discuss how to better care for sepsis patients in the community.

### **Recognition for patient safety**

Following these strategies, Newman Regional Health was able to consistently increase compliance. The process has worked very well for the organization and currently, its year-to-date sepsis compliance is 85.2%.

Newman Regional Health was recognized recently for its accomplishments in patient safety improvement. The healthcare organization was one of only 14 hospitals statewide to receive the “Highest Achievement with Distinction” award from the Kansas Healthcare Collaborative, a nonprofit organization that focuses on healthcare quality improvement.

## Improves Patient Care With MEDITECH's Depression Screening and Suicide Prevention Toolkit

Coffeyville Regional Medical Center (Coffeyville, KS) experienced dramatic results when the acute care hospital and several outpatient clinics went LIVE as an early adopter of MEDITECH's Depression Screening and Suicide Prevention Toolkit in December 2019. The evidence-based tools and advanced clinical decision support are designed with Expanse technology.

**"In the first month using MEDITECH's Depression Screening and Suicide Prevention Toolkit, we identified five patients at risk of suicide whom we normally may not have detected, and were able to get them the help they needed," said IT Consultant Al Monteiro.**

CRMC implemented the toolkit to improve depression screening at the organization, and to assist clinicians in following the appropriate processes and interventions needed when patients screen positive.

### Screening every patient

Widespread depression screening at CRMC was a fairly new initiative. Although the organization has always been diligent about screening patients for suicide risk, clinicians were often unsure of how to proceed with screening every patient for depression; workflow and processes can vary depending on patients' needs, and aren't always clear-cut.



**"Since we went LIVE with the toolkit, no one has had to ask me, 'What do I do next?,'" said IT Analyst Amber Beaumont, RN. "Clinical decision support guides clinicians through the process, and makes sure clinicians ask the required questions. It also tells them how to move forward, depending on the score."**

## AT A GLANCE

Coffeyville Regional Medical Center (Coffeyville, KS) is a nonprofit, 47-bed hospital that uses the latest healthcare technologies. CRMC serves more than 45,000 patients from southern Kansas and northern Oklahoma.



**Discover MEDITECH's Depression Screening and Suicide Prevention Toolkit**

[Read more.](#)

CRMC worked alongside the MEDITECH toolkit team to implement the toolkit and build workflows that were self-explanatory to end users. The toolkit includes the Patient Health Questionnaire – 9, which is a depression screening tool, and the Columbia – Suicide Severity Rating Scale.

Some surgeons initially resisted screening patients who visited the office for follow-up procedures, such as suture removal. They felt the screening was more applicable to internists and other providers. However, shortly after going LIVE with the toolkit, a surgeon identified a patient at risk for suicide during a routine screening and got the patient the help they needed.

“It’s a strong example of why widespread screening is important,” said Monteiro. “We shared this story in team meetings to drive adoption and show the toolkit’s effectiveness

to management. Staff also thought they had to ask every patient all the questions on the PHQ-9 and the C-SSRS. We clarified that if the patient answers a certain way, you don’t have to ask the other questions. So now they have embraced it.”

### Using patient registries for follow-up

The newly implemented widespread screening has enabled CRMC to improve their Merit-Based Incentive Payment System score for the CMS2 measure; in eight months, the organization’s performance has increased from 20% to 67% attestation. Patients who are subsequently diagnosed with depression following these screenings all flow to its patient registries, which allows for CRMC to follow up with select groups of patients to ensure that treatment continues after they leave the clinic or hospital.

**“Catching more patients suffering from depression and getting them help is our biggest achievement, but being able to attest to that MIPS measure and gaining reimbursement for it has been a big win for us as well,” said Monteiro.**

With the right interventions in place, staff are empowered to make smart and quick decisions. And CRMC is fully confident in its system, knowing that the toolkit will guide caregivers to take appropriate action and patients will get the care they need.



## Lowers SIR With CLABSI Prevention Processes

### About

St. Bernards Medical Center (Jonesboro, AR) is a 440-bed regional referral hospital for Northeast Arkansas and Southeast Missouri. It has the only NICU in eastern Arkansas and the only Level III Trauma Center in the northeastern part of the state. The medical center is the flagship of St. Bernards Healthcare, a four-hospital network.

**“Examining this process closely helped us to more clearly connect daily work and documentation to tangible outcomes. The EHR became a tool we optimized to hardwire compliance and make the ‘right thing to do’ more prominent and reportable.”**

Kasey Holder, MD  
Vice President of  
Medical Affairs  
St. Bernards Healthcare

### Challenge

St. Bernards' initial evaluations showed its CLABSI rate was 1.551 from 2016 – 2017, well above the national industry standard of 1.0. Its previous campaigns to centralize CLABSI improvement efforts were sporadic and noninclusive. St. Bernards saw the need to bundle protocols to fit organizational needs and specific goals.

### Execution

St. Bernards created a highly reliable organizational plan, or HIRO, package that would facilitate the organization of policies, educational materials, performance reports, and MEDITECH documentation related to central lines. When developing the HIRO package, St. Bernards built specific sections of it into MEDITECH's EHR for performance tracking. Its primary objective was to create a reliable process for decreasing central line infections, with one source of truth for all information.

### Results

Following a consistent organizational philosophy empowered St. Bernards to create a highly reliable process for decreasing central line infections. The organization's most recent standardized infection ratio, as of April 2020, was .241.

Thanks to its efforts, St. Bernards accomplished its goal of lowering the SIR below the 1.0 national standard. Here is a full timeline of St. Bernards' SIR improvements:

- FY Oct. 2016 – 2017 SIR of 1.551
- FY Oct. 2017 – 2018 SIR of 1.03
- HIRO launched in Nov. 2018
- FY Oct. 2018 – 2019 SIR of 0.257



## Makes Major Gains in Battling the Opioid Epidemic

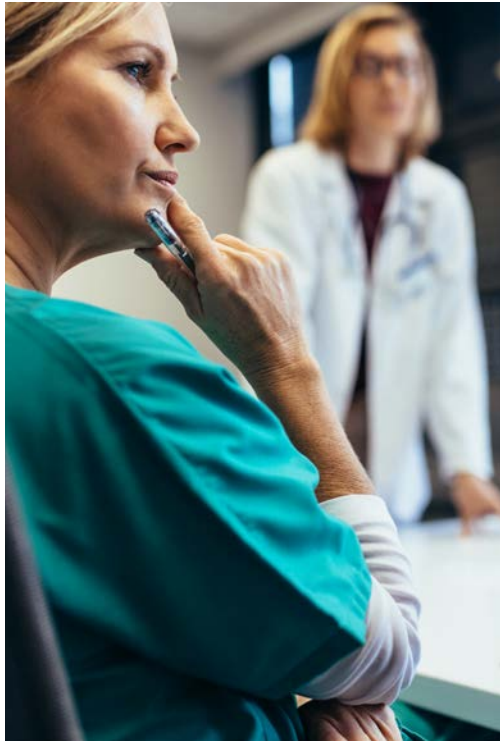
**Results include a 94% reduction in Dilaudid® prescriptions and a 46% decrease in other opioids**

The opioid epidemic hit Calvert County, MD, hard. By 2015, CalvertHealth Medical Center (Prince Frederick, MD) was rated the top prescriber for the highest amount of morphine milligram equivalents in the area — a watershed moment for the organization. CalvertHealth recognized its obligation to tackle the crisis raging in its community.

**“We heard the very personal experiences of community members, including those right here in our hospital, whose families were impacted by substance abuse disorder. We saw it as a call to action to move forward and make a real change to prevent this epidemic from spreading any further,” said CalvertHealth CIO Phil Campbell.**

### A plan of attack

CalvertHealth responded with a multi-pronged initiative to engage all stakeholders. The organization created an opioid stewardship task force and petitioned outside entities to participate. Achieving buy-in from community physicians, pharmacists, dentists, and local support programs was crucial to fostering true stewardship. Outreach partners witnessed CalvertHealth’s leadership commitment to combating the epidemic and adopted the task force framework.



Education efforts furthered area support. For providers, CalvertHealth produced brochures outlining new hospital policies. For patients and families, the hospital created easy-to-read materials explaining what opioids do, their role in pain management, and the availability of alternative therapies.

## AT A GLANCE

Located in Prince Frederick, MD, CalvertHealth Medical Center is a nonprofit, community-owned medical center with 110 beds. Part of CalvertHealth, the hospital serves approximately 420 patients daily.



**MEDITECH Podcast: How CalvertHealth is addressing the opioid crisis**

[Listen to the episode.](#)



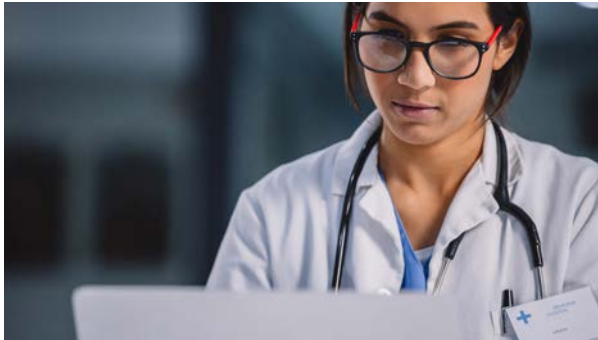
### **Leveraging technology**

By becoming a member of the Chesapeake Regional Information System for our Patients program, CalvertHealth is able to exchange data with hospitals and individual providers in Maryland and DC, alerting physicians to patient red flags, such as “doctor shopping” for opioid prescriptions. A single sign-on button available in MEDITECH’s EHR streamlines access to CRISP, enabling physicians to track prescription information outside of CalvertHealth.

The hospital also incorporated decision support within MEDITECH that prompts them to search the CRISP database before prescribing and sets reminders of appropriate CDC-recommended dosing guidelines. Standard order sets within MEDITECH were also updated to align with these guidelines.

In recognition of the hospital’s successful opioid stewardship program, CalvertHealth was awarded the Health Quarterly Innovator of the Year award in 2017. Reflecting on the program’s achievements, Director of Pharmacy Kara Harrer remarked, “Seeing our success in the ED with Dilaudid and staff education, our community providers were very impressed. Even small changes can be enough to touch one family, or save a life.”

## Reduces Sepsis Mortality Rate by 65% With MEDITECH



### About

Frederick Health Hospital (Frederick, MD) is the hub of Frederick Health and the only acute care hospital in the county. Located 50 miles from Baltimore, this nonprofit 269-bed facility and its outpatient services account for 285,000 visits every year. Frederick Health Hospital was recognized by CHIME as a Digital Health Most Wired Level 8 organization.

### Challenge

Frederick Health Hospital's leading cause of death was sepsis, with mortality rates as high as 16%. An analysis determined that 97% of sepsis patients arrived at the hospital via the emergency department. The hospital did not have bundles or protocols in place, nor did it have a system to recognize borderline sepsis patients.

### Execution

Recognizing the need for a comprehensive approach to sepsis care, hospital leadership designed a three-pronged strategy:

1. Form a multidisciplinary committee to establish best practices for sepsis screening, order set bundles, documentation, and chart review.
2. Improve sepsis awareness by changing the organizational culture at a multidisciplinary level.
3. Institute a corporate goal of reducing sepsis mortality and surpassing the core measure at a minimum of 80%.

### Results

A strong, collaborative, and multidisciplinary approach enabled Frederick Health Hospital to decrease sepsis rates and improve core measure compliance while changing the organization's culture:

- SEP-1 core measure compliance rates rose from 32% to 80%, but have reached as high as 91%. (The national average is 51%.)
- The sepsis mortality rate decreased 65% from almost 16% down to 4.76%.

The hospital has transformed itself from a below-average performer to a recognized leader in the fight against sepsis.



## Achieves Quality Outcomes and Creates Organization-Wide Efficiencies



### About

South Tyneside and Sunderland NHS Foundation Trust serves a population of 430,000 in Northeast England. The trust is an NHS England Global Digital Exemplar, distinguished for delivering exceptional and efficient care through digital technology. Sunderland Royal Hospital, the trust's 970-bed acute care facility, achieved Stage 7 designation from HIMSS Europe in 2020.



### Challenge

Since 2019, the National Health Service has focused on redesigning the way patient care is delivered, as outlined in its Long Term Plan. Among its plan to restructure and create a more sustainable system, the NHS aims to advance digital technology to improve quality, safety, patient experience, and outcomes.

As a leading GDE, Sunderland sought to further improve care quality and safety, as well as generate efficiencies and cost savings. The GDE is also creating examples for other NHS trusts to follow.

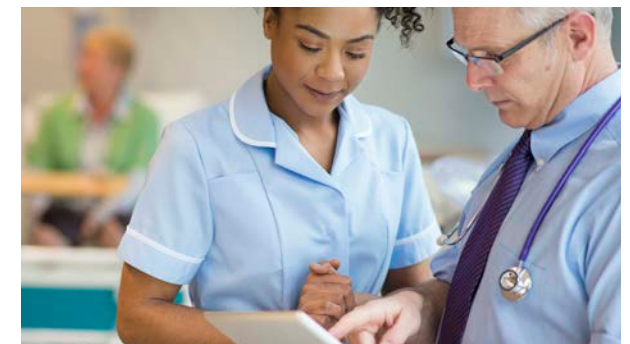
### Execution

By leveraging the information within its MEDITECH EPR, the trust has exceeded NHS expectations specific to early intervention, data accuracy, and closed-loop medication management to help reduce medication errors. Additionally, the trust is realizing an extensive range of time-saving and cash-releasing benefits associated with its GDE program, and its target of being “paper-free at the point of care.” Real-time documentation greatly reduces incomplete information and transcription errors, resulting in greater accuracy of information.

### Results

Using MEDITECH's integrated EPR, the trust was able to:

- Surpass a 99% sepsis screening rate through real-time patient trackers and clinical decision support.
- Reduce the medication error rate to 0.5% annually through integrated e-Prescribing, pharmacy, and medication administration.
- Exceed its 80% Commissioning for Quality and Innovation target related to e-Referral Service implementation and slots published, reaching 97%.
- Achieve 100% accuracy of observational data by eliminating transcription errors.
- Reduce its “did not attend” rate by 1.1 points, from 11.3% to 10.2%.
- Prompt clinicians to document observations on 100% of all pain scores, up from just 20%.





**MEDITECH**

## **Predictive Analytics With Clinical Surveillance**

*Use predictive analytics to help clinicians prioritize care*

## Reduces Maternal Complications With Support From MEDITECH

When The Joint Commission introduced 13 new performance measures to address maternal complications such as obstetric hemorrhages and severe hypertension/preeclampsia back in 2020, the Birthing Center at Golden Valley Memorial Healthcare (Clinton, MO) saw an opportunity to test Surveillance, its new predictive analytics solution from MEDITECH.

**“That was the impetus for us to look into leveraging Surveillance for its monitoring capabilities,” said Birthing Center Director Wendy Bolinger, MBA, BSN, RNC-ONQS. “Since we went LIVE with the solution in 2021, we’ve seen a drastic improvement in complying with The Joint Commission’s elements of performance for managing these maternal complications.”**

Bolinger noted that Surveillance and staff education have reinforced compliance and help clinicians provide timely treatment to patients, with monthly audits often reporting 100% compliance.

**“Maternal morbidity and mortality rates in the United States are the highest in the industrialized world and continue to rise,” said Bolinger. “Because of Surveillance, we’re able to track and treat maternal complications. If a patient meets the criteria we specified in the profile, nurses and physicians are notified on their status boards and trackers. From there, clinicians have immediate access to processes and protocols for timely treatment.”**

### Identifying at-risk patients

The Birthing Center set a goal to audit compliance in January 2021. A multidisciplinary team of clinicians, IT analysts, and the quality outcomes coordinator developed policies, procedures, and algorithms based on evidence-based practice for maternal complications.

Focusing on maternal hemorrhage and severe hypertension/preeclampsia, the team built surveillance profiles that help identify patients who meet the criteria for these critical events and provide clinicians with actionable insights. In addition to educating clinicians, the team provides just-in-time training in the event of a fallout.

## AT A GLANCE

A rural healthcare organization located in Clinton, MO, Golden Valley Memorial Healthcare consists of a 56-bed hospital with a 24/7 emergency department, several clinics, outpatient services, and a cancer center.



### GVMH Birthing Center’s surveillance profiles also include:

- High-risk newborn
- Apgar score
- Newborn bilirubin
- Hysterectomy
- Nulliparous C-section

“Giving staff fingertip access to policies, procedures, and protocols keeps them at the bedside, where they can manage the complex care of these patients,” said GVMH Quality Outcomes Coordinator Nancy Engeman, BSN, RN.



### **Maternal hemorrhage profile**

*Risk assessments are performed at every prenatal visit and during each shift throughout labor and delivery; postpartum risk assessments chart fundal and abdominal checks during recovery. The profile is triggered by either estimated or quantitative blood loss for a vaginal or Cesarean delivery. Nurses quickly see the patient's risk level and are prompted to place appropriate orders, such as blood units on standby, for those at high risk.*

### **Hypertensive crisis profile**

*Birth Center patients qualify for the hypertensive crisis profile when their systolic blood pressure measures 160 or their diastolic blood pressure measures 110 and persists longer than 15 minutes. Once the criteria are met, the hypertensive crisis algorithm is initiated, with medication dosing occurring within 30 to 60 minutes. Vital signs are taken every 10 minutes while patients are in crisis, and medication dosing continues until levels are within the target range of 140 - 150 for systolic blood pressure and 90 -100 for diastolic blood pressure.*

The Birthing Center uses a surveillance watchlist to give clinicians a high-level overview of patients who meet the criteria for these profiles. Nurses and physicians simply click on the date and time of the alert to see why the patient qualified and view the hospital's treatment protocol.

### **Meeting the needs of every care setting**

Bolinger is confident the Birthing Center will be adding more surveillance profiles in the future.

“With a heavy focus on maternal safety right now, we'll continue to watch for high-risk areas that need to be monitored and add them to our surveillance watchlist,” she said.

In addition to the surveillance profiles for maternal complications, the Birthing Center has built a profile to identify neonates at risk for hypoglycemia. Through staff education, surveillance monitoring, and monthly audits, the organization has seen a tremendous improvement in detecting susceptible newborns.

The Birthing Center isn't the only department benefiting from the predictive analytics solution. Surveillance is supporting clinicians throughout GVMH, especially Infection Control.

**“Having Surveillance was key for our facility to monitor our COVID process, and we have a pretty extensive list of infection prevention profiles that help us monitor patient care,” said Engeman. “Surveillance allows us to zero in on the cases that we need to review, instead of reviewing a ton of normal charts and then finally getting to something that we need to actually have eyes on.”**

## Lowers Hospital-Acquired C. Difficile Rates by 30% With MEDITECH

### About

Southern Ohio Medical Center (Portsmouth, Ohio) is a 211-bed hospital that serves a large, sparsely populated area in Southern Ohio and Northern Kentucky. The hospital and its 45 outpatient clinics support a community in which chronic conditions are prevalent and the poverty rate is high.

### Challenge

SOMC's infection prevention and quality improvement team established a multidisciplinary process to differentiate between an active C. diff infection, or CDI, and colonization. This screening process helped the hospital to achieve a standardized infection ratio of 0.394, well below the 2020 industry average of 0.52. However, its labor-intensive tasks introduced challenges. To automate the process in Expanse, SOMC engaged MEDITECH to develop tools that would help to expedite appropriate C. diff testing.



### Execution

After SOMC went LIVE with its Expanse EHR in 2020, the infection prevention team realized that using discrete information captured in the system could help to automate processes and lead to timelier decisions.

### Results

System automation led to many positive outcomes, including:

- A 30% relative change in hospital-acquired CDIs.
- A 32% decrease in the number of canceled tests.
- 3.5 hours of the infectious diseases pharmacist's time saved per week.



**"We are always looking for better ways to provide care. Our performance improvement model is called *A Better Way* and our team, in partnership with MEDITECH Professional Services, did just that. We found a better way to detect C. difficile infections and provide patient treatment earlier on."**

**Valerie DeCamp, DNP**  
Vice President of Clinical Integration  
and Chief Quality Officer  
Southern Ohio Medical Center

## Uses MEDITECH's Surveillance Solution to Monitor and Manage COVID-19 Patients

The Valley Hospital found itself on the outskirts of the pandemic's epicenter at the end of March 2020. New Jersey had the second-highest COVID-19 cases in the country, and many of Valley's units were dedicated to caring for these patients. By April, coronavirus patients made up 75% of Valley's census.

Valley uses Surveillance, MEDITECH's predictive analytics solution, to monitor its patients' COVID-19 status. The hospital is one of the first and most prolific users of Surveillance, which has helped its care teams to respond to changing patient conditions, manage care, and increase compliance with quality metrics.

### How Surveillance works

Surveillance uses evidence-based rules to analyze data in real time, identifying patients who meet specific criteria. Actionable surveillance boards automatically populate with qualifying patients and fit smoothly into clinicians' workflows. Status boards and trackers throughout MEDITECH's EHR are updated with qualified patients. Alerts are broadcast to staff via mobile devices, expediting interventions and reducing communication delays.

Valley's primary Surveillance specialist, Chris



Neumann, said, "The solution can be used for anything, but we specifically modified it to manage our patients who test positive or negative for COVID-19, or are waiting for test results."

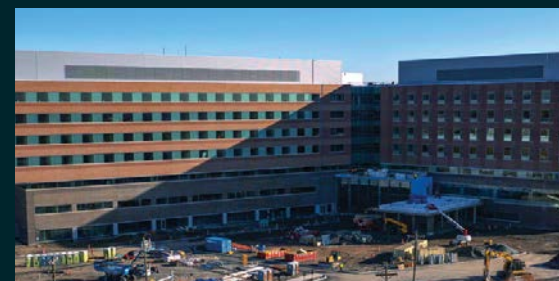
### Positive, negative, and pending result profiles

In the early stages of the pandemic, Valley's IT staff built a status board to track ventilator patients who were COVID positive.

"Clinicians wanted to be able to determine how many patients had COVID-19 so the patients could be managed with the proper isolation protocols," said Valley AVP and CAO Mike Burke. "With the number of cases skyrocketing in New

## AT A GLANCE

The Valley Hospital (Paramus, NJ) is an acute care, not-for-profit hospital serving approximately 440,000 people in the Bergen County area. It is part of Valley Health System, which was recognized by CHIME as a Digital Health Most Wired Level 9 organization.



### Guiding customers through the COVID-19 pandemic

[Read more.](#)

York and New Jersey, we were concerned about having enough PPE and ventilators. Identifying COVID-positive patients helped us to conserve dwindling supplies for the right patients.”

According to Burke and Neumann, this status board evolved during the pandemic to identify patients with a positive, negative, or pending lab result. Using color-coded indicators, the staff can quickly see their patients’ status.

These indicators are attached to various nursing status boards and trackers throughout Valley’s EHR. The letter P, highlighted in red, displays for positive results, while the letter N, highlighted in green, displays for negative results. If test results are not yet available, a PR, highlighted in blue, displays on the board.

As the pandemic continued, Valley refined the positive profile to include patients who had been identified by Infection Control as COVID-19 positive from outside results and required isolation.

### Special indicators

“We needed to come up with a way to alert clinicians about the COVID-positive test result from previous visits or other testing facilities,” explained Neumann. “Initially, we used registration queries to identify patients, but that type of query drops off the status board after the patient is discharged. So we used special indicators instead, because they’re attached to the patient’s medical record and carry over to subsequent visits.”

Valley set up two special indicators for COVID-19: confirmed and suspected. Designed to stay with the patient long term, these actionable indicators alert clinicians to “at risk” patients. Valley also uses special indicators for patients who have been tested at other organizations, using the “suspected” indicator to alert staff of potentially positive patients to begin isolation protocols. Then, if deemed positive by Infection Control, the indicator is changed to “confirmed.”

### Public status boards and watchlists

Because public status boards establish a house-wide view, Valley finds them ideal for tracking COVID-19 patients. When a test is ordered for a patient who may have the coronavirus, the order qualifies the patient for the hospital’s public board. This gives the staff relevant information up front rather than checking each patient on the unit individually.

For Infection Control, Valley uses a watchlist that aggregates multiple surveillance profiles, including the three COVID-19 profiles. The watchlist displays the date and time the patient qualified for each profile, but organizations can choose to display the time since the patient qualified. Infection Control staff, nurse managers, and others can then drill down to view additional information on the profile criteria screen, which indicates the patient criteria that triggered the profile.

### Recommendations for building profiles

Like most hospitals in the earliest-hit communities, Valley’s response at the beginning of the pandemic was reactionary as the organization grappled with responding to the novel disease. But now that Valley has built several iterations of COVID profiles, Neumann is in a position to offer others some valuable advice.

“In hindsight, it’s so important to ask the right questions before building your profiles,” he said. “What exactly are you tracking, equipment? Available beds? What patients are occupying those beds? We didn’t ask these questions in the beginning.”

Neumann noted that, as the situation changes, what you’re looking to track may also change. Other data items can be used as well. The patient’s portal of entry — a skilled nursing facility, for example — could be used as a criterion due to its high-risk population.

Valley continues to expand and refine its use of Surveillance to monitor COVID-19 patients. These efforts include a COVID-19 test surveillance profile.

“We’re looking to extend our surveillance profiles to look at patients tested at another location, previously tested, or not tested but in isolation,” he said. “This profile will give clinicians a more complete picture of our patients’ statuses, and help them to keep everyone safer.”

## Decreases Antibiotic Use Through MEDITECH's Antimicrobial Stewardship Toolkit



### About

NMC Health consists of a 103-bed, not-for-profit medical center and 10 clinics. Located in Newton, KS, the health system serves Harvey County and the surrounding area.

**"It was quite a change in our process and I was a little worried that I might have to push the staff to use the system. But because it streamlined our workflow significantly, there was immediate adoption by the staff."**

**Allen Graber**  
Director of Pharmacy  
NMC Health

### Challenge

According to the CDC, at least 2.8 million U.S. adults are infected with antibiotic-resistant bacteria each year. NMC Health prioritized antimicrobial stewardship, but it had issues with convoluted processes, and too much antibiotic use led to increased costs. In NMC Health's previous workflow, pharmacists accessed two separate vendor systems to monitor and review medication orders. Multiple clicks were required to view results, and documentation was available to pharmacists but inaccessible to hospitalists. This became an inefficient process and often required extensive manual cleanup.

### Execution

NMC Health set goals to reduce the trend of antimicrobial use and identify antibiotic costs per patient day. The health system implemented MEDITECH's evidence-based Antimicrobial Stewardship Toolkit, using the toolkit's advanced clinical decision support and guidance to align best practice workflows in Expanse. This improved collaboration between pharmacists and physicians, as the workflows centralized information and made it easier to document and review data.



### Results

NMC Health is employing Antimicrobial Use and Resistance Reporting and Antibiotic Cost Reporting to analyze key metrics and positive outcomes since its toolkit implementation. These pre-go-LIVE vs. post-go-LIVE improvements include a:

- 4% decrease in total administration days, representing a downward trend in antibiotic use (days of therapy).
- 30% decrease in cost per patient (per day) and total costs, gathered using MEDITECH's Business and Clinical Analytics solution.

## Uses MEDITECH Toolkit and Surveillance Solution to Combat CAUTI



### About

RCCH HealthCare Partners spans 12 states, with its headquarters located in Brentwood, TN. The organization comprises 18 regional health systems. Thirteen of RCCH's hospitals use MEDITECH's EHR.

### Challenge

RCCH sought to eliminate inconsistencies in its approach to preventing catheter-associated urinary tract infections, and to implement uniform best practices for indwelling catheters across the five hospitals on MEDITECH's most recent release. To do so, RCCH needed an EHR solution that enabled clinicians to more effectively analyze the data they needed to monitor and manage patients who were at a higher risk of CAUTI.

### Execution

RCCH turned to MEDITECH's Quality and Surveillance solution and CAUTI Prevention Toolkit for support in the early detection and prevention of CAUTI. Surveillance provided clinical guidelines and treatment options to clinicians, and helped ensure that all indwelling catheters were placed in compliance with CDC best practices embedded within the toolkit.

### Results

After implementing MEDITECH's Quality and Surveillance solution and CAUTI Prevention Toolkit, momentum from the CAUTI surveillance initiative led to the following improvements at RCCH:

- 45% decrease in CAUTI from Q4 2017 to Q1 2018
- 35% reduction in indwelling catheter days



**"We have a continuous focus on patient safety and preventing harm. I am very pleased with the attention toward appropriate use of urinary catheters and the diligence to prevent hospital-acquired infections such as catheter-associated urinary tract infections. The MEDITECH Surveillance functionality enables nurses to leverage technology in patient safety efforts."**

**Dana Obos**  
Chief Quality Officer,  
VP Clinical Operations  
RCCH HealthCare Partners



## Uses MEDITECH's Surveillance to Help Clinicians Identify and Prevent Infections

### About

The Valley Hospital (Paramus, NJ) is an acute care, not-for-profit hospital serving approximately 440,000 people in the Bergen County area. It is part of Valley Health System, which was recognized by CHIME as a Digital Health Most Wired Level 9 organization.

**"Why wouldn't you want to free staff from performing repetitive tasks or surveilling patient information when the EHR can accomplish those same functions faster and more easily?"**

**Chris Neumann**  
Project Specialist  
Valley Health System



### Challenge

Like most healthcare organizations, The Valley Hospital had always struggled with early identification of sepsis, both in the ED and on inpatient floors. Motivated by the Institute for Healthcare Improvement's 100,000 Lives Campaign, Valley's leadership assigned advanced practice nurses and quality assessment staff to track specific conditions and evaluate patients.

When Valley moved forward with MEDITECH's EHR, the hospital's leadership team recognized the potential for a new electronic surveillance tool in helping clinicians with the early detection of sepsis and accepted the opportunity to be an early adopter.

### Execution

Participating in agile development and proper implementation processes enabled Valley to collaborate with MEDITECH on a data monitoring system, which simultaneously analyzes clinical and demographic data from throughout the EHR. Using rule logic grounded in evidence-based medicine, the surveillance system analyzes data for subtle changes in a patient's condition that care teams may miss, notifying clinicians and providing guidance for the timely initiation of sepsis care."

### Results

MEDITECH's Surveillance solution quickly earned the organization's confidence for its power and versatility, and the hospital sees no limit in its potential. With 23 surveillance boards in use, Valley is yielding impressive results:

- 100% of HIM-coded septic patients were found by electronic surveillance in March 2016.
- 93% of patients who qualified for the sepsis surveillance board were coded with the sepsis diagnosis by HIM.
- Flu vaccine administration compliance increased from 78% to 98%.
- 30 minutes in estimated nursing time was saved by eliminating manual counts of urinary catheters and central lines for CAUTI and CLABSI rates.
- VTE prophylaxis compliance rose to 93%, a dramatic improvement from the low 70s.

Surveillance has emerged as the Valley IT department's first choice for hospital-wide problem solving. Clinicians are confident that the solution is identifying conditions, providing relevant data, and expediting ordering to initiate treatment sooner.



**MEDITECH**

**Data-Driven Decision-Making**

*Visualize Data to Measure and Improve Performance*

## Unleashes the Power of Data With MEDITECH's Analytics Solution



Sierra View Medical Center, for years, was challenged with complex and cumbersome processes for retrieving data from its electronic health record. Few report writers had the specialized knowledge and skills to write them, and reports could take hours to run, depending on the amount of data requested. The leadership team was frustrated by the difficulty in acquiring the right data at the right time, especially when it was needed immediately.

Regulatory surveys were a unique challenge due to the "on the spot" requests for reports on specific patient populations used in retrospective chart review.

"We would cringe during surveys because we had all that data, but we couldn't get to it,"

said SVMC Director of Information Technology and Clinical Informatics Traci Follett.

MEDITECH's Business and Clinical Analytics has helped SVMC to streamline the survey process by giving staff access to high-level dashboards that filter and organize data, transforming it into actionable information that can be leveraged in real time.

To prepare for Joint Commission and state surveys, SVMC's IT team created dashboards for patient populations commonly requested by surveyors.

**"Now, when they want to see patients who have had procedural sedation done in the ICU or patients at risk for falls, we have an up-to-date list available immediately," explained Follett.**

### 'A game changer'

BCA isn't just helping SVMC with surveys. MEDITECH's analytics solution delivers actionable data, fueling the organization's ability to make more informed decisions and improving data accessibility for end users, particularly executives.

"It's been a game changer in terms of being able to get data into the hands of people who need to make important decisions, either on the clinical or business side," said Follett.

## AT A GLANCE

Sierra View Medical Center is a district hospital located in a rural community in Porterville, CA. This 167-bed, acute care facility has served the residents of Tulare County for more than 60 years."



### Scorecards in Business and Clinical Analytics

Leaders and designated staff can view key metrics at any time, including:

- Lengths of stay
- Admissions
- CPOE scores
- Readmission information
- Resource utilization

She noted that executives required little to no training to access dashboards that enable them to focus on specific service lines and view census information and patient volume.

“Developing BCA dashboards is an efficient and intuitive process,” said Follett. “Standard dashboards are easy to customize to executives’ needs, and end users can easily modify them on the fly to filter specific data elements they want to focus on.”

### **Interactive and customizable dashboards**

Because BCA is an integrated data analytics solution, it displays data quickly, without slowing down the system, and often eliminates the need to run the report altogether. Before using the solution, SVMC relied on static reports, inefficient in the constantly changing healthcare environment.

“Some departments, like imaging, are using BCA dashboards to look at volumes to determine the productivity of their staff and make any necessary scheduling adjustments,” said Follett. “In the surgical space, we’re using dashboards to identify the specific providers in the operating room, the number of cases they’ve worked on, and the staff members who were present for the operation.”

On the financial side, BCA is used to view statistics related to volumes, patients’ lengths of stay, delinquent accounts, and more on a clean, customizable dashboard.

### **Intelligent application of data**

SVMC also uses BCA to report on its progress with specific quality improvement initiatives, such as preventing falls and hospital-acquired infections.

“We use BCA a lot in clinical areas because we can monitor data throughout the year to see where our vulnerabilities are,” explained Follett. “By identifying and then addressing gaps in care, we can measure and monitor our progress with any of our quality improvement projects.”

SVMC continues to transition from the older, static report methodology to dynamic BCA dashboards that are much more accessible to end users. Its data governance committee works with both clinical and business teams to prioritize dashboard creation, a testament to the solution’s usefulness and versatility.

“More than anything, BCA has brought value to our organization,” said Follett. “Improved decision-making means improved outcomes, and that’s only possible with insightful analytics and usable data.”



## Increases Physician Efficiency With MEDITECH's BCA Solution



Omer Moin, MD, was striving to make data more useful and meaningful to his medical staff. As the chief of emergency medicine at Lawrence General Hospital (Lawrence, MA), Dr. Moin oversees a dynamic, urban ED located in one of the most underserved communities in the commonwealth. Lawrence General serves a diverse population, many of whom are vulnerable. Easy access to the right data is critical for ED physicians to provide better, more efficient care.

So Lawrence General partnered with MEDITECH to create a customized ED Throughput dashboard, enabling Dr. Moin and his team to leverage the data most helpful to them as a busy ED in an urban environment.

### Tailoring dashboards to tackle area issues

A version of the ED Throughput dashboard is included with MEDITECH's Business and Clinical Analytics solution, but Dr. Moin wanted more specific metrics related to patient throughput, return visits to the ED, and behavioral health issues. Access to this information would enable him and his team to improve the quality of care they provide.

In addition, Dr. Moin requested a provider scorecard on the dashboard. The scorecard would provide a more objective look at his medical staff's performance by identifying key metrics such as total ED visits, number of CTs ordered, and total 72-hour revisit patients. It would also show patients' average minutes in each ED throughput phase.

### Accessing the right data

Lawrence General engaged MEDITECH for several EHR-related initiatives, including collaborating with Dr. Moin and his team on BCA dashboards. Because BCA is capable of providing insights on specific sets of data points, Dr. Moin analyzed information in the EHR and determined which touch points collected the data he most wanted to see.

Together, MEDITECH and Dr. Moin created a dashboard that goes well beyond tracking the average minutes a patient remains in each phase of their stay, enabling the ED to identify

## AT A GLANCE

Lawrence General Hospital (Lawrence, MA) has one of the busiest emergency departments in the commonwealth, with over 70,000 visits per year.



"We focused on the ED Throughput dashboard not only because of how powerful it is for the ED, but because of the even more powerful impact it has on providers."

**Omer Moin, MD, FACEP**  
Chief of Emergency Medicine  
Lawrence General Hospital

### Analytics from the ED Volume dashboard provide insights on:

#### Staffing

Census data such as ED counts by priority and ED counts by hour enable the leadership team to allocate staff more effectively.

#### LWBS rates

Opening up a fast track area in the ED enabled staff to see more patients, reducing the number who left without being seen.

#### ICU transfers

On a daily basis, the ED Volume dashboard displays the number of patients who were admitted to the ICU and the number of patients who were transferred to other ICUs when Lawrence General was at capacity.

potential bottlenecks. It also provides targeted analysis on patients presenting with mental health symptoms and has been used to make a business case for offering addiction services.

**“BCA has taken us to levels not achieved on previous EMRs,” he said. “It helps us answer questions about what’s happening at any given moment in the ED.”**

### Adding value to practice

The provider scorecard section goes into even deeper detail to help clinicians add value to their practice. Dr. Moin noted the scorecard has been particularly helpful to new physicians who recently completed their residencies.

Before introducing the scorecard to the physicians on his team, Dr. Moin worked with MEDITECH to ensure the metrics would deliver insights the providers wanted to know, such as how many patients return to the ED within 72 hours (a metric that indicates discharge effectiveness) and the number of procedures, CTs, and ultrasounds ordered by each physician. It also includes the first provider/last provider to see the patient, which displays patient hand-offs upon shift change.

Dr. Moin also worked with MEDITECH to create a nurse scorecard, similar to the one for physicians. Nursing metrics collected include how long it takes for the nurse to fully triage a patient, put the patient into a bed, and

discharge a patient. Nurse leaders confirmed they were collecting the right information to enable them to track and trend performance, so they could focus on what to improve.

**“It adds value to say that as an organization, we are looking at the clinical work that physicians and nurses are doing, and using this data to increase clinical understanding,” said Dr. Moin.**

### Impacting emergency care

Every month, both scorecards are shared with clinicians, who can easily view their individual performance trends and compare them with their peers. Data is anonymized, but staff discuss their performance amongst themselves to see where they can improve individually.

Scorecards are especially helpful for ED physicians who have just completed their residencies. They can compare the number of CTs they ordered with the number ordered by their peers and look into reasons why they might be ordering more scans. Other useful metrics for new physicians include the amount of time each patient spends in the throughput phases, such as how long it takes the physician to decide to admit a patient; Dr. Moin noted these measures improve with experience.

But the numbers themselves don't tell the whole story. That's why the scorecard includes patients' Emergency Severity Index levels.

Metrics include the number of patients who are rated as ESI 1 or 2 — the most severe categories — that the physician treated. Providers who are treating patients with a higher acuity will see fewer patients per hour than physicians who are treating people with less serious complaints. This is valuable information when providers look at their performance measures.

Scorecard metrics are also correcting misperceptions at Lawrence General. For example, some physicians thought that they were frequently seeing patients before the nurses had assessed them. Upon looking at the data, Dr. Moin learned physicians got to patients first less than 5% of the time.

### Focusing on health equity

Now proficient in BCA, Dr. Moin is able to pull stats right before important meetings and build dashboards on the fly.

**“This has revolutionized what I am able to do — not just for the ER, but also for the hospital,” he said.**

Lawrence General also worked with MEDITECH on a health equity dashboard, which continues to evolve. It enables Dr. Moin and his team to identify disparities and track their progress, improving the quality of care for all patients.

## Advances COVID-19 Contact Tracing With MEDITECH

### About

Emanate Health is the largest nonprofit healthcare provider in California's San Gabriel Valley. It consists of Emanate Health Queen of the Valley Hospital in West Covina, Emanate Health Inter-Community Hospital in Covina, Foothill Presbyterian Hospital in Glendora, and Emanate Health Home Care and Hospice in West Covina, as well as a network of clinics. More than one million people receive care within this 625-bed organization.

**"We can identify not just the source of COVID-19 infection — who did this patient/staff member likely get the virus from — but also who did the patient or staff member potentially expose during their infectious period. I am not aware of any system in the market that can accomplish what we just did."**

**Loucine Kasparian**  
Corporate Director, Infection Control  
Emanate Health

### Challenge

During the pandemic, preventing the spread of COVID-19 was among the most significant challenges facing healthcare providers. One of the keys to slowing down transmission was effective contact tracing to identify people who may have been exposed to an infected person. At the height of the pandemic, the timing was crucial for implementing a reliable and efficient system to conduct contact tracing among staff and patients to minimize the exposure window while identifying anyone at risk after a potential exposure to COVID-19.

### Execution

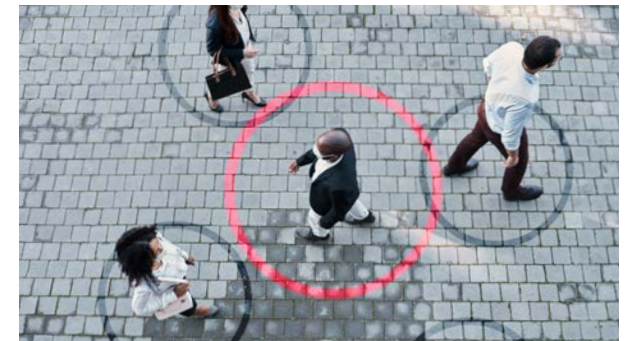
Emanate Health collaborated with MEDITECH to quickly develop contact tracing dashboards in its MEDITECH Expanse EHR. Its initial goal was to identify patients and staff at high risk for COVID-19 exposure as a result of an inpatient testing positive during their hospital stay. Achieving this goal required staff to clearly understand the exposure window, identify at-risk patients and hospital staff, and prioritize COVID-19 cases determined to have high-risk exposure events. Analyzing patient location history while integrating data from other vendor sources helped staff identify roommates who may have been exposed, employees who may be at high risk for exposure, and patients who are also employees.

### Results

Emanate Health and MEDITECH leveraged Business and Clinical Analytics dashboards within Expanse — integrating data from other vendor sources — to customize an automated contact tracing program. Contact tracing dashboards enable staff to:

- Identify high-risk exposure events based on the exposure window.
- Accurately prioritize COVID-19 cases identified as coming from high-risk exposure events.
- Identify at-risk patients and staff to minimize the spread.

Emanate Health plans to incorporate BCA dashboards into daily operational use by Infection Control and Employee Health to perform similar contact tracing for other infectious diseases such as C. difficile and MRSA.



## Monitors Coronavirus Cases Using MEDITECH's BCA Solution

To stay ahead of the coronavirus pandemic, the Maryland Department of Health mandated on March 3, 2020, that all healthcare organizations report to the state on any patients who present with symptoms of COVID-19. CalvertHealth's infection control department looked to their business application specialist and MEDITECH's Business and Clinical Analytics solution to meet the daunting challenge of pulling together the necessary data within 24 hours. The team was already using BCA for its reporting features and was able to leverage datasets they had previously created to quickly build a coronavirus monitoring dashboard and meet the next-day reporting deadline.

### CalvertHealth's COVID-19 monitoring dashboard

The dashboard groups patients with COVID-19 symptoms into two types: influenza-like illness and acute respiratory illness. ILI patients have a fever over 100 degrees and a cough or sore throat. ARI patients have at least two symptoms that include cough, fever/chills, rhinorrhea/nasal congestion, shortness of breath/respiratory distress, or sore throat. Based on the number of symptoms present, patients are categorized as having either an ILI, an ARI, or both. CalvertHealth must report to the state health department any patient who presents with both or just one of those illnesses.



An infection control practitioner at CalvertHealth exports the patient/result data from the BCA dashboard and forwards that information to the Maryland Department of Health each day. Pulling the data directly from an interactive BCA dashboard saves time. But it also improves communication by enabling them to share information within CalvertHealth and to report it directly to the state.

## AT A GLANCE

Located in Prince Frederick, MD, CalvertHealth Medical Center is a nonprofit, community-owned medical center with 110 beds. Part of CalvertHealth, the hospital serves approximately 420 patients daily.



### Visualize your data

BCA dashboards can be created to track:

- Confirmed COVID-19 cases.
- Suspected cases.
- Personal protective equipment.
- Geographic locations of cases.
- Occupancy rates by department.

[Read more.](#)



### CalvertHealth's hospital occupancy dashboard

Days later, CalvertHealth was tasked with developing a second BCA dashboard to address a new requirement from the Maryland Institute for Emergency Medical Services System — which also came with a one-day turnaround time. This request focused on reporting hospital bed availability in acute, pediatric, and ICU settings, as well as overall occupancy. The information must be submitted by 8 a.m. daily, and helps state officials move patients to hospitals and clinics that can best accommodate them, in the event of capacity issues.

Using previously built dashboards and datasets, CalvertHealth's analyst created this dashboard in an hour and captured nearly all mandatory fields, with the remaining fields easily extracted from MEDITECH's EHR.

Meeting the tight reporting deadlines set by government agencies during the pandemic is a challenge. Lisa Carlson, an application specialist at CalvertHealth, said, "We get these notifications on a Tuesday and need to report by Wednesday. We have to be extremely flexible and responsive to these requests. This gets the job done for us."

## Monitors COVID-19 Patients With MEDITECH's BCA Solution

Firelands Regional Health System (Sandusky, OH) aims to stay ahead of the COVID-19 surge using analytics to identify coronavirus cases, trends, and resources. The 405-bed medical center developed an interactive reporting dashboard, specifically for COVID-19 patients, using MEDITECH's Business and Clinical Analytics.

### Tracking in real time with a COVID-19 reporting dashboard

Moving COVID-19 data from spreadsheets into a dynamic BCA reporting dashboard enabled Firelands to meet the organization's needs: one version drills down to patient-level detail for Infection Control staff, while the other contains high-level data for executives. Senior administration and Infection Control monitor the dashboard and share situation reports with medical staff and managers, the CDC, and other reporting bodies.



**"Our BCA dashboard has quickly become our go-to resource for the most updated information on our COVID-19 status and response," said Denao Ruttino, CIO/VP of Operations. "We are using this tool to monitor the state of the facility in real time, such as how many patients are coming through the ED and where bottlenecks are occurring."**

Using its COVID-19 dashboard, which updates hourly, Firelands is able to track surge capacity, case locations, bed occupancy and capacity, symptoms, lab results, testing by location, mortality rate, and patients discharged with COVID-19.

## AT A GLANCE

Firelands Regional Health System, a not-for-profit healthcare facility and the only full-service medical center in Erie County, serves the northern Ohio counties of Erie, Ottawa, Sandusky, and Huron.



"I am very proud of the Firelands team, as they've done tremendous work. Strong collaboration between Informatics, IS, Nursing, Infection Control, and others enables us to execute on an evolving vision. We are able to maintain situational awareness in a straightforward manner."

**Denao Ruttino**  
CIO/VP of Operations  
Firelands Regional Health System

### MEDITECH Podcast: How data brought 'new life and new hope' amid COVID-19

[Listen to the episode.](#)



### Coordinating responses through a central command center

Firelands' remote workers, medical staff, and community physicians conduct socially distanced meetings and phone calls every day to go over the dashboard to see where things are trending.

**"We've been able to react to situations, as we can see them in near-real time. Similarly, we've been able to identify test turnaround times and compare those turnaround times by outsourced lab to see where we are getting the fastest results," said Ruttino.**

The dashboard is also aiding in executing patient treatment plans, using special indicators to flag patients with COVID-19 symptoms. Visualization graphs of lab orders and test results are interactive, providing insights that help Firelands to improve its turnaround times.

By knowing where the medical center stands at all times, and predicting what's around the corner, Firelands is able to be proactive in its planning to ensure it has the appropriate resources in place.

## Uncovers COVID-19 Insights With MEDITECH's BCA Solution

When COVID-19 struck, leadership at NMC Health knew it was imperative that staff have timely access to the data they need to make the best, most informed decisions, whether related to bed occupancy, testing, or PPE. To do so, they turned to MEDITECH's Business and Clinical Analytics solution.

Dashboards in BCA provide staff with a single source of truth for critical information while also eliminating time-consuming manual data collection. By leveraging BCA and working alongside MEDITECH, NMC Health created COVID-19 dashboards to uncover insights needed to care for its patients during the pandemic.

**"We used MEDITECH's Professional Services for a project in the past and they were very responsive and great to work with," said Kelly Lippold, director of Clinical Informatics. "We wanted to track patients in-house who had been tested and run occupancy stats from certain locations, but our Professional Services analyst brought more ideas to the table and expanded what we would be able to look at."**



MEDITECH assisted the hospital's Incident Command team with evaluating, designing, and testing BCA dashboards, and creating reports to achieve their organizational goals. NMC Health's daily operational huddles are conducted based on data from three key dashboards: Snapshot, Lab Tests, and Supply Tracking.

## AT A GLANCE

NMC Health consists of a 103-bed, not-for-profit medical center and 10 clinics. Located in Newton, KS, the health system serves Harvey County and the surrounding area.



"The BCA COVID-19 tool helps communicate important data points with key stakeholders and medical staff, without text-heavy attachments. This dashboard is a valuable tool for arming managers with real-time statistics related to the state of COVID-19 within NMC Health."

**Heather Porter**  
Chief Clinical Officer  
and Incident Commander  
NMC Health



### **Snapshot:**

Provides a real-time view of in-house patients, which locations they're in, their testing status, and the number of patients on ventilators. Management also uses this dashboard to filter out key areas of concern, such as monitoring the hospital's occupancy rate to prepare for potential step-down overflow units. A "test pending" special indicator monitors patients across care settings; if patients are tested and diagnosed in an outpatient setting and later return to the inpatient setting with more serious symptoms, the indicator is still present

### **Lab Tests:**

Allows staff to monitor all lab tests by date range and zip code (for possible disease clusters). They can also track the volume of testing to prevent overtesting if supplies are short. Turnaround times for tests sent to state and reference labs are also tracked so the hospital can follow up on any delays.

### **Supply Tracking:**

Pulls supply reports into BCA through integration with MEDITECH's Materials Management and uses this data to monitor items in high demand. The Materials Management director reviews the average quantity used by day to determine the item's "burn rate." The result is compared to trends over time to calculate the "days left on hand" for that item, based on CDC recommendations, which is submitted to the state to justify supply purchases.

**"Capturing supplies through BCA has simplified the life of our Materials Management director. She can focus on what we need versus spending time figuring out what we already have," said Lippold.**



**MEDITECH**  
**Interoperability**

*Bridge the Gaps Between Care Transitions*

### Connects MEDITECH EHR With Epic, Advancing Interoperability



Photo credit: © Holland Bloorview Kids Rehabilitation Hospital

Children with complex medical conditions are often treated at more than one hospital, so it's imperative for clinicians to have access to a summary of care their patients receive from other healthcare organizations. That's why Holland Bloorview Kids Rehabilitation Hospital elected to implement a point-to-point interface connecting its MEDITECH EHR with the Epic EHR used by The Hospital for Sick Children (also known as SickKids) and Children's Hospital of Eastern Ontario. As three of the largest stand-alone children's hospitals in Canada, they frequently share patients.

The point-to-point connection provides these stand-alone children's hospitals with a consistent approach to accessing and sharing information, making it easier for patients and a summary of their records to move freely between settings.

#### Creating more efficient workflows

Holland Bloorview's connection to SickKids and CHEO improves the file sharing process and reduces manual tasks typically required. Historically, patient records have been available in view-only formats and often require printing and scanning before adding them to the patient chart.

Now, when external information is available, providers are alerted to launch the inbound patient summary. In addition to viewing demographic details and clinical information, clinicians have the option to select and consume problems, allergies, medications, and immunizations. Sharing this information results in more coordinated care when patients transition from SickKids to Holland Bloorview or CHEO.

**"Families forget some things, naturally, especially as they transfer between facilities, so it's extremely beneficial to be able to seamlessly access their information," said Clinical Team Investigator and Physician Director Peter Rumney, MD, of Holland Bloorview.**

## AT A GLANCE

Holland Bloorview Kids Rehabilitation Hospital (Toronto, ON) focuses on combining world-class care, transformational research, and academic leadership in the field of child and youth rehabilitation and disability. Providing both inpatient and outpatient services, Holland Bloorview is the only organization to achieve 100% in three successive quality surveys by Accreditation Canada.



### MEDITECH Podcast: Why elevating children's wellness is a social justice issue

[Listen to the episode.](#)



Photo credit: © Holland Bloorview Kids Rehabilitation Hospital

The interface is primarily used throughout three of the rehabilitation hospital's inpatient units and its day program. Clinicians are able to work more efficiently because the connection has put an end to "hunting and pecking" to find information.

System flexibility enables the hospital to determine who can pull data from the patient summary into the chart, creating a shared workflow. For example, at Holland Bloorview, admitting physicians consume problems, pharmacists consume immunizations and allergies, and nurses evaluate everything.

**"The selectivity is great," said Dr. Rumney. "It allows us to simply check boxes for what we want to consume. There's tremendous value in being able to organize the data so we can quickly gather insights that help determine the next steps in the patient's care."**

Dr. Rumney noted that the interface has helped to reduce redundant tests and procedures because patient information is easily accessible to providers.

### **Building a more comprehensive patient record**

Using the point-to-point interface to lay the groundwork for more in-depth information sharing, Holland Bloorview will take another leap forward when it implements MEDITECH's Traverse Exchange Canada. The cloud-based interoperability network goes beyond one-to-one sharing by enabling data exchange with other connected EHRs and provincial entities in the healthcare space.

**"We have a good starting point," said Dr. Rumney. "By establishing interoperable workflows, we're able to prepare for the future, when we'll be able to access data from more sources digitally and with more uniformity, allowing everyone to share the same comprehensive patient information."**

## Improves A&E Integration and Interoperability With MEDITECH's EPR

### About

Located in South Yorkshire, England, The Rotherham NHS Foundation Trust provides a wide range of health services to the Rotherham community and beyond. The trust, which sees approximately 100,000 A&E patients per year, opened its Urgent and Emergency Care Centre in July 2017.

### Challenge

For The Rotherham NHS Foundation Trust, following the NHS Five Year Forward View and achieving the nationwide goal of greater patient engagement came in the form of opening its new Urgent and Emergency Care Centre. But Rotherham overcame a series of challenges to become successful:

- Construction of the new emergency care center took 18 months. During that time, clinical leaders and IT were forced to design workflows for both of their temporary facilities, which were not suited for A&E, and their new building, which was still under construction.
- Although many of Rotherham's systems did not "talk" with one another, its GP system in particular struggled with interoperability due to a lack of integration between hospital, urgent care, and A&E systems.
- Working in-house with clinicians from various disciplines and with different levels of software experience resulted in opposing viewpoints and initial resistance to change.

### Execution

To help drive this project, Rotherham selected MEDITECH's Emergency Department Management solution for its inherent integration with the trust's MEDITECH EPR and its proven track record for interoperability. Rotherham had full backing from informatics, as the team already knew how to run MEDITECH, putting them one step ahead to support implementation in the A&E.

### Results

After the MEDITECH implementation, Rotherham's patients gained one source of truth for hospital and A&E care. Rotherham experienced automation benefits for both the trust and the A&E:

- Through interoperability with the NHS Personal Demographics Service, Rotherham was the first trust to link its records to the PDS, increasing NHS identification number verification from 85% to 99%. Penalty reductions for missing or unmatched numbers alone resulted in a savings of £153,300.
- When patients are admitted from the A&E, hospital clinicians can review A&E visit details, resulting in smoother care transitions. The trust improved revenue by £14 million in one fiscal year.
- Rotherham's A&E now has access to integrated lab and radiology reports. They can send electronic requests directly to hospital departments for processing and no longer have to wait for faxed or paper results. This provides for quicker insights, shorter wait times, and improved internal communications.

**"It is so valuable to have A&E information in one patient record. We never had that before. Things are better with MEDITECH and we've gained a lot. It's good for patients and good for care."**

Laura Mumby  
Head of EPR  
The Rotherham NHS Foundation Trust



## Transforms Care With MEDITECH's Interoperability Solutions



### About

Alder Hey Children's NHS Foundation Trust (Liverpool, England) is one of Europe's largest children's hospitals, with over 330,000 patients and families visiting the trust each year. In addition to the hospital's main site, Alder Hey offers pediatric services at a number of community sites across Merseyside, Cumbria, Shropshire, Wales, and the Isle of Man.

### Challenge

The NHS in the northwest counties of Cheshire and Merseyside, which includes Alder Hey, is working to connect healthcare and social services organizations through interoperability initiatives. As a main provider of pediatric care, Alder Hey works with children who transition to various outpatient settings; thus, they aspired to develop a method for sharing patient records across the region.

### Execution

The NHS designates the creation of sustainability and transformation partnerships — also referred to as health information exchanges — to promote more coordinated, cost-effective care. Many different vendors feed the Cheshire and Merseyside Sustainability and Transformation Plan. To help develop the pathway for sharing patient information, Alder Hey elected to use the continuity of care document available through MEDITECH, as MEDITECH is the only vendor using formatted data and global standards for cross-enterprise document sharing.

### Results

Within six weeks, Alder Hey and MEDITECH developed a clinical document architecture feed into the shared record, allowing clinicians to see a list of documents in the patient record including discharge summaries, radiology reports, pathology results, and standard demographics. Other benefits include:

- An improved user experience, as clinicians access information from other trusts and GPs as part of their workflow.
- The availability of necessary clinical information, to prevent duplicate investigations.
- A reduction in time spent collating and summarizing clinical information from other trusts and GPs.
- Improved clinical decision-making due to the availability of relevant information during the clinical encounter.

**"We wanted to do something based on IHE standards and didn't want to rely on complex integration. We quickly selected MEDITECH for their use of formatted data using XDS standards, and within only six weeks we had developed a CDA feed into the shared record. It was really easy to achieve and we now have a rich set of information."**

**David Reilly**  
Head of Interoperability  
Alder Hey Children's NHS Foundation Trust





## Increases Collections by 43% After MEDITECH as a Service Implementation



In the market for a new EHR, Roosevelt General Hospital's leadership narrowed the search by identifying must-haves: a cost-efficient solution to resolve their revenue cycle issues without sacrificing independence. RGH's selection committee chose MEDITECH Expanse through the company's MEDITECH as a Service, a cloud-based subscription model, to fulfill leadership's priorities. MEDITECH as a Service, or MaaS, offered all the benefits of the full Expanse platform, without the upfront cost of procuring an on-premise EHR and data center.

"MEDITECH offered state-of-the-art software with an affordable price tag, which is essential for us to remain independent," said Business Office Director Jessica Camacho, MBA, of RGH.

"MaaS has given us the flexibility to customize our software to meet the unique needs of our rural environment across all care settings."

### Maintaining independence with MaaS

RGH's financial health depends on efficient coding and billing processes, supported by a strong revenue cycle solution. By implementing Expanse, deployed with MaaS, the rural health system improved cash flow and avoided substantial upfront capital investment, enabling the organization to remain independent.

Within three months of going live, RGH achieved normal payment returns — half the time it took with the legacy system. Additionally, the organization has maintained control over the cost management services offered to patients.

### Strengthening cash flow

Before Expanse, the coding and billing department would have to pick and choose which claims were the most viable to pursue. The legacy EHR's inefficient workflows failed to capture adequate information, causing the health system's cash flow to suffer. However, with Expanse, every claim can be treated equally.

## AT A GLANCE

Roosevelt General Hospital (Portales, NM) is a nonprofit, acute care hospital. It provides comprehensive care, including emergency services, inpatient and outpatient surgeries, and digital imaging, to the residents of Eastern New Mexico and West Texas. In addition to the 22-bed hospital, RGH owns and operates two rural health clinics and two specialty clinics.



"RGH evaluated the top four EHRs in the industry and selected MEDITECH as the best fit for our organization. It was important that we obtain an EHR that could be tailored to our specific workflows, optimize revenue, and maintain cost-effectiveness."

**Kaye Green, MBA**  
Chief Executive Officer  
Roosevelt General Hospital

"I attribute our increased cash flow to our efficiencies in the coding and billing offices because we are now capturing everything in Expanse. We don't miss money like we did with our legacy systems," said Camacho. "We averaged \$1.9 million to \$2.1 million monthly in cash collections with our legacy system. After we implemented Expanse, our collections increased by 30% to 48%, despite experiencing a decrease in volumes for several departments."

RGH's emergency department and clinics saw the most notable improvements. Although overall revenue was down due to provider access issues related to its rural location, the billing and coding team reported collections in those specialties were the highest ever recorded after deploying Expanse Revenue Cycle. The solution's simplified payment process helped to reduce A/R days and FTE requirements. Now that 95% of their payors are set up as ERA/EFT, the billing and coding team has increased efficiency by automating the process. They no longer manually enter paper checks into the system, saving 20+ hours per week in posting and scanning time.

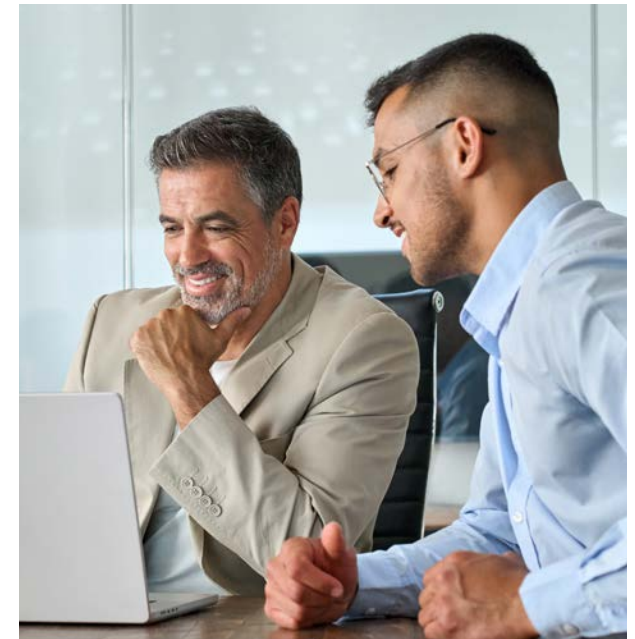
### Informing strategic decisions

To optimize MEDITECH's Revenue Cycle solution, RGH leadership leverages the Financial Status Dashboard, an interactive reporting tool for viewing real-time trends. Camacho and other decision-makers can explore data related to patient volume, revenue, cash flow, accounts receivable, and staff productivity, all on one screen. The dashboard informs decisions on the financial viability of potential opportunities or the continuation of service lines, such as the organization's recent operating room expansion and the addition of an off-site clinic to address community needs.

Empowered by its MEDITECH partnership and a stronger revenue stream, RGH is exploring opportunities to augment the organization's technological capabilities with artificial intelligence. In addition, the leadership team is developing a swing bed program and looking into expanding surgical services.

**"We are proof that despite a challenging healthcare environment, rural hospitals can improve their financial health while remaining independent," said Chief Executive Officer Kaye Green, MBA, of RGH.**

"Agility and innovation are key to improving the bottom line, so we can explore prospective development projects and continue to build on our achievements," she said. "I'm also looking forward to MEDITECH enhancements in clinical areas, including full integration of AI and plans for precision medicine. Even though we are a small, rural facility, our vision is to be a model for comprehensive rural healthcare and stay at the forefront of emerging technologies."



## Uses Expense Revenue Cycle to Reduce Self-Pay Debt by 42% Through Community Engagement



Howard County Medical Center is committed to community outreach as a means to expand access to care across its rural, underserved population. The success of this outreach rests on maintaining its own fiscal sustainability when many Critical Access Hospitals are at risk of closing and carry the burden of uncompensated care.

But where other CAHs struggle, Howard County continues to thrive — an achievement CFO Morgan Meyer attributes to financial transparency and community engagement. The medical center recognized that, to succeed in this environment, it needed to have the same mindset as its patients and make every dollar count.

Implementing MEDITECH Expense in 2019 set the stage for even greater transparency and efficiency; by providing a single EHR and Central Business Office across care settings, staff could monitor each patient's financial situation. It also enabled Howard County to establish a new position called a financial navigator, responsible for helping patients find ways to afford the care they need close to home.

### Greater transparency through centralized monitoring

Howard County's revenue cycle staff can now use their CBO to review patient accounts across care settings and automatically post payments. Patients make only one call to get all of their billing questions answered, which has increased satisfaction.

In addition, Howard County's management team is able to analyze their financial health across settings using their new Financial Status Desktop. They rely on this interactive reporting tool to view real-time trends in daily reports. Meyer no longer has to wait until the end of the month to measure results, allowing her to make mid-month adjustments to reduce spending and maximize reimbursement. She also turns to the FSD to manage cost reporting for Medicare.

## AT A GLANCE

Howard County Medical Center (St. Paul, NE) consists of a 10-bed Critical Access Hospital and two medical clinics. It provides on-staff physicians and a wide selection of outpatient services for its community in central Nebraska.



### Strategic Goals

Howard County's strategic goals are aligned with its efforts to expand access to care while sustainably managing its revenue cycle. These goals include:

- Staying economically sound and financially responsible.
- Focusing on the patient experience.
- Expanding services.
- Committing to community involvement.

“At first I was skeptical that I would see what I needed to see,” said Meyer. “But MEDITECH was right. You can drill down to see anything you want with the FSD.”

### **Improving care access and affordability**

A single EHR and CBO also enabled Howard County to tackle patient financial insecurity, a major obstacle to care. To support these patients, the medical center decided to establish a financial navigator position – a move the community appreciates.

Financial navigators use Expanse Revenue Cycle’s Patient Accounting Desktop to review patients’ financial responsibilities across the continuum and align them with the internal and external resources needed to supplement their out-of-pocket expenses. Services may include securing co-pay

assistance, locating cancer drug rebates, and finding lower-cost medications, as well as reaching out to expecting mothers about payment plans.

But financial navigators go beyond providing services directly related to medical expenses. They identify social determinants of health and provide patients with food donations, gas cards, transportation to and from appointments, and other assistance that could impact wellness. Patients develop a trusting relationship with their financial navigators, who complement Howard County’s chronic care management program. Together, these teams have contributed to healthier outcomes and a better patient experience.

“It’s not just about Howard County, it’s about the patients,” said Meyer.

### **Path to financial success**

According to the AHA, most rural hospitals average A/R days over 50. MEDITECH’s Revenue Cycle solution has helped Howard County keep A/R days between 35-45; they’re currently at 39. Even its transition to Expanse progressed smoothly, without the typical A/R days spike CFOs expect when implementing a new EHR. Meyer attributes her organization’s success to rigorously building and testing the processing of claims prior to go-LIVE.

Leveraging financial navigators also helped the medical center reduce its self-pay bad debt by 42%, from \$853,000 in 2019 to \$490,000 in 2021.

But Howard County won’t stop there. The organization continues to strengthen its financial position by improving the patient experience, such as adding check-in kiosks to capture more accurate insurance information.



## Gains Financial Transparency and Increases Efficiency With MEDITECH Expanse

Keeping a nonprofit healthcare system financially sustainable depends in large part on collaboration and information. At Oswego Health, a full-service community hospital, its leadership team has worked tirelessly to improve the organization's bottom line for more than a decade. CFO Eric Campbell formed a multidisciplinary revenue cycle committee as part of that initiative. The committee promotes transparency by setting goals, reviewing metrics, and reacting to concerning trends.

Campbell and his team were eager to streamline their tedious, manual process of compiling reports that were quickly outdated. They saw an opportunity when the organization moved to MEDITECH Expanse; leveraging the platform's redesigned Revenue Cycle solution, specifically the interactive Financial Status Desktop, enabled them to eliminate manual processes while improving transparency.

### A single source of truth

Throughout Oswego, MEDITECH's FSD is the single source of truth for all stakeholders; it supports the organization's strong culture of transparency and accountability. From office staff to the CEO, everyone who uses this desktop is empowered to proactively monitor financial metrics, gauging real-time performance and informing decisions.



Campbell frequently works with his director of financial services to review receivables and cash flow, identify the root cause of issues, and drill into individual account details to support his findings.

**"I use the Financial Status Desktop daily to look up cash receipts, adjustments, charges, and patient accounts," said Campbell. "It's been a wonderful development to have such easy access. I love it."**

## AT A GLANCE

Oswego Health (Oswego, NY) comprises a 164-bed community hospital, a skilled nursing facility, two urgent care facilities, specialty practices, lab stations, and medical imaging sites. As a nonprofit healthcare system, they invest all income after expenses to care for the community.



### Community impact

Fiscal responsibility has enabled Oswego Health to dedicate **\$18 million annually** to provide care to the uninsured, the underinsured, and the indigent as part of a community investment project.

## Multidisciplinary performance measurement

Maintaining Oswego's fiscal responsibility is a team effort. Campbell leads a longstanding, multidisciplinary committee who all play a role in ensuring smooth revenue cycle processes. This committee — which includes executives, quality officers, office managers, analysts, case managers, and the directors of ancillary and behavioral services — meets regularly to review dashboard metrics.

Committee members use the FSD's daily and monthly status reports to review cash receipts, charges, days in revenue billed and unbilled, and other financial metrics. With this data, the committee is able to compare performance against goals and identify problematic trends, such as an increase in denials from a particular payer. Subgroups are then assigned to investigate solutions to the flagged issues. Using drill-down capabilities inherent in the FSD, they're able to delve into granular details to identify the root cause.

Case management and utilization review staff also play a key role in Oswego's revenue cycle efforts by ensuring adequate documentation, working with insurance companies to secure inpatient approvals.

## Efficiency through automation

Using MEDITECH's Revenue Cycle solution to automate processes, Oswego has gained transparency and efficiency, helping the financial services department to maintain consistent performance. Despite a 17% reduction in department size due to retirements, staff are completing the same tasks without being overburdened — a significant benefit at a time when recruiting has become more difficult.

Automated processes include:

- Capturing emergency department charges through CPT codes embedded as a byproduct of documentation, ensuring ED bills are at the most appropriate level.
- Enabling the financial services staff to view receivables and account details in the Patient Accounting Desktop for quick identification of payer issues and reduced aging.
- Creating account checks to fix account issues before submitting them to a clearinghouse, which has led to a consistent 95% acceptance rate.

Because of these efficiencies, Oswego has kept A/R days low, even through its transition to Expanse: They currently average between 30-35 days in the hospital.

## Community investment

Fiscal responsibility has enabled Oswego to dedicate \$18 million annually to provide care to the uninsured, the underinsured, and the indigent as part of a community investment project. Campbell attributes this success to the organization's solid revenue cycle.

**"It starts at the top, from the CEO down," said Campbell. "Through strong leadership and actionable, transparent data, we've been able to achieve our financial goals."**

Meeting monthly with representatives from areas throughout the organization, Campbell noted, has enabled Oswego to overcome obstacles that affect the bottom line through creative problem-solving. This committee brings that same know-how to its annual meetings, where they plan for the future. By bringing many disciplines to the table, Oswego has emphasized the importance of fiscal responsibility and enabled the healthcare system to make a real difference to everyone in the community.

## Improves RVU Transparency With MEDITECH

*The end result is a new dashboard that saves the health information management staff approximately 140 hours per month.*

Staff satisfaction is critical to recruiting and retaining healthcare professionals, especially for rural organizations. For physicians compensated using a productivity formula based on relative value units, a lack of transparency between administrators and physicians (whether intentional or not) can be a source of constant frustration.

Golden Valley Memorial Healthcare employs a dedicated HIM team to ensure RVUs are accurate. However, inefficient processes for tracking, validating, and subsequently sharing RVU data with physicians eventually led to upwards of 150 hours of manual validation — as well as burnout of its HIM staff.

“You can’t miss payroll,” explained Tara Dull, HIM director. “Brooke — our accountant — and I used to work fast and furious to process professional charges. We were sometimes up until midnight. It was not sustainable.”

Because of GVMH’s unique contracts with providers, many of their charges span across acute and ambulatory care settings. To get a complete picture of their particular workflows, HIM staff were spending time printing and manually reviewing schedules and incomplete record reports, to gauge which providers were missing RVUs. Something had to change.



### Building a new dashboard

GVMH was already using MEDITECH’s Business and Clinical Analytics solution to automate reporting in other areas of the organization. Since the health system’s own staff were tied up with its Expanse migration and other priority projects, GVMH turned to MEDITECH to supplement its resources. MEDITECH helped the organization to merge disparate RVU data sources and visualize the results in a meaningful way.

## AT A GLANCE

A rural healthcare organization located in Clinton, MO, Golden Valley Memorial Healthcare consists of a 56-bed hospital with a 24/7 emergency department, several clinics, outpatient services, and a cancer center.



“It’s nice to have an idea and actually have that exact concept delivered without shortcomings and workarounds. We were able to get exactly what we wanted without having to compromise.”

**Tara Dull**  
HIM Director  
Golden Valley Memorial Healthcare

### Same data, new insight at GVMH

[Watch the video.](#)



**“Our CIO knew there had to be a way to accomplish everything we needed with BCA. He valued my time and felt that seeking MEDITECH’s help in designing a personalized RVU dashboard would be the best way for me to get some of that time back,” said Dull.**

“He pushed for CFO and CEO approval and once we agreed to a scope of work, the process moved pretty quickly. Turns out that BCA is more powerful than what I ever thought it could be.”

MEDITECH assigned Jonathan Bashford, a SQL data engineer, to walk through GVMH’s workflow, identify its needs, and design a new dashboard. Dull and Bashford talked multiple times per week, walking through examples and business logic while zeroing in on those services that had potential for missed revenue and charges.

They started with the ambulatory encounters, which represented the largest piece of the financial pie. They then progressed to services in the acute setting performed by members of the ambulatory physician groups, which involved the forwarding of charges between settings.

“We went through multiple iterations,” said Dull. “Jonathan kept uncovering additional benefits and new ways of seeing the data. He was very familiar with MEDITECH’s side of the house and put everything in layman’s terms for me.”

The completed dashboard gave GVMH a list of patients by contributing provider and associated charges. For those patients associated with a provider who did not list identified charges, staff could easily identify the reasons why. For example, a mid-level provider who treated the patient may have received the RVU credit instead, unsigned reports could be preventing coders from issuing charges, or coding staff may simply need to be notified that the patient account requires coding.

### Getting time back

GVMH’s new dashboard dramatically reduced the time needed to process RVUs — from 150 hours down to less than eight. Staff can quickly determine which provider RVUs were applied to, incorporate edits, and even identify incomplete records without having to look elsewhere. Everything is cleanly organized, and HIM is also able to drag and manipulate certain templates to view data in different ways.

**“The RVU dashboard paid immediate dividends in hours saved,” said Dull. “Our CFO loves that we are available for other projects that she previously didn’t have hours budgeted for.”**

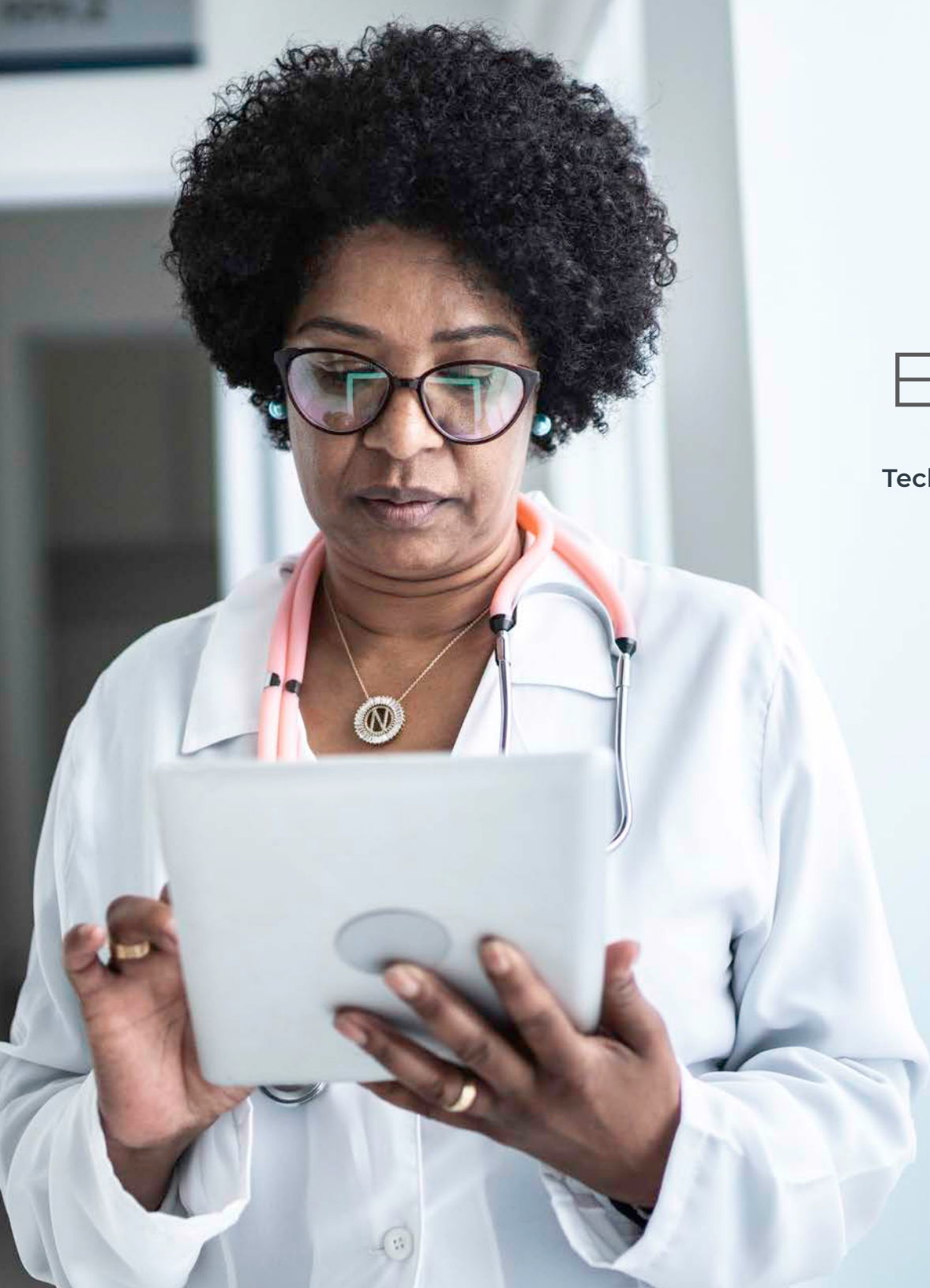
The HIM staff aren’t the only ones benefiting. Physicians used to scrutinize their RVUs, contacting the HIM staff to inquire about specific missed charges. Now the number of calls has dropped dramatically, with some months requiring no follow-up at all.

Physicians receive monthly RVU reports. A facesheet, designed by MEDITECH, outlines charges produced by month under a provider’s name — including total quantity per CPT code, work RVU value, and what RVUs were charged. Detailed reports are given upon request and providers also have the option to review dashboards themselves, though most prefer paper reports.

“We’ve gotten great feedback from providers,” said Dull. “They like the additional detail we can pull out of BCA, and it’s created a lot of awareness across the organization. People are even asking if we can pull other details.”

GVMH is now looking to MEDITECH for help with other organizational improvements, such as implementing provider scorecards and Joint Commission dashboards.

**“It’s nice to have an idea and actually have that exact concept delivered without shortcomings and workarounds,” said Dull. “We were able to get exactly what we wanted without having to compromise. Without years of experience, it would be difficult to get a solution as good as what we received from MEDITECH’s Professional Services.”**



# MEDITECH E X P A N S E

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