# FROST & SULLIVAN

# MEDITECH

# 2022 ENABLING TECHNOLOGY LEADER

North American Clinical Decision Support Systems Industry

# **Best Practices Criteria for World-Class Performance**

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. MEDITECH excels in many of the criteria in the clinical decision support systems space.

AWARD CRITERIA	
Technology Leverage	Customer Impact
Commitment to Innovation	Price/Performance Value
Commitment to Creativity	Customer Purchase Experience
Stage Gate Efficiency	Customer Ownership Experience
Commercialization Success	Customer Service Experience
Application Diversity	Brand Equity

## Clinical Decision Support Systems: Market Overview

Increasing healthcare data necessitates efficient clinical data support systems (CDSS) to effectively filter and provide precise patient-specific information at the appropriate time to augment clinical decisionmaking, improve workflows, and deliver value-based healthcare. Frost & Sullivan estimates the United States (US) CDSS market will reach \$8,961 million in 2026 with a compound annual growth rate of about 11.8% from 2021 to 2026.<sup>1</sup>

However, as patient records are also housed in legacy systems such as spreadsheets, handwritten notes, and scanned documents, accessing such data is a significant challenge in the CDSS industry. Moreover, although electronic health record (EHR) systems store some data, these might not include all the actionable information since patients often visit different healthcare facilities. Therefore, interoperability is critical in the market. Another obstacle is the incompatibility of genomic test results with most EHR systems' technical structure, thus hindering clinicians from easily accessing genetic data. Finally, since research continuously generates new evidence, vendors must ensure that the rules and data governing their CDSS are up to date.

MEDITECH uniquely leverages its technology to meet market and customer needs. It is well-positioned to capitalize on new growth opportunities, cementing its position in the CDSS industry.

<sup>&</sup>lt;sup>1</sup> US Clinical Decision Support System (CDSS) Growth Opportunities, (Frost & Sullivan, March 2022).

#### **Broad Portfolio Based on Customer Needs**

Founded in 1969 and headquartered in Massachusetts, US, MEDITECH is a CDSS provider, developing EHRs to simplify and enhance clinician and patient interactions. The company empowers healthcare organizations with superior tools for secure and cost-effective care and allows patients to participate in their care by accessing personal health information.

MEDITECH Expanse offers a single integrated EHR for greater care coordination across all care settings, eliminating the need to change the standard toolset. The solution caters to hospitals, ambulatory practices, outpatient clinics, emergency departments, surgical centers, home care, hospice, long-term care, mental health settings, and patients' homes. The company is extending new functionality for infusion clinics, outpatient therapy/clinics, tissues/transplant, and other specialty clinics.

#### **Collaborations and Partnerships**

Aligning with Google Health, MEDITECH is developing a solution to leverage its partner's search and summarization capabilities for quick and easy access to information from multiple sources. This way, clinicians can have an accurate longitudinal view of a patient's history, enhancing their clinical decision-making.

Similarly, the company partnered with CommonWell Health Alliance to connect facilities nationwide. This collaboration allows clinicians to view the entire patient story and have real-time access to all records embedded within their daily workflows. Further, the bi-directional exchange between CommonWell and Carequality allows its system to share member records with all major EHR vendors.

MEDITECH works with vendors, such as ZynxHealth, First Databank, Intelligent Medical Objects, National Comprehensive Cancer Network, and DrFirst, to integrate clinical content and updates directly within its Expanse solution workflow. Customers can take updates from these vendors with vast clinical expertise and stay up to date.

#### **Offerings: Agile, Scalable Framework**

MEDITECH understands the various clients' unique needs and has taken steps to equip them with the most up-to-date and cutting-edge solutions. This orderly and systematic product development journey begins with practicing physicians establishing user-driven focus groups and incorporating a patient-centric

"Frost & Sullivan's research identifies MEDITECH as a leading partner, leveraging cutting-edge methodologies to advance the CDSS market."

- Ojaswi Rana, Best Practices Research Analyst Agile development methodology. The company works closely with experts to tailor workflows, embed content and decision support, include necessary thirdparty tools, and design new features.

The rapid, iterative, and evolutionary user-centered design and customer collaboration-based development processes ensure timely product

delivery. Further, by operating feedback groups, MEDITECH engages with dozens of groups comprising hundreds of healthcare professionals at any given time. Additionally, it deploys multiple usability testing rounds on prototypes and working software, building innovative solutions that address market needs.

#### **Cloud Platform**

MEDITECH provides scalable, secure, cloud-native solutions built on Google Cloud. Hosting applications (apps) provides scalability, reduces implementation time, and eases onboarding. The MEDITECH Cloud Platform includes:

- **Expanse NOW** notifies clinicians of new workload items and patient demographics, results, medications, allergies, and problems through a mobile app, allowing them to conveniently review relevant patient clinical data.
- **High Availability SnapShot** enables physicians to access critical patient information, such as Problems, Allergies, Medications, and Immunization data, during EHR downtime by utilizing cloud authentication even without internet availability.
- **Virtual Care** allows patients to conduct virtual physician visits through a video feature on the patient's portal.
- **Expanse Patient Connect** provides bidirectional, real-time messaging to connect patients and clinical care teams to confirm, cancel, or reschedule appointments.

#### Artificial Intelligence

Collaborating with Nuance Communications, an artificial intelligence software technology company, MEDITECH developed its **Expanse Virtual Assistant** solution that responds to simple verbal commands by retrieving the information physicians seek.

The company is deploying new functionality that will allow clinicians to utilize virtual assistants to place orders and find new use cases. MEDITECH envisions this functionality incorporating ambient listening devices on phones and in examination and patient rooms.

#### Ambulatory

MEDITECH's fastest-growing solution in terms of deployment, **Expanse Ambulatory**, offers greater integration between acute and ambulatory settings. The company also provides the solution to independent and physician-owned practices through its Google Cloud deployment model.

#### Genomics

MEDITECH re-architected its EHR to store complex genomic data and persuaded reference laboratories to use standards-based approaches to communicate genomic test results. The product leans on Health Level 7's version 2 and Fast Healthcare Interoperability Resources standard.

**Expanse Genomics** presents clinicians with discrete and actionable genomic data for better-informed treatment strategies. It connects with numerous genomics vendors, including but not limited to Foundation, Ambry, Caris, ProGeneX, Quest, and Neogenomics.

#### EHR Toolkits

MEDITECH's EHR Excellence toolkits include embedded standard content, advanced clinical decision support, real-time surveillance and registry patient monitoring, on-demand education, and best practice-

"MEDITECH forges a strong client relationship by being upfront with pricing and resource estimates. It scales its pricing based on organizational size and ensures that all customers receive the same cutting-edge EHR."

- Ojaswi Rana, Best Practices Research Analyst driven workflows to help organizations achieve measurable and improved outcomes. Toolkits currently include sepsis management, catheterassociated urinary tract infections (CAUTI) prevention, antimicrobial stewardship, depression screening and suicide prevention, hypertension management, diabetes prevention and management, fall risk management, heart

failure management, opioid stewardship, telemetry appropriateness, and obstetrics hemorrhage management.

#### Interoperability

**Traverse Interoperability** offers customers a range of interoperability options, bridging gaps between care transitions. MEDITECH's record of collaboration in industry standards workgroups such as Argonaut and FAST, as well as its work with the CommonWell Alliance, demonstrate the company's commitment to promoting interoperability in healthcare.

Frost & Sullivan's research identifies MEDITECH as a leading partner leveraging cutting-edge methodologies to advance the CDSS market.

#### **Customer-centric Approach Drives Unmatched Client Experience**

With its customer-centric corporate philosophy, MEDITECH operates on the central tenet that its success depends on customer satisfaction and outcomes. This philosophy permeates the company's daily practices. It meets with customers to assess their needs and develop tailored solutions with roadmaps for seamless execution. This foundational approach establishes customers' ongoing trust for long-lasting relationships throughout the product lifecycle.

MEDITECH forges a strong client relationship by being upfront with pricing and resource estimates. It scales its pricing based on organizational size and ensures that all customers receive the same cuttingedge EHR. The company also offers a cloud-based subscription model called MEDITECH-as-a-Service (MaaS) that enables organizations to access the same state-of-the-art platform faster without the significant upfront capital expenditure. First releasing its MaaS solution in 2018, MEDITECH booked twice as many MaaS customers in 2020 than the year before and doubled its total MaaS customer base in 2021.<sup>2</sup>

The company's support model assigns managers and specialists to clients so they can contact company representatives directly for a more personal experience. Its engagement program, MEDITECH Circle, offers interactive opportunities to customers; for instance, invitations to virtual or in-person forums throughout the year to learn from MEDITECH and their peers and network with one another.

<sup>&</sup>lt;sup>2</sup> Interview with MEDITECH, 14 July 2022.

Also, the company offers MEDITECH Professional Services that help customers elevate outcomes, achieve peak performance, and drive decisions through data insights. A team of experts collaborates with clients to help them improve quality and maximize the return on investment using advanced system functionality.

Additionally, MEDITECH's Greenfield Alliance program is specifically designed for companies that want to collaborate with MEDITECH, and offer solutions which complement, enhance, or extend MEDITECH Expanse. Similarly, the MEDITECH Greenfield Workspace is a testing ground for app developers to try their integration with Expanse, where developers can execute application programming interfaces and test their apps against an actual MEDITECH EHR.

#### Use Cases

**Southern Ohio Medical Center** saw a 30% relative change in hospital-acquired infection of Clostridioides (C.) difficile and a 32% relative change in canceled tests by working with MEDTECH to automate C. difficile detection.<sup>3</sup>

**Frederick Health** uses Expanse Genomics to automatically incorporate discrete genetic data into its clinical decision-making, reducing time spent ordering and resulting genetic tests by over 50%.<sup>4</sup>

**Coffeyville Regional Medical Center** leveraged MEDITECH's Depression Screening and Suicide Prevention Toolkit to identify potentially suicidal patients and improved their Merit-Based Incentive Payment System score for the Compiler Monitor System-2 measure from 20% to 67% attestation in eight months.<sup>5</sup>

**Hilo Medical Center** significantly reduced its medication error rate from 16.8 to 2.7 per 10,000 administered doses.<sup>6</sup> EHR implementation resulted in total annual cost savings of about \$1.4 million.<sup>7</sup>

**Avera Health's** sepsis mortality rate dropped by 4.28%, from 14.46% to 10.18%, resulting in \$10 million in cost savings based on a \$5,080 cost per case.<sup>8</sup>

**RCCH Healthcare Partners** witnessed a 45% decrease in CAUTI from the fourth quarter of 2017 to the first quarter of 2018 and a 35% reduction in indwelling catheter days after using MEDITECH's CAUTI Prevention Toolkit and Surveillance Solution.<sup>9</sup>

**NMC Health** experienced a 4% decrease in total administration days and a 30% decrease in antibiotic cost per patient with MEDITECH's Antimicrobial Stewardship Toolkit.<sup>10</sup>

<sup>9</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> Interview with MEDITECH, 14 July 2022.

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Ibid. <sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> MEDITECH Expanse Presentation, (MEDITECH, 14 July 2022).

<sup>&</sup>lt;sup>10</sup> Ibid.

"MEDITECH has delivered on all the promises they made. When I go back and track all the things that MEDITECH said they would do and what they actually delivered, I can put a checkmark alongside all of them."

-Jim Matney, President and Chief Executive Officer, Colquitt Regional Medical Center<sup>11</sup>

"MEDITECH has always found ways to evolve with us, support new strategic directions, and deliver results. As our two organizations have grown, the dedication to this partnership and achieving our common goals has only deepened."

-P. Martin Paslick, Senior Vice President and Chief Information Officer, HCA Healthcare<sup>12</sup>

Frost & Sullivan applauds MEDITECH for its customer-centric approach that drives client satisfaction.

#### Earning Clients' Trust and Loyalty through Customer-centric Practices

Since its inception, MEDITECH's sterling reputation and customer needs prioritization led to its coveted preferred partner status. As an established leader in the space, the company focuses on word of mouth, strong references, and shared customer experiences to strengthen brand equity. Its most successful customers rank among the Digital Health Most Wired organizations, Healthcare Information and Management Systems Society Stage 7 sites, and Leapfrog Grade A hospitals. They are also rated highly by Healthgrades for Patient Safety and Patient Experience and rank among the Chartis Group's top rural, critical access, and community hospitals.

MEDITECH's commercial EHR adoption reaches approximately 2,250 customers in 23 countries.<sup>13</sup> In 2021, it was one of only two EHR vendors to experience double-digit net hospital growth.<sup>14</sup>

The company plans to extend its EHR adoption in Canada and expand its international reach across the United Kingdom, Ireland, Africa, the Middle East, East Asia, and Australia.

Frost & Sullivan believes MEDITECH is well-positioned to drive the CDSS space into its next growth phase, capturing market share and sustaining its leadership in the coming years.

<sup>&</sup>lt;sup>11</sup> MEDITECH Expanse Presentation, (MEDITECH, 14 July 2022).

<sup>&</sup>lt;sup>12</sup> Ibid.
<sup>13</sup> Interview with MEDITECH, 14 July 2022.

<sup>&</sup>lt;sup>14</sup> Ibid.

# Conclusion

Technology integration is a critical success factor for the clinical data support systems (CDSS) industry. Yet, with many options available, market stakeholders need to leverage the most appropriate and best technology-based solutions to optimize their market impact. With its MEDITECH Expanse Electronic Health Record system, MEDITECH delivers a diverse portfolio of interoperable and reliable solutions. The company stands out from competitors based on its commitment to innovation, creativity, and ability to launch new solutions with far-reaching impact and application. MEDITECH pairs its technology focus with customer-centric values, thus earning a solid reputation in the CDSS market.

With its strong overall performance, MEDITECH earns Frost & Sullivan's 2022 North American Enabling Technology Leadership Award in the CDSS industry.

# What You Need to Know about the Enabling Technology Leadership Recognition

Frost & Sullivan's Enabling Technology Leadership Award recognizes the company that applies its technology in new ways to improve existing products and services and elevate the customer experience.

## **Best Practices Award Analysis**

For the Enabling Technology Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

## Technology Leverage

**Commitment to Innovation**: Continuous emerging technology adoption and creation enables new product development and enhances product performance

**Commitment to Creativity**: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

**Stage Gate Efficiency**: Technology adoption enhances the stage gate process for launching new products and solutions

**Commercialization Success**: Company displays a proven track record of taking new technologies to market with a high success rate

**Application Diversity**: Company develops and/or integrates technology that serves multiple applications and multiple environments

## **Customer Impact**

**Price/Performance Value**: Products or services provide the best value for the price compared to similar market offerings

**Customer Purchase Experience**: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

**Customer Ownership Experience**: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

**Customer Service Experience**: Customer service is accessible, fast, stress-free, and high quality

**Brand Equity**: Customers perceive the brand positively and exhibit high brand loyalty

# **About Frost & Sullivan**

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Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator<sup>™</sup>. Learn more.

#### Key Impacts:

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- ROI & Margin: Implementation Excellence
- Transformational Growth: Industry Leadership

## The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

#### Analytical Perspectives:

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)



