Standardize patient monitoring and implement virtual care at scale


Hospital systems continue to face the challenges of aging populations, staff shortages, and cost constraints. More efficient clinical workflows and more effective virtual care are essential to maximize resources without compromising quality, especially in critical care units.

Clinical command centers, serving as virtual ICUs, are a growing solution to optimize clinician time, but they are only as good as the technology that powers them. When every second counts, the right data at the right time is crucial, whether clinicians are in the command center, bedside, or on call.

Lenovo and Medical Informatics Corp. are working together to set a new standard for scalable, data-driven care. The Medical Informatics Sickbay Clinical Platform is an FDA-cleared platform that delivers near-real-time patient monitoring and AI-powered analytics — the only vendor-neutral, integrated patient monitoring solution in healthcare.

Running on Lenovo technology powered by Intel®, the platform aggregates, standardizes, and displays the data needed to make life-saving decisions today and gain AI-enabled insights to improve tomorrow.

Medical Informatics Corp. is a member of the Lenovo AI Innovators program and a Gold-level Intel® Market Ready Partner.
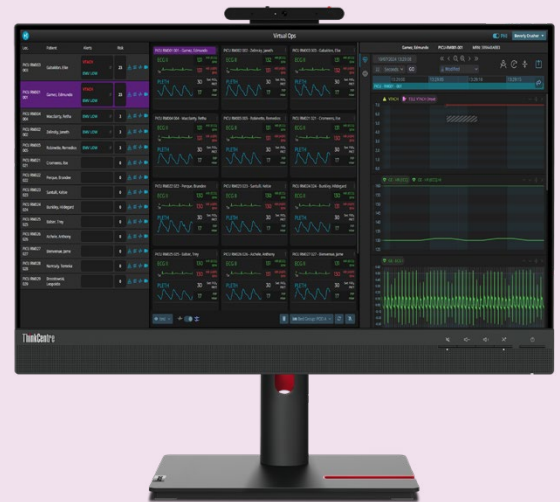
Building the clinical command center of the future

The new standard of scalable patient monitoring. Integrate every device, electronic health record data, and videos on a customizable user interface. Seamlessly monitor patients throughout your health system with second-by-second data capture, powered with AI risk scoring and clinical algorithms that help save lives. Lenovo will work with you to customize infrastructure and displays to best meet your needs.

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Sickbay
by Medical Informatics Corp.

Smarter technology for all

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Discover the true power of bedside data

Monitor for a more accurate clinical picture, individually and system-wide

Centralize and securely access integrated, time-synchronized monitoring data on one platform

- Get integrated persistent data per patient, per unit, per hospital, across your health system
- View waveform data on any web-enabled device — current and historical — aggregated from all bedside devices at native resolution
- Efficiently stratify patient risk

Analyze for care improvements now and over time

Analytics and AI for better real-time care and research

- Build trends including waveforms, vitals, labs, and meds for rapid root cause analysis
- Facilitate decisions on continued high-acuity or step-down care
- Bridge research insight into clinical practice

Collaborate for better clinician and patient experience

Annotate and share events to expedite and improve care

- Quickly perform comprehensive event reviews to drive quality improvement and reduce risk
- Ensure consistent data access, transparency, and continuity of care across staff and units
- Align system-wide workflows and establish virtual care performance standards

Automate to optimize resources and save costs

Increase efficiencies and eliminate manual processes across workflows

- Get secure, scalable, cost-effective medical device integration (MDI)
- Integrate seamlessly with your electronic health record (EHR)
- Automate risk scoring staff metrics and provide improved clinical workflows

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Sickbay's AI advantages

Patient representation

Sickbay presents native waveform and other related monitoring data for patient populations at any given health system.

Timeliness

Sickbay constantly collects data straight from connected systems and devices, meaning algorithms are developed and proven on data that is always up to date.

Objective reporting

Sickbay does not interpret any patient data — it simply displays it to any authorized user. Clinicians can apply AI-driven care solutions without worrying about bias driven by subjective interpretation.

Complete picture

Because Sickbay automatically gathers data from all types of connected bedside devices, datasets capture critical events, from regular monitoring to rare cases for Sickbay-monitored patients.

Data control

Health systems that use Sickbay control all their own data, which they can then share with their own researchers and other team members.

With large amounts of critical data, Sickbay incorporates AI algorithms for predictive treatment and advanced patient analysis. Sickbay's data integration also allows you to seamlessly develop and test your own ethical algorithms, as well as integrate third-party analytics.

Single patient over time

Single-patient monitoring

Multi-patient monitoring

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Sickbay platform data flow architecture

Capture clinical data
At the bedside, vendor agnostic

- Cardiac monitors and other bedside devices
- Ventilators
- Electronic health records
- Alarm notifications

Aggregate and standardize
In the data center

Sickbay®
by **Medical Informatics Corp.**

Sickbay software components
FDA CLEARED

Display and monitor
On end user devices

- Command center
- Virtual ICU
- Hospital floor
- Remote locations
- Customized patient lists
- Custom algorithms

Lenovo Recommends
- Lenovo ThinkSystem SR650/630 or ThinkAgile VX servers powered by 5th Gen Intel® Xeon® Scalable processors
- Lenovo ThinkSystem DM and/or DG storage

Lenovo Recommends
- 14th Gen Intel® Core™ processors and Intel vPro®
- ThinkVision Tiny-in-One monitor and other ThinkVision displays, scalable depending on beds to monitor

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Put Sickbay to work for your clinical, quality, and financial teams — and your patients

Sickbay clients report a wide range of benefits, including care quality, patient satisfaction, and reduced costs.[1] One client cut the time spent on case reviews by up to 95% (from weeks to days).[2] And an eight-hospital system achieved these results from their Sickbay-powered virtual ICU, which included coverage for cardiac and cardiovascular ICUs.[3]

- **Standardized mortality ratio reduced from .36 to .33 in one year**

- **Steep drop in nocturnal code blues**

- **Cardiac, respiratory, and blood pressure interventions down significantly**

To learn more about the Sickbay platform and how you can harness the power of standardized monitoring and virtual care at scale, powered by Lenovo and Intel, visit www.lenovo.com/health and contact your Lenovo representative.

Sources
1 Medical Informatics, "Patient-Centered AI Redefines Continuum of Care," 2024
2 Medical Informatics Corp., "Enable Comprehensive Case Reviews with Unparalleled Data Access"
3 Dhala A, Fusaro MV, Uddin F, Tuazon D, Klahn S, Schwartz R, Sasangohar F, Alegria J, Masud F. Integrating a Virtual ICU with Cardiac and Cardiovascular ICUs: Managing the Needs of a Complex and High-Acuity Specialty ICU Cohort. Methodist DeBakey Cardiovasc J. 2023;19(4):4-16. doi: 10.14797/mdcvj.1247

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