

Discover how Black Box builds a unified IT framework, connecting communications, EMRs, and backend systems for a renowned healthcare organization

Overview

This US-based integrated healthcare system recognized the critical need to modernize its outdated and fragmented communication infrastructure. Facing challenges with legacy PBX systems, device overload among clinical staff, and inconsistent communication tools, this healthcare organization partnered with Black Box® and Zoom to lead a comprehensive transformation. This initiative focused on deploying Zoom Phone to create a unified, cloud-based communications platform that would enhance patient care, improve caregiver efficiency, enable regulatory compliance, and align with the expectations of a diverse workforce. Black Box combined integration excellence and partner collaboration to deliver a future ready communications ecosystem for this healthcare system.

Challenges

This medical system's communication infrastructure was increasingly unfit for the demands of modern care. Legacy PBX systems created silos and limited scalability. Clinicians managed as many as four to six devices, causing delays and inefficiencies. A combination of collaboration platforms, including Webex Siemens/Mitel, Vocera and Teams, added complexity and administrative overhead. The organization also needed a dependable technology partner to deliver affordable, low-disruption upgrades.

AT A GLANCE

CHALLENGES

- Outdated PBX systems across departments
- Poor patient satisfaction (HCAHPS) linked to communication inefficiencies
- Managing clinical workflows across devices

SOLUTIONS

- Flexible, service-led integration driven by Black Box
- Zoom's Unified cloud-native communication platform and Zoom Phone EMR integration within Epic Rover, Haiku, Canto and Hyperspace applications
- Disaster-resilient architecture and smart room design for future needs

RESULTS

- Improved communication speed and clinical collaboration
- Seamless integration across seven hospitals and hundreds of sites
- Infrastructure built for disaster resilience and uptime

BENEFITS

- \$20M+ in cost savings by avoiding on-prem PBX system replacement
- Over 70% user adoption, up from 30% in early stages
- Improved compliance support, clinical workflows, and patient engagement



Solutions

To modernize its infrastructure, the healthcare system partnered with Black Box for its multi-platform, integration-first approach. Acting as a single point of accountability, Black Box delivered a streamlined solution using best-in-class technologies without locking into a single vendor. Zoom Phone and Epic Rover were integrated into clinicians' smartphones to streamline care delivery and reduce device overload, while enabling HIPAA compliance. Collaboration tools were consolidated into a unified platform, cutting costs and simplifying workflows. User-centric design enabled quick adoption by tailoring communication workflows to specific clinical roles. A phased transition preserved legacy investments while shifting to a modern, centrally managed architecture.

Embedded support teams, ongoing training, and a dedicated PMO helped ensure seamless execution and trust across the organization.

Results

The transformation had an immediate and lasting impact. Real-time access to information improved clinical responsiveness and boosted patient satisfaction scores. Device consolidation and simplified workflows more than doubled user adoption. The organization avoided costly infrastructure overhauls, saving millions, while successfully centralizing and cloud-enabling a system that now supports over 90,000 communication ports. Most importantly, the new infrastructure fully complies with federal mandates and is built to withstand emergencies and future demands.

Why Black Box?

This healthcare system's journey underscores why leading organizations trust Black Box for critical communication transformations. By going beyond technical upgrades to deliver a scalable, compliant, and user-friendly platform, Black Box empowered the organization to modernize with confidence. Its deep integration expertise, healthcare experience, and commitment to long-term partnership helped streamline operations, enhance care quality, and future-proof the IT ecosystem. Across the healthcare industry, Black Box continues to be a trusted advisor for building smarter, more connected, and compliant environments.

Black Box® is a trusted IT solutions provider delivering cutting-edge technology products and world-class consulting services to businesses across the globe in every industry. The breadth of our global reach and depth of our expertise accelerate customer success by bringing people, ideas, and technology together to solve real-world business problems.