BLACK BOX®

Black Box Modernized Network Infrastructure for a Leading Multisite Healthcare Provider, Ensuring Scalable & Seamless Operations

Overview

A prominent healthcare group overseeing three major hospitals faced limitations due to aging Cat5 cabling, which restricted performance and scalability. To modernize its infrastructure and support next-gen healthcare technologies, they partnered with Black Box® for a comprehensive multisite network refresh. This included designing new cable pathways, installing high-speed CAT6 and fiber optic cabling, and migrating from Avaya to Cisco Unified Communications. The upgrade was executed in parallel with hospital operations, ensuring zero disruption, and delivered a high-performance, future-ready network to support critical care and long-term growth.

Challenges

The primary challenge was modernizing the network without compromising patient care or interrupting operations. The existing Cat5 infrastructure of the organization lacked the performance and reliability needed to support evolving technologies. Campus-wide connectivity was inconsistent, with many endpoints relying on legacy cabling that slowed workflows and hindered communication. In addition, the hospitals needed to shift from an outdated Avaya telephony system to Cisco Unified Communications, adding another layer of complexity.

► AT A GLANCE

CHALLENGES

- Outdated Cat5 cabling, limiting performance and scalability
- Inconsistent network coverage across hospital campuses
- Need to maintain uninterrupted healthcare operations

SOLUTIONS

- Installed high-speed CAT6 and fiber infrastructure
- Built 60 new telecom rooms with structured cabling
- Migrated from Avaya to Cisco Unified Communications

RESULTS

- Zero downtime during implementation
- Improved network speed, reliability, and coverage
- Reduced costs through parallel project execution

BENEFITS

- Seamless execution across mission-critical environments
- Scalable network foundation supporting long-term innovation
- Strengthened client partnership through proven expertise

Solutions

Faced with these daunting challenges, the healthcare group turned to Black Box, a partner with a proven track record of delivering comprehensive network solutions in mission-critical environments. Black Box delivered a tailored, end-to-end solution. They built new cable pathways, installed CAT6 and fiber optic cabling, and constructed 60 telecommunications rooms to centralize connectivity. The team also ensured a seamless migration to Cisco Unified Communications, integrating voice systems with the upgraded infrastructure. Every connection was thoroughly tested and certified to meet healthcare performance and compliance standards.

Results

From the outset, success was non-negotiable, and the transformation delivered by Black Box exceeded expectations. As the new infrastructure came to life, the difference was palpable. Critical systems began to operate with greater speed and precision. Communication between departments became seamless, and network reliability shifted from a persistent concern to a dependable constant. Hospital staff, often at the mercy of lagging connectivity, now experienced uninterrupted workflows, whether accessing patient records, coordinating care, or relying on real-time telehealth applications.

Notably, all of this was achieved with zero disruption to daily operations. Not a single shift, consultation, or emergency procedure was affected. Beyond immediate impact, the upgrade marked a turning point. The healthcare group now stands equipped with a robust, scalable foundation, ready to support digital health innovations, data-driven care models, and future expansion plans. What began as a necessary refresh evolved into a strategic leap toward a smarter, more connected future in healthcare.

Why Black Box?

With a profound understanding of the unique needs of healthcare, Black Box delivered an end-to-end solution that balanced innovation with operational continuity. The team's strategic planning, technical expertise, and seamless execution ensured that the hospitals received a scalable, reliable network built for long-term success. For healthcare organizations navigating the complexities of modernization, Black Box brings the experience and vision needed to turn infrastructure challenges into opportunities for progress.

Let's secure the future. Contact@blackbox.com or visit BLACKBOX.COM.

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