

CASE STUDY

Sandwell and West Birmingham Hospitals NHS Trust



Enabling the seamless launch of MMUH Hospital through resilient, future-ready telephony

About the customer

Sandwell and West Birmingham Hospitals NHS Trust is an integrated provider of acute, community, and primary care services to a population of over 327,000 across the West Midlands. With more than 7,000 staff, the Trust manages several sites, including a Treatment Centre and an Eye Hospital.

A key milestone in the Trust's ongoing transformation is the opening of Midland Metropolitan University Hospital (MMUH). This is a new 10-floor, 710-bed facility that consolidates services from older hospitals into a modern, digitally-enabled care environment. MMUH is designed to act as the Trust's acute hub, enhancing care in inpatient wards, radiology, maternity, children's services, and emergency departments, while also supporting the wider local community.

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At a glance

Industry: Healthcare

Employees: 7,000

Solutions: Unified Comms & Voice, Cloud
and Modern Workplace, Intelligent
Connectivity

The challenge

The Trust embarked on a complex programme to consolidate emergency departments and clinical services from Sandwell General and Birmingham City Hospitals into MMUH. This required a voice infrastructure capable of supporting:

- **High stakes migration under tight deadlines:** The telephony system had to be fully live before MMUH opened, with no margin for error.
- **Coexistence with legacy systems:** Departments would migrate in phases, meaning they had to facilitate temporary interoperability between old and new systems.
- **Trust-wide communication unification:** Multiple legacy voice platforms had to be replaced with a single, resilient, centrally managed system that spanned all sites within the Trust.
- **Support for Emergency Protocols:** The infrastructure needed to enable rapid, secure, and broadcast-style communication for clinical escalation, including trauma and crash calls.
- **Scalability for the Future:** The Trust required a flexible platform that could evolve with future tech, including cloud services, Microsoft Teams, AI tools, and omni-channel patient engagement.

The solution

In partnership with the Trust's IT and clinical teams, we delivered a comprehensive Mitel-based voice platform designed to serve both the immediate operational needs of MMUH and the long-term digital strategy of the entire Trust.

Key components of the solution included:

- **Phased, risk-free migration:** Our hybrid architecture allowed departments to transition incrementally, while continuing to use legacy platforms. This ensured zero disruption to the Trust's services.
- **Unified Mitel telephony across the Trust:** All hospital sites and departments now operate on a single, secure, high-availability platform. This delivers seamless communication across wards, clinics, and even external locations.
- **Resilient and redundant network design:** Dual connectivity paths, on-site survivability appliances, analogue copper backups, and automatic failover mechanisms ensure that systems stay operational, even during infrastructure failures.



"The partnership with Wavenet has been really powerful. It has ensured that by the end of our move day, we had a fully working telephony system, enabling all wards to connect across hospital locations. This allows us to deliver the best possible care for our patients."

Mark Taylor

Director of IT and Digital at Sandwell and West Birmingham Hospitals NHS Trust

- **Enhanced emergency communication and public safety:** To increase safety in emergency situations, we implemented several special Bedlam devices – special handsets that can audibly broadcast calls across entire departments. This ensures urgent alerts are heard immediately by all nearby staff. Also, public areas are now equipped with phones to allow visitors to immediately contact support teams and emergency assistance.
- **Contact centre and emergency service integration:** We provided seamless interoperability with the Trust's existing contact centre system, enabling intelligent call routing and management of critical lines such as the Trust's 2222 emergency service.
- **Modern SIP telephony and cloud-based routing:** Modern SIP endpoints and a cloud-based routing layer offer resilience for both inbound and outbound calls. This strengthens the Trust's business continuity framework.
- **Scalable and future-proof architecture:** Built to support emerging technologies without a full redesign, the platform enables integration with Microsoft Teams, workforce management, and AI-driven analytics as future demands evolve.

The result

We have delivered a resilient, intelligently designed communications infrastructure that supports exceptional clinical delivery both at MMUH and across other Trust sites.

Key outcomes include:

- **Greater Visibility and Ease of Management:** Staff at A. McLean now have access to the Cato Central Management Application, which is so intuitive that their IT Manager was able to become entirely comfortable working with it within two days. This gives them visibility across all sites, detailed insights into every circuit, and the ability to monitor performance down to the user and application level across the network. They can now manage all their networking and security through a single pane of glass.
- **Uninterrupted launch of operations:** MMUH launched with a fully operational telephony system. This meant uninterrupted clinical communications from day one, supporting continuous delivery of care.
- **Improved staff collaboration across sites:** The new unified communications platform simplifies communications and enables smoother inter-departmental coordination.
- **Faster, more coordinated emergency responses:** Broadcast-enabled trauma alerts and accessible emergency phones improve clinical response times and public safety.
- **Business continuity and operational resilience:** Redundant links, cloud routing, and local failover capabilities protect against service disruptions, even during unplanned events.
- **A scalable foundation for digital innovation:** The Trust is now positioned to adopt new technologies, improve patient engagement, and scale its digital strategy with confidence.



“Thanks to Wavenet, we have been able to deliver a landmark transformation that ensures a connected, efficient and future-ready healthcare environment for the local community.”

Mark Taylor

Director of IT and Digital at Sandwell and West Birmingham Hospitals NHS Trust



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Talk to us

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