Client Story

Unifying comms with Barts Health NHS Trust

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BLOCK

33.6 million calls.
14,000 devices.
Zero downtime.

These aren’t just numbers for Barts Health NHS Trust, they represent a seismic shift in how one of the UK’s largest Trusts connects its people and saves lives.

Barts Health NHS Trust has transformed its legacy telephony into a FutureNow collaboration service, with its new unified comms solution delivering 100% availability and driving nearly £300,000 in annual savings from circuit and call charges. These results have shown how this smart infrastructure can be just as vital as the care it supports.

Barts Health NHS Trust comprises five hospitals located across London: Whipps Cross, Newham, The Royal London, St Bartholomew’s, and Mile End. There are 20,795 staff members operating across these sites, and approximately 14,000 devices connected to the Trust’s telephony services.

However, in 2018, the digital team at Barts identified communications could be significantly improved to modernise its systems and create more effective ways of working. This decision kick-started the ongoing development of the Trust’s collaboration technology, which has contributed to Barts obtaining its HIMSS INFRAM Level 6 rating – the first Trust to do so in the UK and Europe.

How has Barts untangled its legacy collaboration systems to become one of the most digitally advanced Trusts in the country?

2017

The dawn of virtual MDTs

Barts has multi-disciplinary teams made up of dedicated consultants whose decisions are crucial to delivering life-saving treatment. These groups of consultants meet to discuss cases and map out treatment plans for severely unwell patients.

Historically, these experts have travelled to meet in real life. But video conferencing technology presented the opportunity for virtual MDT meetings which could not only save consultants time but ensure as many patient cases were reviewed as possible. It was a tempting investment considering Barts Cancer Centre alone serves more than 1.5 million sick people across the UK.

But the stakes were high. The technology had to be medical grade, allowing clinicians to review scans in detail and hold complex discussions without lag or disruption. Any break in connectivity during these calls could delay treatment plans, something many patient's health conditions couldn't afford.

Introducing Webex

Barts partnered with Block to set up virtual MDT rooms that were suitable for specialist use. The solution needed to be the same for all sites within the Trust to support interoperability. Meanwhile, audio and video quality had to be optimised otherwise consultants wouldn't be able to analyse imagery in high definition to ensure they devised the best treatment plan possible.

In response, Block deployed Webex alongside on-prem infrastructure across 13 rooms within the Trust's five key hospital sites. This enabled multi-disciplinary teams to safely transition to a virtual set up as well as maximise the number of patient reviews while remaining accurate.

2022

Evolving to cloud

Five years after introducing virtual MDT rooms, Barts set its sights on a bigger ambition: to unify all communications across the entire Trust. At the time, ten different telephony platforms were in use across five hospitals, supporting around 14,000 devices. It was a patchwork of legacy systems that had become increasingly difficult to manage.

Digital teams were contending with the ongoing challenge of keeping legacy platforms running with limited spare parts. But the world had moved on. Cloud technology had matured and was now trusted, even in the most high stake environments. For Barts, this wasn't just an upgrade, it was a bold step towards building communication services that could better support staff, and ultimately, improve patient care.

How is telephony used at Barts?

Telephony is a fundamental part of communication across Barts' hospitals, covering non-critical daily tasks all the way through to life-saving and emergency situations.

For example, phones ensure hospital departments are synced internally, informing services such as portering and catering. They also support patient wellbeing by hosting external calls – the phones situated in common areas enable family members to ring for updates on loved ones.

Meanwhile, telephony is vital to saving patients' lives – a criticality that's reflected in Barts' business continuity phones (otherwise known as red phones). These lines of communication can never go down, even if the hospital experiences an outage. For example, if a patient goes into a cardiac arrest, a staff member will make an internal call via the 2222 dial. This notifies the switchboard team who immediately send a page across the hospital for a resuscitation crash team. Guaranteeing 100% availability here is crucial.

2023

Planning migration

The long life of Barts' telephony systems complicated the unified comms roll out. Its history had created a sprawling collection of hardware and systems across the Trust which needed to be mapped and unravelled. There was also no residing telecoms manager, which meant Barts' digital team and Block had to build a full view before they could plan a migration.

In response, Block supported the Barts' digital team in physically mapping every phone on site, collecting information such as name, extension number, the telephony platform being used, and future user needs. This was essential information to formulate migration plans as well as ensure the end user was unaffected throughout the transition to cloud.

A phased approach

The unified comms solution Block implemented was tailored to Barts. The plan considered:

- Having a full mesh integration between old and new systems to provide a phased zero downtime migration.
- Defining a plan for each Acute site to ensure departments and staff know what will happen and when.
- Adhering to a design standard to ensure changes to numbers and dialling habits were made in a controlled way.
- Scheduling and planning the rollout limit disruption to staff and patient care.
- Providing a group of Block's technical experts to deliver always-on support to the users and the Barts rollout team.
- Planning migration points for switchover of critical functions such as switchboard, contact centre, and number porting.
- Aligning to the Barts' renewal dates to ensure sites and services migrated prior to upcoming renewal expenditure.
- Creating rollout and adoption guides to upskill and support staff with limited telephony knowledge.

The challenge at hand

Lack of data and knowledge of the existing estate is one example that summarises the difficulties the Barts digital team and Block faced.

Modern-day connected phones enable you to automatically see the device's extension number, its identification, when it was last online and offline, as well as when it was last accessed. This makes it easy for digital teams to understand what phones are in the hospitals and how they're performing.

In contrast, prior to migration, Barts' phones were identified via hand written white labels stuck to the device. These labels had become worn over time and in some cases hadn't been updated when identification had changed. As a result, it was difficult for the Barts digital team to identify the device, let alone understand its usage and performance patterns.

2024

Savings, switchboards, and sustainability

Barts' unified comms solution was completed in 2024 and has achieved several significant results for the Trust and its hospitals.

- **Cost savings:** Connectivity points were consolidated into two primary connections for all external calls. These calls are free of charge for landline and mobile (historically Barts were charged by the minute). This has reduced connection costs by 98% annually – creating savings that can be redirected into further enhancements.
- **Sustainability:** The room of surplus hardware has drastically declined to 10 boxes for data centres, and two boxes for resilient SIP service. The decrease in connection points and introduction of more efficient technology has also reduced power consumption.
- **Flexibility:** Wireless phone service has improved with the introduction of a modem. It means remote workers can receive calls, work life balance is improved as an increasing number of staff can work from home, and medical practitioners are not attached to one location in the hospital when using a phone.
- **Switchboard:** Managers on the switchboard are responsible for system admin requests as well as answering some of the 120,000 calls that come through every month. These requests typically take between 15-30 minutes each. However, this has been reduced to a few minutes thanks to an automated portal, saving approximately 13 and a half days of work hours during February 2025. It has also led to changes being consistent with less risk of outages, as directory numbers and DDIs are all stored and tracked in a system.
- **Smarter working:** Barts new telephony set up now enables switchboard staff to work from home. Meanwhile, if a switchboard goes down in one of the hospitals, calls can be redirected to another hospital within the Trust.

33.6 million

Calls successfully handled by Barts via its new UC solution in 2024

100%

Platform availability maintained to core telephony services

7,363

Devices were registered to the unified comms platforms by December 2024 – increasing from 333 in January, indicating a rapid rollout and migration

300%

Increase in soft phone users over a 12 month period enabling more mobile and flexible communication

2025

The next refresh

Barts is now updating the MDT video rooms it originally installed in 2017 and moved to cloud in 2022. This involves leaning into the latest technological developments to simplify the rooms and make them easier to maintain.

Another key update will be allowing participants to join multi-disciplinary team meetings hosted on Microsoft Teams from a Webex room. The aim here is to provide more flexibility to clinicians on how they can work and eliminate barriers around Webex sign up.

Untangling systems during the MDT video rooms' initial installation and the unified comms migration means it's now much easier for Barts' digital teams to implement new technologies as they emerge in the market.

"Barts is already seeing a host of positive changes from working together with Block on our Trust-wide digital transformation. You can feel it on the ground, in patient feedback, and staff morale, but for me the best thing is it's all measurable via the network dashboard, where the whole team can see at a glance the upgrades in stability, reliability, and security across the board."

Fay Stevenson, Deputy Director of Informatics at Barts Health NHS Trust

The next chapter of innovation

Barts Health NHS Trust is already realising the benefits of FutureNow collaboration service, with legacy systems replaced and modern, unified infrastructure in place. Now the Trust is not only improving day-to-day care by consolidating communications, unlocking new efficiencies, and creating a flexible, resilient infrastructure – its setting the stage for what comes next.

Now, Barts is well positioned to embrace innovation and continue leading in digital healthcare, whether that be integrating AI-powered agents to support staff or adopting the next wave of clinical collaboration tools.

The journey continues...

Watch the video