



# Unified communications improves healthcare efficiency

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IT Director  
Worcestershire Health Community



## Partnership with BT helps Worcestershire Health Community deliver better service at lower cost

### Client

The Health Community in Worcestershire comprises more than 10,000 healthcare professionals across three NHS trusts – Worcestershire Primary Care Trust, Worcestershire Acute Hospitals NHS Trust, and Worcestershire Mental Health Partnership Trust – serving a population of more than half-a-million people.

A shared services organisation has been created to use new technology for more efficient and effective healthcare. John Thornbury, IT Director at Worcestershire Health Community, says: “We recognised that we needed to integrate our voice and data networks to create a robust infrastructure that would be flexible enough to support our evolving needs.”

### Challenge

Worcestershire Health Community made the decision to develop a long-term partnership with a strategic supplier that could meet all of its requirements. “Rather than make spot purchase decisions for products and services we wanted to have a single vendor responsible for the entire network, and we chose to work with BT,” comments John Thornbury. “Not only would this give clear accountability but it would also enable us to use our purchasing power and simplify the interface.”

The agreement encompassed telephony, local area network (LAN), and wide area network (WAN) services. Mobile communications and flexible working technologies were also included. Right from the outset Worcestershire Health Community wanted to avoid this becoming a series of disconnected projects. John Thornbury adds: “With BT’s help we developed a co-ordinated strategy, endorsed by NHS executives across Worcestershire. This would provide a fully flexible infrastructure to underpin ever-improving healthcare for patients right across the county.”

### Solution

The foundation was the creation of an IP-based WAN infrastructure. This network extends to some 300 sites around Worcestershire, ranging from large acute hospitals to medical centres and GP surgeries.

Against a unified communications vision, the next phase was to extend and upgrade in-building LAN services to support integrated voice and data. The rollout of IP telephony followed with the installation of a centralised and fully resilient Nortel CS1000 call server to replace legacy equipment at selected sites. Of a total of approximately 15,000 voice extensions, around 2,000 have already migrated to IP telephony and

## The BT differentiators

- Willingness to work in partnership, with a long-term track record of service delivery to the Worcestershire Health Community
- Ability to provide a one-stop-shop for the full range of Worcestershire Health Community’s communications technology requirements
- Understanding of the applications and business benefits of unified communications and collaboration technologies

## Case study

# Worcestershire Health Community

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**John Thornbury**  
IT Director  
Worcestershire Health Community

a further 5,000 are scheduled. A blend of BT ISDN30 digital lines and BT Hosted Voice services provide cost effective connection to the public telephone network.

Crucially, the IP telephony migration has enabled the introduction of unified communications and collaboration (UCC). Implemented by BT, Microsoft Office Communications Server has integrated desktops with the voice system to provide features such as presence, dynamic voicemail messaging based on calendar data, and the ability to share a workspace. Other collaboration facilities include BT MeetMe on demand audio conferencing, and video conferencing across six strategically sited conferencing suites.

To enable flexible working each of the three main hospitals in the county was equipped with a wireless network. With around 1,500 access points this Wi-Fi network provides comprehensive coverage and has been designed to support the future implementation of radio-frequency identification asset tracking in collaboration with BT. This can pinpoint the precise location of key medical devices, specialist equipment, and possibly even babies in

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the maternity unit. The wireless network also links to BT Openzone, enabling public broadband access services for patients and members of the public.

BT has also assisted the Worcestershire Health Community to reduce costs by improving accountability for mobile communications. This has helped reduce the number of mobile phones by around 25 per cent. BT now provides connectivity services for 1,500 mobile phones and 3G cards, which are used to provide mobile connectivity for laptops etc.

### Value

Working with BT the Worcestershire Health Community has created a fully scalable UCC infrastructure as a foundation for more flexible working – enabling greater efficiency and improved patient care. UCC facilities such as presence information and dynamic messaging facilities have made health professionals much more accessible, while offering new communication options. John Thornbury notes: “The wireless network and collaborative applications mean our people can in the future avoid the need to travel. Not only does that reduce ineffective time it saves money, lowers carbon emissions, and enables us to deliver better and more responsive patient care.”

The video conferencing facilities are in high demand, both for management meetings and for clinical sessions such as those for the West Midlands Cancer Intelligence Network, enabling knowledge sharing and more rapid patient diagnosis. Extensive use of audio and video conferencing facilities is expected to reduce travelling costs by up to 20 per cent.

Improved collaboration will also enable greater efficiency and faster response. John Thornbury says: “We are now far more agile. For example, BT MeetMe audio conferencing was used very effectively to rapidly co-ordinate services during the swine flu pandemic. Using IP telephony we were able to set up a contact centre from scratch within 24 hours.”

Flexible working is popular with staff as it provides the opportunity for efficiency improvement alongside a better work life balance. The wireless network is starting to enable people to access or update patient

records at the point of care, saving time and improving accuracy. Secure remote access facilities enable health workers to log on from anywhere there is an internet connection. Health workers even have the option to receive voice calls on their laptops using a USB headset.

Communications costs have reduced too. The implementation of IP telephony, the rationalisation of mobile phones, and the use of the IP network have combined to reduce call charges by around £400,000 per year. Further financial benefits are being realised from simplified moves and changes, together with lower maintenance costs as legacy equipment is decommissioned.

John Thornbury sums up: “Our strategic partnership with BT is very strong and delivers significant added value through a great spirit of co-operation. There is clear accountability and no blame culture; if ever there is a problem we work together to resolve it.”

The achievements of BT and the Worcestershire Health Community have been acknowledged with nomination in the GC Awards 2010. Sponsored by The Guardian these awards recognise excellence in public sector IT. John Thornbury has also been personally nominated and shortlisted as a finalist in the Innovator of the Year category.

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## Core BT services

- ISDN digital lines
- BT Hosted Voice
- BT Mobile services
- Managed wired and wireless LAN
- Nortel CS1000 IP telephony solution
- Microsoft Office Communications Server
- BT MeetMe and video conferencing equipment from BT Conferencing
- Secure remote access services

