

## Integration

# Leveraging Video for Leading Edge Teaching and Patient Care



## BACKGROUND

This Yorktel customer is one of the largest and oldest NHS Foundation Trusts in the United Kingdom (UK). The Trust is comprised of a diverse network of 10 local hospitals, with one of these being the particular focus of this case study. Recognised as a world-class teaching institution, The Trust is the U.K.'s leading cancer treatment centre and one of the U.K.'s five full scale biomedical research centres.

While most hospitals must integrate new technologies into legacy environments, the hospital, opened in 2005, had the benefit of state-of-the-art amenities already in place. However, it lacked today's leading edge collaboration and communications solutions, which are suited to advance their distance training objectives.

## THE CHALLENGE

Yorktel has a history working with this hospital, including various video deployments to enable collaboration in both clinical and non-clinical settings. While these solutions remain effective for most collaboration needs, there was one area of note with room for improvement.

Yorktel's 30+ years expertise with video translated into creating an environment where videoconferencing systems were easy to use and delivered a virtual immersive experience. This quality experience is critical for supporting cross-disciplinary collaboration and sets the stage for more widespread use of collaboration based MDTs.

## YORKTEL CASE STUDY: HEALTHCARE

Multi-disciplinary team meetings (MDTs) are a critical forum for healthcare collaboration, but many solutions currently being utilised hinder their effectiveness. Key shortcomings include costly hardware and video endpoints for room-based meetings, lack of interoperability with the existing network environment, deployment complexity, non-intuitive user experience, bandwidth management for reliable connectivity, and most of all high quality audio/video to support teams trying to diagnose complex medical conditions in real time.

As a result, MDTs have largely been conducted in person. These sessions are essential for sharing knowledge as practitioners increasingly move to a multi-discipline approach for patient care. However, when drawing across a network of 10 or more hospitals, the logistics challenges intensify.

Clinicians have tight schedules, so the associated time and expense around travel make MDTs a costly proposition; and risky, if unforeseen location or travel complications, like traffic, prevent attendance. Furthermore, these meetings were not recorded, greatly limiting the value of the learning. Not only does a recording allow practitioners to make a more precise diagnosis, but also makes the proceedings accessible to and sharable with outside parties, either for peer review or for teaching purposes.

### THE SOLUTION

Being a new hospital, they had an ideal environment to consider the latest in video communications and collaboration technology. Not only are these conditions more conducive to supporting current solutions than older, pre-Internet facilities, but so implementing them would also reinforce the hospital's vision and reputation of being on the cutting edge of technology to improve healthcare outcomes.

To this end, Yorktel's video communications team developed a complete solution, built from the bottom-up to address and overcome these challenges around MDTs. Aside from deploying high resolution video conferencing systems from best-in-class vendors — capable of supporting 4K — Yorktel designed and installed six MDT suites to host these meetings.

With a viewing capacity of up to 30 people, these purpose-built rooms created new collaboration spaces throughout the facility where practitioners could easily convene remotely. On the networking side, to ensure reliable connectivity and proper bandwidth availability, dedicated fibre was deployed linking the operating theatre to all of the MDT suites.

Yorktel's 30+ years expertise with video translated into creating an environment where videoconferencing systems were easy to use and delivered a virtual immersive experience. This quality experience is critical for supporting cross-disciplinary collaboration and sets the stage for more widespread use of collaboration based MDTs.

Once deployed, immediate benefits were realised in savings of both time and money related to suspended travel and the productivity gained from clinicians' freed-up time. More importantly, given the growing use of MDTs, the facility was now able to support these meetings on a far more regular basis. Yorktel's solution made it easier for a broader spectrum of specialists to participate, which results in deeper knowledge sharing and improved patient care.



### THE BENEFITS

Once deployed, immediate benefits were realised in savings of both time and money related to suspended travel and the productivity gained from clinicians' freed-up time. More importantly, given the growing use of MDTs, the facility was now able to support these meetings on a far more regular basis. Yorktel's solution made it easier for a broader spectrum of specialists to participate, which results in deeper knowledge sharing and improved patient care.

With the inherent ease-of-use of Yorktel's solution eliminating complexity for onsite IT personnel, the hospital is finding new applications for video, such as telemedicine and remote teaching. On the financial side, there's also a revenue generation benefit that helps make the overall ROI very attractive. Hospitals of this caliber are able to monetise their teaching by broadcasting surgeries on a pay-for-view basis.

This hospital could only take advantage of such a revenue stream by deploying a leading edge video conferencing solution that was in line with their state-of-the-art facility.



“We have many demands on our financial and network resources, but MDTs are too important for us to continue with the status quo. Yorktel showed us a path with video conferencing that made sense in every way. Today, we collaborate more effectively and more often, and as a result, patients are getting better care than ever.”

— Hospital CIO