

Secure remote healthcare collaboration

Remote healthcare communication tools can be highly effective and useful for collaboration, clinical assessments, and surgical training, finds Ingo Aicher, Managing Director at Jones AV Limited



Due to the pandemic's rapid onset, hospital IT departments were ill-prepared, and solutions were deployed ad hoc, previously unthinkable in an IT environment dominated by security concerns. However, applications like MS Teams® and Zoom® fulfilled a purpose throughout the pandemic and demonstrated great uptake in areas such as remote radiology assessments, multidisciplinary team meetings, remote specialist second opinion, online training, and live specialist conferences. Though these applications are not without their drawbacks, remote healthcare collaboration is much-needed in support for businesses and industries.

The sheer volume of users is causing issues surrounding bandwidth, latency, and delays, affecting image and audio quality. A whole host of security concerns when used in a clinical environment has recently come to the fore.

Nexxis Live and other innovative remote healthcare platforms

Data relayed through servers of big corporations are randomly recorded or stored for application improvement or connections are not secured properly and can be hacked. Raising many flags about patient data security and GDPR in Hospital IT departments everywhere.

Newly developed platforms for surgical collaborations such as the "Nexxis Live" from Barco seek to address these issues.

Nexxis Live comes as a package combining a physical device for connection of imaging devices and a dedicated secure online platform which allows for easy connectivity and remote healthcare collaboration.

The small form factor physical box allows for the connection of up to 4

imaging devices, such as Endoscopes, Microscopes, Ultrasound, X-Ray, Patient Monitor, or an overview camera to give a complete overview of the procedures and training.

Remote participants and patients in the future of healthcare

Using any web browser, without installing additional software, remote participants can log in via a secure dedicated portal, guaranteeing bandwidth stability, image, and audio quality to follow procedures and training. Smart collaboration tools allow to annotate or comment on images and live video with intelligent image tracking.

Collaboration amongst the group can be via chat and voice, very much as people are used to from major remote comms platforms.

But most importantly the remote

connections through this specialist platform are secure and approved for use in medical and data-sensitive environments for remote healthcare.

Recently, Jones AV demonstrated the Barco Nexxis Live capabilities at the Mersey School of Endoscopy ENRICH ERCP course, broadcasting live video from Endoscopy, X-Ray, Ultrasound, and a camera tracking the trainers hand movements live from the ERCP treatment room at the Royal Liverpool University Hospital simultaneously to a cohort of students at the John Moores University Skills Labs, specialist units in Blackburn, Burnley and Isle of Man plus remote participants from around the country.

The platform allowed students, trainers, and specialists in the hospital to chat, draw and collaborate with ease and follow the procedure as if they were in the room.

Staff shortages and the effects of the pandemic

Looming staff shortages in the NHS highlight the ever-increasing need for more training of nurses and doctors and such innovative tools for delivery. Traditionally, surgical skills are taught in the treatment room itself or in small training rooms at the hospital which are severely limited in space.

This new technology makes training more accessible to bigger groups of trainees, reduces the amount of travel to and from live training courses, helping the NHS to reduce the carbon footprint, whilst increasing the standard of training available.

This June, Jones AV successfully deployed Nexxis Live at the Sheffield Endoscopy Summer School.

The three-day ESPGHAN course at the Kenwood Hotel in Sheffield was followed by participants from across the globe from Chile to South Korea and Sweden to South Africa.

Nexxis Live facilitated the transmission from the hotel following speakers from multiple camera angles and presentations broadcast simultaneously, bringing the international cohort locally and remote together. The event culminated on the third day with live surgeries being broadcast from 2 operating theatres at Sheffield Children's Hospital, guest lectures from Rome and further live cases beamed in from Boston.

Prof Mike Thomson the Event Organiser said, "Jones AV have been brilliant both before and during the event, they have been very impressive with their professionalism, and also the way the technology allowed us to interdigitate the live cases and lectures"

Nexxis Live was deployed to support this Hybrid event, bringing together the best of both worlds. Enabling the fellowship of junior surgeons to learn hands on and in person onsite whilst specialists around the globe contributed and others logged in remotely, increasing the reach of this high-quality training.

Nexxis Live guaranteed great image quality, secure transmission, ease of use for participants and a multitude of collaboration tools, making this an extremely successful event. The ESPGHAN Summer school received outstanding participant feedback for their live and online content and the organisers have rebooked the technology and services for another event in 2023.

BARCO NEXXIS LIVE: Collaborate easily

- Consult remote experts during surgery
- Share surgery with remote students or experts around the globe

Collaborate seamlessly

- Guide peers via telestration on the live video
- Talk, chat and draw as if remote users are in the OR

Train and evaluate

- Show junior surgeons and trainees on how to perform procedures
- Remotely monitor, guide, and evaluate surgeons in the OR

Get technical assistance

- Consult technical equipment experts at any point in time

Find out more about Barco Nexxis Live, or get support for your hybrid events, online training courses or more information on integrated operating theatres for secure remote comms.



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