World leading 4K surgical imaging technology to improve patient experience at SAH

Better vision means better patient outcomes

Sydney Adventist Hospital today becomes home to the largest 4K surgical imaging installation in the world, providing surgeons and patients with access to the latest leading edge imaging technology. The benefits from this technology are considerable – from improving our patients’ surgical experience and recovery to simplified workflow and efficiency for doctors and theatre staff.

Imaging is used in every minimally invasive surgical procedure. Cameras are inserted through very small incisions and display the surgical site on screens for the surgeon to view and work within the patient, with the aim of sparing them from open surgery. This minimally invasive approach spares the patient pain, potential blood loss, extensive wounds and often ensures a much faster and less painful recovery.

“We are constantly looking at ways to help surgeons provide a better experience for patients. As part of this ongoing commitment, we have upgraded our imaging equipment to provide surgeons with the latest 4K technology. Beside significantly improved vision and clarity for the surgeon, the benefits provided by this technology include operating theatre efficiency, post-operative recovery times for patients and improved surgeon-patient communication. Today we become one of only a few hospitals in NSW providing 4K technology1 and the largest installer of this technology in the world. This superior imaging equipment is today operational in 17 theatres – with our closest competitor only offering this state-of-the-art technology in 3 theatres. Every surgical patient at SAH has the benefit of this technology. Better vision for surgeons means better results for patients,” said Brett Goods, AHCL CEO.

1 St Vincents Private has 3, Gosford Public currently installing 2
What is the Arthrex Synergy 4K ultra high-definition camera technology?

The Arthrex 4-in-1 system combines the latest technology, 4K camera heads, LED lighting, image management and integration with an intuitive tablet controller that is programmed by surgeons based on individual surgery and patient requirements. It is the only 4K camera system of its kind on the market in the world.

It offers increased picture clarity and depth of field that can help surgeons identify different tissue structures and pathology far more accurately, improving surgical precision.

The system can be used in any surgical procedure and has a number of available attachments that can provide flexibility in intricate situations, offering a surgeon a greater level of control and dexterity.

Accompanying the system is Arthrex’s Synergy surgeon iPad application that affords physicians with the tools to manage still photographs and video recording in digital format. The app sets a new standard for patient education and post-operative communication, enabling surgeons to create a report containing the surgery images and post-operative notes ready for immediate distribution.

Benefits to surgeons

Surgeons rely on clear and detailed imagery to perform quality surgery. The quality of their surgery determines how quickly a patient recovers. At Sydney Adventist Hospital we are always trying to improve patient care, whether through our own actions or by providing the best possible tools for our surgeons.

Some of our surgeons recently tested a range of the latest imaging equipment on the market and unanimously agreed that the Arthrex Synergy system was superior in a number of ways, including:

- Image quality was significantly better than competitor systems
- Depth of field was up to four times better
- Length of operations was reduced due to better vision
- Enhanced visuals aided surgical accuracy and therefore reduced the potential of complications
- Some procedures previously requiring two surgical episodes, could be completed in one because of the ability to see surrounding tissues more clearly
The ability to individually program the intuitive tablet controller based on patient requirements reduced paperwork and streamlined operating theatre functions.

The secure cloud-based storage of images and notes meant they could be accessed anywhere and at anytime.

The technology provided improved communication with patients postoperatively due to the ease and ability to gain access to the image and video material.

Surgeons who have access to this system in other countries report reduced need to perform open surgeries because they are now able to complete more procedures laparoscopically because of the enhanced vision.

Benefits to patients

The San has long been recognised for its unique kind of patient care. Having the ability to provide the best possible patient care requires quality surgeons, but also arming them with high quality tools of trade. The 4K Synergy system offers the following improved benefits to patients:

- Better patient outcomes through improved surgical accuracy
- Reduced operating time due to enhanced vision
- Ability to conduct multiple procedures in the one surgical episode due to depth of field and clarity of vision
- Immediacy of patient results allowing improved post-operative communication
- Ability of technology to reduce staff paperwork therefore allowing more face-to-face nursing time and improved care

Benefits to SAH

The San has been a leader in healthcare innovation for over 115 years. When decisions regarding the purchase of new technology are made, all areas of benefit are considered. Apart from the obvious aim of improved patient care, we also consider how it will impact staff, improve service delivery, assist long-term growth and improve overall efficiency. The Arthrex Synergy system will deliver a range of benefits to our hospital:

- The fully integrated system automatically draws admission and surgical information from the patient information system, relieving staff of additional laborious paperwork, reducing the potential for human error and freeing them up to provide better patient care
- The system will fully integrate with our ‘San Care’ doctor/patient management software which will deliver imaging and surgical information immediately to the patient records
- The software-based system delivers updates to the equipment as advances are made, rather than having to replace expensive hardware which will reduce future financial burden
- The Synergy platform can be used across all surgical specialties, therefore all areas of the hospital benefit
- The secure cloud-based storage means images and notes are available to the doctors anywhere and at any time
“We have spent a lot of time reviewing the latest imaging technology on the market and have consulted all our stakeholders regarding what is available and what is the best. We have reviewed what will be the best for surgeons and patients and what will have the best financial and long-term benefit to the San, and we are confident that the Arthrex Synergy 4K Imaging Platform ticks all the boxes.” stated Brett Goods, AHCL CEO.