

# SONY



## St Jansdal Hospital streamlines operating room workflow efficiency with NUCLeUS™

### NUCLEUS™

Sony's video-over-IP image sharing platform saves time for busy OR staff, and allows more efficient sharing of surgical video content at Netherlands hospital.



#### The Challenge

- Time lost connecting equipment to screens in hospital operating rooms.
- Need to remotely consult other surgeons during procedures in OR.
- Inefficient manual printing and scanning of surgical images to add to patient record files.



#### The Solution

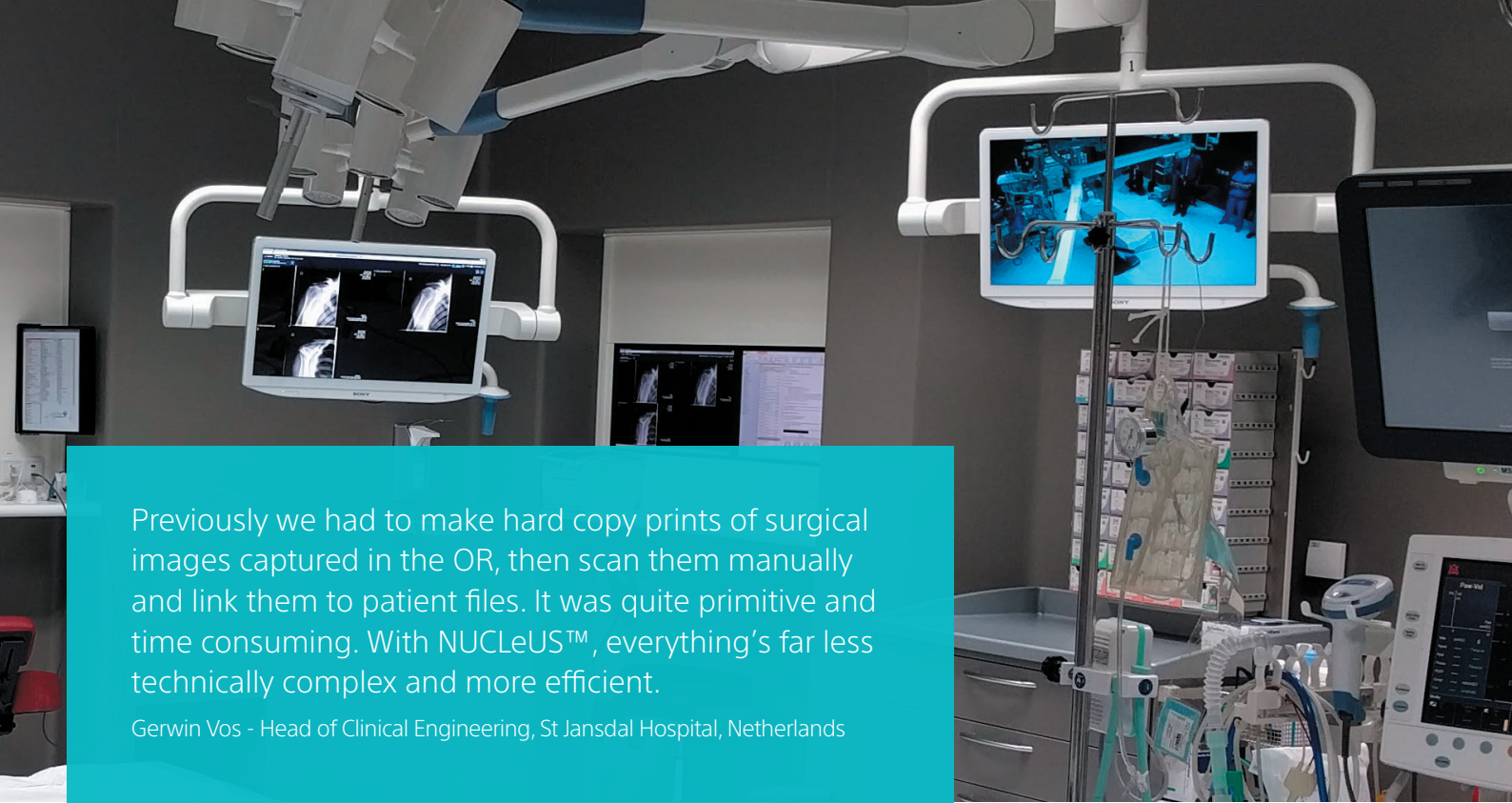
- NUCLeUSTM video-over-IP imaging platform installed in six ORs.
- Touchscreen routes surgical cameras and other image sources to any monitor in the OR.
- Video can be recorded and shared with other ORs, training rooms and Head Nurse's office.



#### The Outcome

- Faster, more efficient connection and routing of equipment in each OR.
- Surgeons can discuss procedures remotely with other colleagues.
- Easy sharing of video at conferences and events.
- Gives clinical teams clear overview of OR occupancy and resource use.



A photograph of an operating room. In the foreground, a large monitor is mounted on a stand, displaying a surgical procedure. To its left, another monitor is mounted on a ceiling arm, showing a different view. In the background, more monitors and medical equipment are visible. A teal text box is overlaid on the bottom left of the image.

Previously we had to make hard copy prints of surgical images captured in the OR, then scan them manually and link them to patient files. It was quite primitive and time consuming. With NUCLeUS™, everything's far less technically complex and more efficient.

Gerwin Vos - Head of Clinical Engineering, St Jansdal Hospital, Netherlands

## Streamlining Dutch hospital's busy workload

St Jansdal Hospital (Ziekenhuis Sint Jansdal) is a community-based hospital in the Dutch city of Harderwijk, 70km east of Amsterdam.

There's a busy schedule for surgeons and staff in the hospital's six operating rooms, with each day's worklist running from 7am until late in the afternoon. The volume of patients means a high workload for OR assistants, who must ensure that imaging sources and ancillary equipment are configured correctly for each procedure.

Preparing for each patient has become faster and more efficient with the arrival of NUCLeUS™, Sony's video-over-IP platform that streamlines the routing and distribution of video and still images sources to wherever they're needed. NUCLeUSTM has been installed in six ORs by Netherlands-based integrator Avex who also provides technical support to the hospital.

## Any image source, any destination

NUCLeUS™ allows OR Assistants to select any combination of image sources – including laparoscopic cameras, surgical microscopes, ultrasound, x-ray and patient vital signs – via the system's intuitive touchscreen. Content is routed instantly for viewing on three ceiling mounted monitors in each OR, giving staff a clear overview of the current procedure. Live video and still images

can also be routed to screens in another OR, allowing surgeons to deliberate a procedure and seek a second opinion from colleagues without needing to be physically present in the room.

## Efficient linkage with patient records

High Definition video clips and still images can be routed across the hospital's IT network and recorded directly to centralised storage. This removes the need to keep dedicated recording equipment in each OR – reducing the amount of equipment in the room. As they're captured, Full HD video and still images are automatically linked to the hospital's PACS and electronic patient record systems.

"Previously we had to make hard copy prints of surgical images captured in the OR, then scan them manually and link them to patient files" says Gerwin Vos, Head of Clinical Engineering at St Jansdal Hospital. "It was quite primitive and time consuming. With NUCLeUS™, now everything's far less technically complex and more efficient."

## Improved allocation of hospital resources

Meanwhile, camera pictures from all six OR's are routed to the Head Nurse's office, where they're presented in a mosaic-style display. This gives a valuable overview of OR occupancy at any moment, helping St Jansdal optimise use of room and staff resources.

The system also supports live video conferencing and training, with footage captured by NUCLeUS™ being used for sharing at surgical conferences, events and hospital 'Open Days'.

NUCLeUS™ saves valuable time that was previously spent repeatedly connecting equipment in the OR. "Every time we had to connect an image source to a monitor it meant another cable" says Bienneke van Weeghel, OR Assistant at St Jansdal Hospital. "Now with NUCLeUS™ it's really nice and simple – just touch the screen and images are displayed right there where you want them. It also makes things neat and tidy, with less equipment and wiring in the room."



## RELATED SOLUTIONS:

NUCLeUS™