



Dear Colleague

## 4K Imaging technology has benefits for surgeons and patients – an Australasian first

Hamilton specialists welcome arrival of 4K in operating rooms



*Tom Ingram (Device) and Margaret Dube (Braemar) demonstrate the difference between 4K and HD imaging*

The installation of the very latest imaging system will revolutionise the digital operating rooms at Braemar Hospital in Hamilton.

The private hospital is the **first hospital in Australasia** to install ultra-high definition (4K) imaging in its operating theatres, enabling surgeons to carry out laparoscopic (keyhole) surgery

with images that closely replicate what their naked eye would see looking into the body.

The human eye sees more than 10 million colours and shades. Ultra-High Definition – or 4K – has four times more pixels than HD (high definition) imagery currently used in laparoscopic and endoscopic procedures, and 64

times the available colours. US surgeon Dr Steven Palter, who performed the first HD endoscopy, says 4K is a “game-changer”. “The images are the sharpest, most detail-rich and colour correct... ever created. It is like seeing with the naked eye.”

Hamilton orthopaedic surgeon Chris O’Meeghan, who introduced Braemar to 4K, says the difference between UHD and HD (high definition) imagery is like the difference between an old big box television and the latest Apple screen.

“It’s much easier to look at. The clarity, contrast and colour are far better and there is a greater depth of field. You can more easily differentiate between different tissues and ligaments.”

Ear, nose and throat surgeon John Clarkson, who specialises in sinus

*"The images are the sharpest, most detail-rich and colour correct... ever created. It is like seeing with the naked eye."*

surgery, says, "The images that can be seen as more detailed than anything we have seen before in endoscopic sinus surgery. They offer the possibility to perform that surgery with greater accuracy and precision than has previously been attainable."

With the increase in minimally invasive surgery, there is a greater need for imaging technologies that give surgeons greater precision and more control and flexibility. The more detail they can see the greater the accuracy and efficiency of the procedure and the less risk of error. O'Meeghan says the benefits of 4K imagery for surgeons and patients are considerable. "The technology means we can operate more safely."

Angela Shaw, Braemar General Manager of clinical services said when the 4K technology was demonstrated in Sydney, the suppliers used images of the inside of a capsicum to demonstrate the image quality. "The first one (in HD) looked pretty good. But when the 4K image was shown, it was just like, 'wow', this is amazing technology"

That simple demonstration led to a full clinical trial by Braemar surgeons in the hospital's operating theatres.

Braemar chief executive Paul Bennett says the multi-million dollar technology is an exciting development for surgical staff and patients. "We want to install the best tools for surgeons to get the best outcomes for their patients".

He says the benefits for surgeons are significant. "They are viewing what they would normally view in open surgery. So it's much more relaxing for their eyes. Because of the size of the investment, more patients will benefit from the technology."

The new technology will also be used as a teaching tool. One of the digital operating rooms will be set up to stream live images and sound to a meeting room at Braemar, so specialists can demonstrate complex procedures to colleagues and junior staff.

All Braemar's operating rooms will have access to the technology.



**To read and see more about our 4K imaging technology click through using the below links:**

<http://braemarthospital.co.nz/news-items/hollywood-technology-now-used-for-surgery-in-hamilton-hospital/>

<https://www.tvnz.co.nz/one-news/new-zealand/safer-keyhole-surgery-coming-as-latest-digital-monitors-arrive-in-nz?autoplay=4685630750001>

Or go to [braemarthospital.co.nz](http://braemarthospital.co.nz) and check out our on-line news page.

## SPECIALIST SELECTOR

Check out [braemarspecialists.co.nz](http://braemarspecialists.co.nz) for full details of all the surgeons working at Braemar Hospital.

Scan for more >



[www.braemarthospital.co.nz](http://www.braemarthospital.co.nz)



24 Ohaupo Road, Hamilton  
PO Box 972, Waikato Mail Centre 3240  
Phone: 07 843 1899 | Fax: 07 834 3944