



St George Hospital and Community Health Services

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St George Hospital's new O-Arm – a first for public hospitals in Australia



St George Hospital has become the first public hospital in Australia to install a revolutionary O-Arm portable intraoperative CT scanner.

The machine is worth more than \$1 million and is the largest item of equipment purchased for the St George Hospital redevelopment.

Dr **Mark Davies**, Neurosurgeon, St George Hospital, said the O-Arm was the most cutting-edge form of technology of its type in the world.

"As a Level 1 Trauma Centre in Sydney, it's really significant that St George Hospital now has the O-Arm and we are already seeing the benefits," Mark said.

The machine can be wheeled into different theatres when needed, providing three-dimensional

images in real time with low radiation exposure, enabling medical staff to remain in the room while in use.

“An example is a young lady in her 20s with an unstable spinal fracture as a result of a car accident, recently had surgery using the O-Arm. She was able to leave hospital just days after surgery. Previously, she could well have been in hospital for up to two weeks, such is the accuracy of this technology.”

The O-Arm links with the surgical navigation system in the operating theatres and offers many benefits over traditional 2D fluoroscopy machines.

"More than 15 years in the development, the benefits of the O-Arm extend beyond its core role for trauma, spinal and brain surgery. We are still exploring its capabilities and looking at what it can do for other areas of surgery," Mark said.

Combining the image quality of a CT scanner in the operating room with what is essentially a GPS for surgeons; the O-Arm enables doctors to more easily navigate around delicate spinal and neurological structures and tracks instrumentation during surgery. This means surgeons receive extremely precise real time visual feedback on the insertion of metal rods and screws during spinal surgery.

"The benefits of using this technology flow on to the patient with the precise accuracy of the O-Arm resulting in higher success rates of surgery, less after surgery complications and shorter recovery times for patients."