

## **SACRED HEART HOSPITAL**

### **SMART OR™**

### **FACT SHEET**

In Sacred Heart Hospital's innovative neurosurgical suite – the Smart OR™ – several components of sophisticated technology work together to provide the utmost precision and accuracy during brain and spine procedures. Regarded as the “operating room of the future,” the Smart OR is used for both surgery and diagnostics, allowing neurosurgeons to see beyond what can be seen with standard MRI imaging, using advanced tools and real-time imagery. Sacred Heart Hospital's commitment to providing the highest quality care through the use of the latest, most advanced technology is revolutionizing and drastically changing the delivery of healthcare.

#### **QUALITY CARE CAPABILITIES**

- The Smart OR brings together real-time, high definition images and neuro-navigational technology to provide the Sacred Heart Hospital surgical team with unmatched precision to treat tumors more effectively than ever before.
- Every component of the Smart OR gathers and organizes critical information to guide the surgical team during procedures. With real-time information, neurosurgeons can navigate the brain to locate and completely treat or remove the tumor, affecting as little of the surrounding tissue as possible.

#### **ADVANCED TECHNOLOGY COMPONENTS**

- Moving to and from the patient during surgery to capture images as operations progress, an intra-operative MRI (iMRI) allows the surgical team to verify whether a cancerous tumor has been completely removed, greatly reducing the need for follow-up surgery. Due to the iMRI's mobility, patients do not need to be moved to and from a standard MRI scanner, thereby reducing the risk of complication.
- Monitoring and documenting every aspect of the procedure with high definition, three dimensional pictures, the VectorVision Sky acts like a global position system (GPS) for the brain.
- The high magnification Zeiss OPMI Petro C Microscope enables Sacred Heart Hospital neurosurgeons to clearly see as they navigate through sensitive areas of the brain while operating.
- Providing real-time information, a high-tech surgical mapping system, called the BrainSUITE®, stores, references and displays images within seconds on flat screens mounted in the operating room. This allows the entire surgical team to view the operation as it progresses and easily consult with one another during surgery.

#### **ULTIMATE PATIENT BENEFITS**

- The Smart OR minimizes trauma, leads to a faster recovery time, amounts to a shorter hospital stay and reduces the risk of various complications, especially additional surgery.
- Sacred Heart Hospital neurosurgeons get direct and instant feedback on the progress of their surgery with the Smart OR technology. This enables them to avoid critical areas of the brain and spine and allows for thorough tumor removal before concluding the operation. With real-time

imagery, combined with the surgical team's skill and knowledge, the safest, most efficient path to the tumor can be charted.

**UNIQUE TECHNOLOGY**

- Sacred Heart Hospital is the first hospital of its size to have a BrainSUITE with the IMRIS iMRI operating suite and eventually the iCT operating suite; and it is the first hospital of its size in the country to use this technology for both surgery and diagnostics. Furthermore, Sacred Heart Hospital is one of only six hospitals in the U.S. – and one of only 17 hospitals in the world – to offer BrainSUITE and IMRIS iMRI technology.
- Brain, spine and trauma patients at Sacred Heart Hospital now benefit from some of the most advanced surgical technology available anywhere in the world – right in Eau Claire, Wisconsin.