In October, Ingalls Memorial Hospital became the first and only hospital in the Midwest – and just the seventh in the nation – to install a new mobile intra-operative computerized tomography (CT) scanning system for use during complex spinal and neurosurgical procedures.

With the addition of the revolutionary mobile technology, surgeons can automatically register the newly acquired CT images and merge them with a patient’s pre-operative scans to track and monitor their surgical instruments in real time, helping to safely achieve desired surgical goals.

The Brainlab Airo Mobile Intraoperative CT technology was installed at Ingalls in early October.

“Ingalls is proud to be the first hospital in the Midwest and one of only a handful in the nation to use this new Brainlab technology,” said Kurt Johnson, President/CEO. “We believe the addition of this innovative imaging system will further enhance the quality of care we offer to our patients during complex surgical procedures.”
The new technology allows for detailed 3-D pictures of the complex anatomy of the spine and the nerves and roots of the spinal cord to guide surgeons as they operate,” adds board-certified spine surgeon George Miz, M.D. “The Airo Mobile CT has the potential to change daily practice in the operating room, which is very important when you are talking about complicated spine and brain surgeries.”

With a gantry opening of 107 cm – the widest on the market – the new technology enables flexible patient positioning. Surgeons can use the technology to see how surgeries are progressing, while maintaining the patient’s surgical position.

And the intraoperative CT can be used in combination with another image-guided surgery system already in-use at Ingalls. Using the two systems together will offer unprecedented visualization and precision during complex brain, spine and trauma surgeries.

“The Brainlab scan volume allows surgeons to image the entire spine in a single scan,” Dr. Miz said.

While traditional X-rays or MRI scans can sometimes take up to 30 minutes to obtain needed images, the new technology can produce three-dimensional 32-slice CT scans in just one to two minutes.

And unlike many systems, the equipment’s mobility offers the option to use the CT scanner in other patient care locations in the hospital as well, from the intensive care units to the emergency department if necessary.

“Ingalls is truly at the forefront of embracing and investing in exciting new technologies like the Airo mobile CT that can improve outcomes and ultimately improve lives,” Dr. Miz added. “We look forward to fully utilizing this imaging system to help enhance the quality of the surgical care we provide for patients.”

For more information, call Ingalls Advanced Orthopedic Institute at 708.915.PAIN (7246).

**About Spine Surgery at Ingalls**

The Ingalls Spine Center features a group of nationally renowned experts – orthopedic spine surgeons, neurosurgeons, nurses, physiatrists and pain management specialists – dedicated to treating
only spine disorders. In fact, Ingalls performs more procedures of the neck, spine, discs, vertebrae, nerves and spinal cord than any other hospital in Chicago’s south suburbs.

The Ingalls Spine Center specializes in:

- **Conservative treatment techniques.** Whenever possible, anesthesiologists and physiatrists rely on the most progressive non-invasive and minimally invasive approaches available today to relieve back and neck pain, including physical therapy, medications, and injections.

- **Surgical treatment options.** Ingalls offers the most advanced surgical treatments available for a full range of spine disorders including degenerative conditions, spinal cord tumors, osteoporosis, and back and neck pain. Advanced techniques like cervical disc replacement, lumbar fusion and vertebroplasty for a minimally invasive way to treat osteoporotic compression fractures are highly effective at eliminating painful symptoms.

- **Dedicated pain management specialists.** The Ingalls continuum of therapies includes epidural steroid injections, nerve blocks, implantable devices and more, until the desired result is attained.

- **Comprehensive physical therapy.** Patients have convenient access to outpatient physical therapy at the Ingalls Family Care Centers in Flossmoor and Tinley Park; Ingalls Center for Outpatient Rehabilitation (ICOR) in South Holland; at the main hospital campus in Harvey, and even in the comfort of home.