Special Technology Issue

Advanced equipment, procedures and diagnostics demonstrate Reid’s commitment to high-quality care

For many years—and particularly since opening its new facility on Reid Parkway—Reid has maintained a strong commitment to high-quality patient care through the use of advanced technologies and sophisticated procedures. In this issue of Reid MD Update, we’ve provided a snapshot of some of our more advanced technologies. Some have been available at Reid for a number of years, others have just been introduced. All are part of our goal of providing the best possible care, close to home.

Cardiology

Cryoablation

**Used For:** SVT ablation and paroxysmal atrial fibrillation ablation via cryoballoon ablation.

**Performed by cardiac electrophysiologists** Xinqiang Han, MD and Vuy Li, MD

**Description:** Uses freezing technology to ablate target tissues. In SVT ablation, cryoablation “freeze-destroys” the abnormal pathway without damaging the normal pathway, minimizing heart block and the need for pacemaker implant. In atrial fibrillation, the cryoballoon isolates pulmonary veins (PV) circumferentially (about 90% of triggers come from the PV). Cryoablation also destroys ganglionic plexus adjacent to PV that also are involved in the pathogenesis of atrial fibrillation.

**Benefits:** Considered safer and potentially faster than radiofrequency ablation (RFA), with less potential damage to surrounding structures, such as the esophagus. Avoids an inherent flaw associated with point-by-point ablation used by RFA, which can leave microscopic gaps and lead to PV reconnection, one of the biggest reasons for a-fib recurrence post-ablation.

Radiation Oncology

**TrueBeam Linear Accelerator**

**Used For:** Radiation therapy for treatment of malignancies

**Performed by radiation oncologists** Arvind Kumar, MD, John Jacobs, MD, Yunjie Lin, MD

**Description:** Provides precise radiation treatments for cancer patients. Reid’s was the first Radiation Oncology Department in Indiana to have TrueBeam technology.

- Image-guided radiation therapy (IGRT)
- Intensity-modulated radiation therapy (IMRT)
- Stereotactic body radiation therapy (SBRT)
- RapidArc radiation therapy

**Benefits:** Allows for precisely targeted radiation therapy treatments; shorter radiation beam-on time; reduced overall patient time on the treatment table; and reduced radiation dose to normal tissue.

Sensei X Robotic Catheter System

**Used For:** Primarily atrial fibrillation ablation (both persistent and paroxysmal), but also PVC, VT and atrial flutter ablation.

**Performed by cardiac electrophysiologists** Xinqiang Han, MD and Vuy Li, MD

**Description:** The ablation catheter is mounted on a robotic arm that accesses the heart percutaneously and can be controlled remotely in cohesion with an advanced three-dimensional mapping system. Reid was the first hospital in Indiana to install this technology.

**Benefits:** The stability provided by the robotic arm enhances tissue contact and accuracy. IntelliSense feature provides catheter stability through force-sensing technology. System reduces X-ray exposure and minimizes fatigue for physician.
**Otolaryngology**

**Balloon Sinuplasty**

**Used For:** Relieving symptoms of chronic sinusitis and acute rhinosinusitis

**Performed by:** Rohit Bawa, MD, Otolaryngology

**Description:** This catheter-based procedure is used to gently open blocked sinuses without tissue or bone removal. A balloon catheter is inserted into the inflamed sinus and inflated to expand the sinus opening to restructure and widen walls of the sinus passageway while maintaining the integrity of the sinus lining. Saline is sprayed into the inflamed sinus to flush pus and mucus, and the tools are removed, leaving sinuses open.

**Benefits:** Compared to traditional sinus surgery, balloon sinuplasty offers less bleeding and a faster recovery time. Published clinical data indicate that patients experienced no device-related adverse events and demonstrated statistically and clinically significant improvement in their sinusitis symptoms.

**Laboratory**

Reid Laboratory offers diagnostics typically found only in larger medical centers. The following tests were introduced at Reid and can offer faster, more accurate results.

**Test:** Upgraded Hematology Analyzer

**Used For:** Analyzing blood cell components

**Description:** Greater capacity and three times the throughput of previous analyzers.

**Benefits:** Allows physicians to follow red cell changes more quickly over time; this helps evaluate the effectiveness of treatment and more discrete analysis of white blood cells and platelets.

**Ordered by:** Oncologists, family physicians, internists

**Test:** Tissue processor

**Used For:** Tissue analysis

**Description:** Automated multi-compartment processor allows lab personnel to process different types of tissue at the same time, higher quality specimens and more accurate diagnoses.

**Ordered by:** Surgeons, oncologists, internists

**Test:** Cepheid molecular analyzer

**Use For:** Rapid diagnosis of infectious diseases, including Clostridium difficile and MRSA, and sexually transmitted diseases such as chlamydia and gonorrhea. Results usually available within two hours after arrival in the laboratory.

**Description:** Uses DNA from samples to provide initial diagnosis of certain infectious diseases.

**Benefits:** Faster results mean more rapid initiation of treatment.

**Ordered by:** Primary care and emergency medicine physicians; hospitalists

**Orthopedics**

**Brain Lab Spinal Navigation**

**Used For:** Most spinal procedures, including complex surgeries on the cervical, thoracic and lumbar spine, such as complex deformity surgery and tumor treatment

**Performed by:** Orthopedic and spine surgeons, particularly Gregory Hellwarth, MD

**Description:** Image-guided, open navigation platform for spinal surgery. Uses two-dimensional images, three-dimensional scans, MRI and CT datasets in all stages of surgery, from planning to implant placement. Both pre- and intraoperative images can be registered for navigation.

**Benefits:** Offers less X-ray exposure and more accurate incision planning and implant placement.

**Priority Consult System**

**Used for:** Pre-op triage of appointments for patients seeking spine care

**Provided by:** Marg Sheperd, RN, orthopedic nurse spine navigator (triage is done on the phone)

**Description:** Software helps office staff screen patients referred to Reid Orthopedic Center for spine care. The goal is for spine pain patients to be directed to the right level of care, at the right time, in the right setting. Some patients will require a traditional office appointment with spine surgeons Gregory Hellwarth, MD, or Ravishankar Vedantam, MD, but many can be guided directly to pain management or therapy. This new pathway will also support referring providers and their practices by increasing communication and time management of their patients with back pain.

**Benefit:** Provides better customer service.

**Radiology**

**1.5 Tesla High Field MRI**

**Benefits:** Provides high-quality imaging for all patients and indications. Reid has two 1.5 Tesla MRI machines, one in the inpatient radiology department and one in the outpatient imaging center.

The CinemaVision system (MRI goggles) is available to make the procedure more relaxing and enjoyable by allowing the patient to enjoy television, DVDs or music. If needed, Xanax or anesthesia may be used.

**Surgery**

**daVinci Surgery System**

**Used For:** Urology, gynecology and thoracic procedures

**Performed by:** Reid surgeons, including:

**Urology:** Aaron Johnson, MD, Timothy Siegel, MD

- Radical prostatectomy
- Partial and total nephrectomy
- Radical cystectomy
- Reconstructive procedures of the kidney and bladder

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Congratulations to...

The **Reid Breast Cancer** recently received Stereotactic Breast Biopsy Accreditation from the American College of Radiology. This complements its other accreditations, which include those for mammography, stereotactic breast biopsy, breast ultrasound and guided breast biopsy for ultrasound. In addition, Reid has been designated as a Breast Imaging Center of Excellence by the American College of Radiology.

![Image of physicians](image1)

**Reid Orthopedic Center** was again named a Five-Star Recipient for Total Knee Replacement. This was the third year in a row the center won the award, which was presented by Health Grades representative Allison Robb at the Reid Orthopedic Center open house on May 20. The open house was attended by over 100 members of the public, who toured the newly remodeled facility at 1400 Highland Rd., Richmond.

Reid **President/CEO Craig Kinyon** was one of 51 hospital executives recognized recently by the American Hospital Association with a “Grassroots Champions” award. The award recognizes “exceptional leadership in generating grassroots and community activity in support of a hospital’s mission.” Kinyon has been at Reid for 19 years, and has served as President/CEO since 2008.

**Reid Telehealth**

Stephen Daggett of Winchester was the first patient to participate in Reid’s new telehealth program, which launched in the region in May. Daggett said his session with Dr. John McGinty of Richmond Cardiology Associates was much less taxing because of the convenience of not having to travel.

The live, interactive video consult service connects patients in rural areas with physicians who specialize in cardiology, orthopedics, pulmonary care and infectious diseases. The five primary care offices currently participating are Eaton Family Care, Hagerstown Family Practice, Randolph Medical Center, Union County Medical Center, and Whitewater Valley Primary Care.

**Out and About**

Many thanks to the following physicians for making presentations in the communities we serve:

- **Jeevan Sekhar, MD**, oncology, and **Tamika Turner, FNP** did presentations at the May 15 Cancer survivors celebration, “HOPE Grows Here.”
- **Dr. Sekhar’s presentation was called “Looking Upward and Outward: The Benefits of Healthy Living to Reduce Cancer.”**
- **Aimee Rogers, MD**, urology, spoke on the topic “Chronic Urinary Tract Infections, Urinary Retention and Incontinence” at the advanced practice providers meeting at Reid Hospital on June 4. Dr. Rogers also made Grand Rounds presentations at Wayne HealthCare in Greenville and Reid Hospital titled “The Other Side of the Coin: Evaluation & Treatment of Common Female Urologic Issues.”
- Orthopedic surgeons **Richard Miller, DO**, and **Chad Reed, DO**, presented “Does Joint Pain Slow You Down?” to approximately 30 attendees at Michael Anthony’s at the Inn in Versailles, Ohio, on June 12.
- **Orthopedic surgeon, Brett Krepps, MD**, presented “You Don’t Have to Live with Joint and Hip Pain,” May 8 in Metamora, Indiana.

**Welcome, New Medical Staff**

- **Cierra Ward, NP**, joined the Care Advance Team.
- **Jessica Johnson, NP** recently joined the Care Advance Team.
- Reid Physician Associates welcomes Main Street Family Medicine (formerly Indian Creek Family Medicine Center), located at 617 Main Street in Brookville, Indiana. The practice includes **Michael Fain, DO**, family medicine, and **Mary Eversole, NP**.

![Image of physicians](image2)

Ryan Holliday, outpatient therapy services manager (right) demonstrates dry needling therapy on Rick Johnson, director of rehab services, during the Reid Orthopedic Center open house held May 20.
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Grand Rounds
Wednesdays, 7:30 a.m. - 8:30 a.m.
Reid Hospital, Lingle Auditorium
For info, contact: Medical Education Department
(765) 983-3112
Lynda.McClelland@ReidHospital.org

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Gynecology: Joseph M. Smith, MD
• Hysterectomy for benign and cancer indications
• Endometriosis resection
• Salpingo-oophorectomy

Thoracic surgery: John Kuhn, MD
• Mediastinal tumor resection
• Lung tumor resection
• Esophageal tumor resection

Description: Minimally invasive surgery on a robotic platform. Small incisions are used to introduce miniaturized wristed instruments and a high-definition camera. The surgeon views a magnified, high-resolution three-dimensional image of the surgical site. Robotic and computer technologies scale, filter and seamlessly translate the surgeon’s hand movements into precise micro-movements of the da Vinci instruments.

Benefits: Can mean shorter hospital stay, less risk of infection, less blood loss and fewer transfusions, faster recovery and less pain and scarring.

Urology

Video urodynamic testing

Used For: Detailed evaluations of bladder functions. Ideal for patients with complex conditions, such as spinal cord injury or spina bifida, and patients at high risk for neurogenic bladder. Can help diagnose problems related to recurrent urinary tract infections, urgency/frequency issues, urogenic bladder and incontinence.

Performed by Aimee Rogers, MD, and Timothy Siegel, MD, urology/urological surgery

Description: Adds a video component to traditional urodynamic testing, providing more meaningful diagnostic data. Using contrast material, fluroroscopy and a high-definition monitor, the physician can observe bladder size and shape, sphincter dysfunction, rectal tone, abdominal tone and changes in bladder pressure.

Benefits: Can provide a more accurate understanding of the patient’s condition. Especially helpful for patients who cannot void on command.

Wound Care

Hyperbaric Therapy

Used For: Healing soft tissue infections, crush injuries, delayed radiation injuries, diabetes-related wounds and skin grafts and flaps.

Performed by: Wound specialists at Reid Wound Healing Center

Description: Surrounds patient with 100% oxygen at higher-than-normal atmospheric pressure, maximizes oxygen delivered to tissue, reduces edema and accelerates the formation of blood vessels. Multiple sessions last 90 minutes to two hours each.

Benefits: Promotes wound healing by stimulating growth to oxygen-carrying small blood vessels, promoting new skin growth and helping to fight infection.