Robotic-Assisted Surgery

Minimally Invasive Procedures Designed for You

Trinity Health

Transforming Surgery with Robotic Technology at Trinity Health Michigan

Facing surgery can feel overwhelming. Whether it's planned or unexpected, you want to know you're in the best hands possible. That's why Trinity Health offers robotic-assisted surgery: a safer, more precise and less invasive option that helps you heal faster and get back to what matters most—your life, your family, your routine.

At Trinity Health, we're proud to be a leader in robotic-assisted care across Michigan. But what matters most isn't the numbers—it's what they mean for you. With over 270 highly skilled surgeons and more than 8,200 robotic procedures performed each year, we combine deep expertise with cutting-edge technology to deliver care that's tailored to you.

Across the state of Michigan, our expert teams are ready to support you with the latest in robotic-assisted surgery—so you can feel confident, cared for and ready to move forward.

Find a Doctor

Our online directory makes it easy to find a surgeon who uses the latest robotic-assisted technology.

SRC SURGEON OF EXCELLENCE ROBOTIC SURGERY

Trinity Health Ann Arbor is proud to be recognized by the Surgical Review Corporation (SRC) for excellence in robotic-assisted procedures—delivering safer surgeries, faster recoveries and high-standard care.

Surgeon-Guided, Robot-Assisted

Robotic surgery combines cutting-edge technology with your surgeon's expertise to enhance precision, control and flexibility compared to traditional techniques.

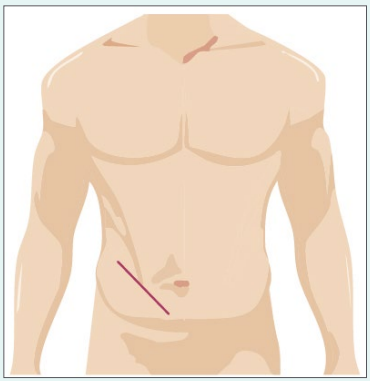
During the procedure, your surgeon is in full control—guiding robotic tools that move with incredible accuracy, even in ways human hands can't. These tools allow for smaller incisions and help avoid nearby healthy tissue. A special 3D camera gives your surgeon a clear, close-up view, helping make the surgery as safe and accurate as possible.

Because robotic surgery is so precise, it often means:

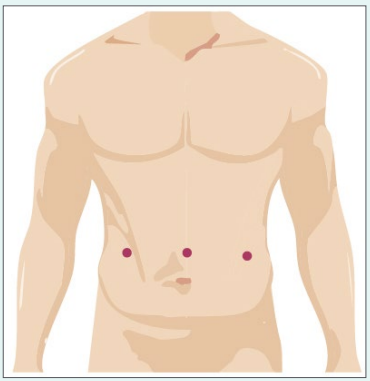
- Less damage to healthy tissue
- Less pain
- Reduced blood loss
- Lower complication rates
- Shorter hospital stays
- Faster recovery
- Less scarring
- Improved quality of life

Traditional vs. Minimally Invasive Robotic Surgery

Compared to traditional surgery, robotic-assisted techniques offer a gentler approach—smaller incisions, less trauma to your body and a quicker path to feeling like yourself again.



Traditional Surgery



Minimally Invasive Robotic Surgery

Meet the Surgical Sidekicks

da Vinci

When it comes to surgery, you want the best care with the least disruption. Trinity Health delivers both with the da Vinci surgical system — a state-of-the-art robotic technology that enables our surgeons to operate with greater accuracy and smaller incisions for a smoother recovery.

da Vinci is used in many types of surgery, including **gynecology, urology, general surgery, thoracic, and cardiac procedures**. Whether it's cancer, prostate surgery, hernia repair, or heart valve work, da Vinci helps make surgery less invasive and recovery faster.

Its robotic arms move with more control than a human hand, and a 3D camera gives your surgeon a clear, magnified view of the surgical site. Throughout the procedure, your surgeon is fully in control, guiding every movement from a console.

For you, this means less pain, minimal scarring, and a quicker return to daily life. We combine this advanced technology with compassionate care — so you feel informed, supported, and confident in your treatment.

da Vinci Surgical Specialties:

- Bariatric
- Cardiology
- Colon and Rectal
- General Surgery
- Gynecology
- Oncology
- Thoracic
- Urology
- Urogynecology

da Vinci

Explore the specialties powered by the da Vinci surgical robot.

Surgical Sidekicks

Mako

If joint pain is limiting your mobility or quality of life, robotic-assisted **joint replacement** surgery may be the solution you've been waiting for.

Mako helps your surgeon plan and perform joint replacement with a high level of precision. It starts with a 3D model of your joint, which is used to create a surgical plan tailored to your anatomy. During the procedure, your surgeon stays in full control while Mako guides a robotic arm to place the new joint exactly where it needs to go.

Robotic-assisted joint replacement offers a personalized, precise approach to help you move forward. Whether you're exploring options or ready for the next step, understanding your choices supports lasting relief and renewed mobility.

Mako Procedures:

- Total Hip Replacement
- Total Knee Replacement
- Partial Knee Replacement

Mako

Learn more about how robotic technology is reshaping joint replacements.

Surgical Sidekicks

Ion

Finding and testing spots deep in the lungs— like lung nodules — can be challenging. The Ion system helps make that process more accurate and less invasive. Using a thin, flexible tube, Ion can reach areas of the lung that are typically hard to access.

Before the procedure, a detailed 3D map of your **lungs** is created to guide the way. During the procedure, your doctor stays in full control, using small incisions and gentle tools to navigate with precision. For you, this often means a smoother experience, less discomfort and a quicker recovery.

Ion is commonly used for:

- Biopsies of small or hard-to-reach lung nodules
- Early detection of lung cancer
- Navigational bronchoscopy procedures

Ion

Explore how Ion brings robotic precision to lung biopsy.

Surgical Sidekicks

ExcelsiusGPS

The ExcelsiusGPS system is like a high-tech GPS for **spine** surgery, helping your doctor place spinal implants with exceptional accuracy. It combines real-time imaging with advanced navigation, allowing for smaller incisions and a more precise approach.

During the procedure, your surgeon guides a robotic arm to ensure everything is placed exactly where it needs to be. This level of control often means less pain, reduced risk of complications and a faster recovery.

Procedures supported by ExcelsiusGPS include:

- Spinal fusion
- Treatment for degenerative disc disease
- Correction of spinal deformities
- Minimally invasive spine surgeries

ExcelsiusGPS

See how ExcelsiusGPS is enhancing accuracy and safety in spine surgery using the link or scan the QR code.

Surgical Sidekicks

Aquablation

Living with an **enlarged prostate** — also known as Benign Prostatic Hyperplasia (BPH) — can affect everything from sleep to daily comfort. Aquablation therapy offers a modern, minimally invasive solution that uses the power of water and robotic precision to treat BPH without cutting or heat.

The robotic system guides a high-pressure water jet to gently remove only the excess tissue, leaving healthy areas untouched. This approach often leads to less pain, fewer side effects and a faster recovery.

Aquablation is used to treat:

- Moderate to severe symptoms of BPH
- Enlarged prostates of various sizes and shapes
- Patients seeking a non-thermal, minimally invasive option

Aquablation

Find out how Aquablation offers a minimally invasive solution for enlarged prostate symptoms.

Surgical Sidekicks

ROSA

If you're living with **epilepsy**, understanding where your seizures start is a key step toward treatment. The ROSA robot helps your doctor pinpoint those areas with remarkable accuracy, using a procedure called stereo-EEG.

Before surgery, your care team creates a detailed 3D map of your brain. During the procedure, ROSA guides your surgeon as they place tiny electrodes through small openings in your skull — helping them reach deep areas with precision and care. The robot doesn't perform the surgery, but it gives your doctor the tools to work with greater control and confidence.

ROSA is used to support procedures like:

- Stereo-electroencephalography (SEEG)
- Surgical planning for epilepsy treatment
- Deep brain electrode placement

ROSA

Take a closer look at ROSA and its impact on personalized epilepsy treatment.

Frequently Asked Questions

Q: Is the surgeon still in control during robotic surgery?

A: Yes — your surgeon is always 100% in control. The robotic system doesn't move on its own or make decisions. It simply translates your surgeon's hand movements into precise actions using small instruments inside your body.

Q: Is there a surgeon in the room during the robotic surgery?

A: Absolutely. Your surgeon is in the room the entire time, guiding and controlling the robotic system throughout your procedure.

Q: Are there risks or problems that only happen with robotic surgery?

A: The risks are similar to traditional surgery, but robotic systems are designed to reduce complications and improve outcomes.

Q: How long does it take to recover after robotic surgery?

A: Recovery depends on the type of surgery, but many people return to normal activities faster than they would with traditional surgery.

Q: What do the scars from robotic surgery look like?

A: Robotic surgery usually leaves small, fine-line scars that are much less noticeable than those from open surgery. Most procedures use four to five tiny incisions, each about the size of a dime or smaller.

Q: How do I get referred to a robotic surgeon?

A: Your primary care provider or specialist will refer you if surgery is the right option for your condition. Once the referral is made, the surgeon's office will contact you to schedule a consultation. If you have a specific Trinity Health surgeon or hospital in mind, you can ask your provider to send the referral there. Some insurance plans may require prior authorization, so it's a good idea to check with your insurance provider before your appointment.

Q: Does insurance pay for robotic surgery?

A: Most insurance plans, including Medicare, cover robotic surgery.

Advanced Technology, Expert Care.

Thinking about your options?

Take a closer look at everything Trinity Health Michigan offers in robotic-assisted surgery.

FIND ROBOTIC SURGEON

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