

Robotic-Assisted Surgery



Robot-assisted surgery offers surgeons greater access to difficult-to-reach areas of the anatomy using the EndoWrist instruments. Robotic technology seamlessly translates the surgeon's movements into precise, real-time movements of the surgical instruments.

Technology moves medicine forward in ways we never imagined, and Eisenhower Medical Center, investing in some of the finest medical technology available, will make another step forward this fall as the first in the Coachella Valley with the da Vinci[®] S HD™ System, a state-of-the-art surgical system. The system offers clarity and detail critical during complex procedures by integrating three-dimensional, high definition (HD) instruments with robotic technology to virtually extend the surgeon's eyes and hands during surgery.

The da Vinci Surgical System is a sophisticated robotic platform designed to enable complex surgery using a minimally invasive approach. The da Vinci System consists of a surgeon's console, a cart with four interactive robotic arms, a high-performance vision system and EndoWrist[®] instruments. "The surgeons are still performing the surgery," clarifies Lynn Hart, RN, Administrative Director of Surgical Services at Eisenhower. "The da Vinci System just translates the surgeon's hand movements at the console into more precise movements."

To perform a procedure, the surgeon uses the console's master controls to maneuver the robotic arms. One arm positions the high resolution stereo endoscope (a camera to see inside the body). The three remaining arms control precise, articulated EndoWrist instrument tips which have the ability to rotate like the human wrist, but with greater range of motion. Seated at the console, the surgeon views a magnified three-dimensional image of the surgical field with a real-time progression of the instruments throughout the surgery. The da Vinci System performs only through the surgeon's direct control and always in real time.

At Eisenhower Medical Center, the da Vinci will be used to perform a variety of surgeries, including prostatectomy, selected gynecological procedures and some cardiac procedures.