

Robot in medical field

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VEX ROBOTICS ESSAY I believe that robotics should be used in the medical field because they can be safer and be more helpful. They can save time and a person's life. They are more accurate. I have evidence to prove that robots are safe to use. 1. In 1997, surgery was performed in Cleveland using Zeus, a robotic surgical system. The operation successfully reconnected a woman's fallopian tubes. 2. In May of 1997, the first robotically-assisted operation for a heart bypass case in Germany was successfully done using the da Vinci surgical system. 3.

The first coronary artery bypass graft was performed using the ZEUS robotic surgical system in October, 1999, in Canada. 4. The first unmanned robotic surgery was performed in Italy, in May, 2006. 5. Also in 2011 a 50-year-old mother of 4 children, Maureen Sampson, was suffering from a gastrointestinal disorder. This is very serious and it can be deadly. Her condition worsened each day. As the day went by her condition worsened. But in July of 2011 her doctor referred her to the robotic-assisted surgery program at Swedish Covenant Hospital in Chicago.

Maureen didn't hesitate after learning that she could recover in a matter of weeks versus months compared to a conventional surgery. Just a month after her surgery, Maureen was back at work, back to daily life with her family, and finally feeling at ease about her health. Maureen is just one of hundreds of patients who have benefited from the knowledge and skill of the robotic-assisted surgical team. But remember these are just some of the examples of successful robotic surgery. Robotic-assisted procedures reduce the negative impacts of surgery, allowing for a speedier recovery and less pain, risk of infection, and scarring.

Surgery robots on this day are actually cleverly made manipulators controlled by competent doctors. Nowadays, there are two fields where surgical robots are being developed and tested. One is telerobotics which enables a doctor to do a surgery at a distance. The other field is minimally invasive surgery - surgery done without making large cuts. The da Vinci robot surgery system is one great example of robotics use for surgery purposes. The da Vinci System consists of a surgeon's console that is typically in the same room as the patient and a patient-side cart with four interactive robotic arms controlled from the console.

Three of the arms are for tools that hold objects, act as a scalpel, scissors, bovie, or unipolar or bipolar electrocautery instruments. The fourth arm is for an endoscopic camera with two lenses that gives the surgeon full stereoscopic vision from the console. For patients, the benefits of robotic assisted surgery may include: -Decreased post-operative pain -Decreased risk of infection -Decreased use of anesthesia -Decreased blood loss -Shorter hospital stay -Quicker and more complete recovery -Faster return to normal daily activities