

Is that you, Doc, or just your robot?

By LARA MOSSA Of The Oakland Press

They call him Lenny and he wheels around the intensive care unit at St. Joseph Mercy Oakland checking on patients. While he's only 5-foot-4, he weighs 225 pounds and has advanced intelligence.

Lenny is one of 20 RP-7 robots the Pontiac health system is using to help doctors and patients interact from long distances.

St. Joseph has three robots on site and has deployed robots at 17 other hospitals in Michigan such as POH Medical Center in Pontiac, St. Joseph's Healthcare in Clinton Township, St. Mary Mercy Hospital in Livonia and Crittenton Hospital in Rochester.

Since St. Joseph is a certified primary stroke center, the robots were used to improve stroke care at hospitals that do not have as many resources.

A physician at St. Joseph, for instance, can have face-to-face interaction with a patient hundreds of miles away and diagnose what kind of treatment will reduce the disabling effects of a stroke.



The Oakland Press/VAUGHN GURGANIAN Dr. Joseph Bander, chief of critical care services, demonstrates a robot to patient Don Trout of Pontiac at St. Joseph Mercy Oakland hospital. The robots are used to help treat patients whose doctors are not in the room.

The biggest advantage to providing long-distance assistance is that many stroke treatments must be implemented within three to four hours or will not be effective, said Dr. Joseph Bander, a physician at St. Joseph who specializes in critical care.

The robots are equipped with cameras, a computer screen, wheels and a sound system. They run on car batteries and need to be plugged in when not in use. Through wireless technology, physicians maneuver the machines from a central computer station. Meanwhile, the physician can communicate with a patient or family member.

The cameras can zoom in on a patient and provide close-ups of a wound, medical chart or monitor. The device even has a stethoscope that allows the doctor to listen to the patient's heartbeat.

The service is much more effective than providing directives over the phone, Bander said, which is the way physicians usually handle situations when they are not on site.

By no means is it meant to replace hands-on care, he said.

In addition, the robots allow patients to be treated in their community hospitals rather than be transported to a larger health system for the expertise there.

Patients and family members tend to feel more comfortable in their hometowns with their own physicians, he said.

“At the moment, it is perhaps the most advanced system that exists,” Bander said. “This is a rapidly emerging field.”

A small percentage of stroke victims are transported by helicopter to St. Joseph for advanced care, said Rob Fisher, administrative director for cardiology and neuroscience at St. Joseph.

That’s the only way the hospital reaps any revenue from the system, he said. Other than that, St. Joseph rents the robots for \$1 million a year at no cost to the participating hospitals.

The hospital began using the robots in November and will have 30 in the network by July.

The device is not used only for stroke care. St. Joseph uses the robots to help doctors monitor patients in the intensive care unit, as well.

Partnering hospitals have inquired about using the machines for cardiology and psychiatric services.

About half of the hospitals involved are part of Novi based Trinity Health, which is the parent company of St. Joseph Mercy Oakland.

Eventually, the technology may be implemented at Trinity Health hospitals in other states.