

Robot rolls into Lompoc hospital

By Bo Poertner/Managing Editor

Think "Star Wars." Think R2-D2.

Now the picture should come into focus - a mobile robot, a computerized whiz kid that can amaze and astound with its space-age medical technology.

It walks. It talks. It hums and buzzes.

Only this robot won't roam the universe, rocketing among the stars and planets, solar system to solar system.

The Remote Presence Robot, or RP-7, soon will be stationed on permanent call at Lompoc Valley Medical Center to help in the emergency diagnosis of the worst stroke cases when the neurologist is not in the hospital.

In those cases, the neurologist will simply call in, connect to the robot and guide its movements and examination via remote control.

The dark silver-gray RP-7 is slightly over 5 feet tall, with a computer screen head atop which sit two camera lens-eyes, one slightly larger than the other, making the robot look like a comical space-alien doctor wearing a monocle. It has a round speaker built into its chest. It is capable of moving on wheels all around the patients' beds, even from room to room if necessary.

The robot is part of a partnership that also allows the Lompoc hospital to take advantage of a neurological specialist who, on the Central Coast, is available only at Santa Barbara Cottage Hospital.

Alois Zauner is the only neuroendovascular neurosurgeon from Los Angeles to the Bay Area, according to Gary Milgram, service line director for neurosciences and orthopedics at Cottage.



The Remote Presence Robot, or RP-7, above, will be stationed on permanent call at Lompoc Valley Medical Center to help in the emergency diagnosis of the worst stroke cases when the neurologist is not in the hospital.//Len Wood/Staff

Zauner is only one of 50 specialists in the nation who can retrieve brain clots through the vascular system, Milgram said.

“What is significant is that time is of the essence,” Milgram said. “He has eight hours from the onset of symptoms to remove that clot.”

RP-7 allows Zauner or any other specialist using the RP-7 system to essentially be in two places at the same time, which can be critical for small, isolated hospitals that cannot always support the services of specialists.

Say there is a late-night neurological emergency at Lompoc hospital. Neurologist Philip Ente, who will be the only doctor using the RP-7 at the hospital, at least in the beginning, can beam in on the robot from home. By controlling it with a joystick, he can examine the stroke victim, saving critical time, and quickly decide whether he can handle the case, if Zauner is needed or if the patient must be transported to UCLA Medical Center.

“It’s very important,” Ente said. “We have to really promote stroke care.”

Ente said that with today’s technology, there is often too little time to transport stroke victims to UCLA. He works two or three days each month at UCLA, making communications with Lompoc even more critical.

Nurse Executive Jayne Scalise said the RP-7 can be used for off-site staff education. Eventually, she said, it might be used in the Intensive Care Unit.

Ente cautioned that the robot shouldn’t become a replacement for patient examinations by human beings.

Milgram emphasized that the benefit extends to both Lompoc and Santa Barbara.

“For a community such as Lompoc to obtain a sub-specialist like this, they just wouldn’t because there isn’t the population there that is going to keep a specialist in business,” Milgram said. “That statement is also true for Santa Barbara. So there is a win-win here. We share our specialist with the Central Coast.

Milgram said Cottage leases the \$120,000 RP-7 for \$5,000, but patient billing will pay for it and its use won’t cost Lompoc hospital anything.

He estimated that Lompoc hospital receives 50 to 60 stroke victims per year, but only two or three per month would be examined with the robot.

“Don’t expect to see this robot moving around all day long,” he said. “It is something that is going to collect dust in the corner until you need it. But when you need it, it’s going to pack a powerful punch.”

Milgram said he hopes that Cottage can put robots in medical centers throughout the Central Coast.

Although the robot hasn’t approached its first patient in Lompoc, Judy Blankenship, director of Emergency Department nursing at the hospital, is admittedly amazed by its potential - and its mere existence.

"I never thought I'd ever be in the nursing field long enough to work with a robot," she said, sitting on a gurney and eyeing the quiet RP-7, plugged into a nearby electrical socket to keep its battery charged.

Blankenship has been a nurse for 42 years.

"We used to have to wash our own syringes and sharpen our own needles. Nothing was disposal," she said. "It's just come a long way."

Blankenship recalled when Matt Williams, of InTouch Technologies Inc., the robot's Goleta producer, beamed in to demonstrate the RP-7's capabilities.

"He beamed in from Petaluma. He was on the screen. He could see everybody in the room," she said. "If someone asked him a question, the screen would turn to them."

To demonstrate, she grabbed the robot by the head and twisted it one way, then another.

The uses of the RP-7 are clean. What is not as clear is what the robot should be named.

Blankenship said some emergency room workers have begun calling the robot Wanda. But she said she doesn't particular like that name; she prefers a space-age name.

"Like Chewbacca."