

ROBOT DOC

Telemedicine expands the reach of medical care.

HEALTHBEAT C1



HEALTHBEAT

PAGING DR. RP-7

TELEMEDICINE TREND MAKES USE OF ROBOTS, TECHNOLOGY TO TREAT PATIENTS

By Susan Abram
Staff Writer

The RP-7 looks left, then right before it rolls its 5 1/2-foot-tall body down the hallways of Childrens Hospital Los Angeles.

Its goggle-like eyes see all signs on walls and children held by parents, the nurses who smile at it and the physicians who give it a nod hello.

The RP-7 is a robot, a cross between WALL-E and R2-D2, only taller and with a specialty in medicine. It also wears a familiar face: that of Dr. Jeffrey Upperman, director of the Childrens Hospital trauma unit.

From his private office several floors above the emergency department, Upperman uses his laptop to control RP-7. Using the two-way camera, Upperman's face is displayed on a monitor mounted on the robot. And with a joystick, Upperman is able to roll to a patient's bedside and enable two-way, real-time communication. If the need should arise, the RP-7 is even equipped with a long-distance stethoscope.

"It has hookups so that a nurse on the other end can place a stethoscope on a child," Upperman said. "At first, I was a skeptic. I was like, 'Give me a break, I'm a surgeon.'"

But after trying the stethoscope, he said, he "was floored by the interaction."

The robot is part of a growing trend in health care called telemedicine, in which medical information is discussed and transferred via telephone or online in real time. The technology allows pediatric surgeons such as Upperman to offer advice to physicians at far-off hospitals where a specialist is unavailable.

Telemedicine "is growing by leaps and bounds," said Jonathan Linkous, CEO of American Telemedicine Association.

The nearly \$1 billion worldwide industry is still new, but will likely expand, as the need for specialty care continues at a time when the nation faces physician shortages. Already, Linkous estimates,

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Esan Yee/Staff Photographer

Dr. Jeffrey Upperman, above, director of the Childrens Hospital Los Angeles trauma unit, uses a laptop to operate the RP-7 robot, pictured at top right. The robot allows medical personnel to view and interact with patients at a remote location. The screen at right is what Upperman sees on his computer through the eyes of his robotic persona. About 200 RP-7s operate worldwide.

