

FDA gives green light to RP-VITA hospital robot

January 25 2013, by Nancy Owano



(Phys.org)—The FDA has approved RP-VITA from iRobot and InTouch Health. This is an autonomous medical robot which will be able to make its rounds of hospital corridors in the U.S. within the next few

months. The RP-VITA robot, to cost hospitals between \$4,000 and \$6,000 a month to operate, has the distinction of being an autonomous moving, telepresence robot that can allow doctors remotely to interact with their hospital patients.

Autonomous movement is a key feature, as now doctors remotely can direct the robot to anywhere in a hospital. Analysts see this as an important step in the potential use of robots in real-world settings beyond the military. The robot is seen as helping busy hospitals leverage remote presence as part of their routine.

The RP-Vita has built-in mapping, obstacle detection, avoidance technology. Translation: the RP-VITA avoids smashing into objects and people through its use of lasers, sonar, and sensors. The human-sized robot is a 5-foot-6-inch device, and its "face" is a screen.

An iPad [user interface](#) can connect directly to hospital systems. The display, along with this iPad interface, allows a doctor to examine a patient remotely. Doctors, for example, open the robot's [software application](#) on their iPads, view an electronic map of the hospital, and direct the robot to their patient as they study the person's [medical records](#) and proceed to evaluate the patient's condition from anywhere in the world.

Acute-care scenarios can be supported in that the RP-VITA is designed to access ultrasound and devices such as electronic stethoscopes, and can be integrated with the patient's vital signs data and lab results.

The robot's telecommunications and [autonomous navigation](#) technology is a result of a joint development between the two companies, [iRobot](#) and InTouch Healthcare. The FDA has given the device 510(k) clearance. The clearance allows RP-VITA to be used for active patient monitoring in preoperative, perioperative and post-surgical settings.

Those settings may include cardiovascular, neurological, prenatal, psychological and critical care assessments and examinations.

"FDA clearance of a robot that can move safely and independently through a fast-paced, chaotic and demanding hospital environment is a significant technological milestone for the robotics and healthcare industries," said Colin Angle, chairman and CEO of Bedford, Massachusetts-based iRobot.

"There are very few environments as difficult to maneuver as that of a busy ICU or emergency department. Having crossed this technology threshold, the potential for self-navigating robots in other markets, and for new applications, is virtually limitless." RP-VITA is being sold into the healthcare market by InTouch Health.

More information: www.intouchhealth.com/products...ducts/rp-vita-robot/

© 2013 Phys.org

Citation: FDA gives green light to RP-VITA hospital robot (2013, January 25) retrieved 10 April 2024 from <https://phys.org/news/2013-01-fda-green-rp-vita-hospital-robot.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--