



INTOUCH HEALTH®

What is RP-7 and Remote Presence?

RP-7® is a wireless, mobile, Remote Presence robot that lets you "be in two places at once." Remote Presence is the ability to project yourself to another location (without leaving your current location) and to move, see, hear and talk as though you were actually there.

How does RP-7 work?

To use RP-7 requires a simple installation at both the local site (where you are) and the remote site (where you will "remotely" visit via RP-7). At the local site, a ControlStation is installed. This is a computer workstation equipped with a video camera, microphone, joystick and specialized software. This computer is linked to the Internet via a broadband connection.



At the remote site, we install RP-7 on an 802.11 wireless network. RP-7 contains a special video camera, microphone and LCD screen fixed to a motorized platform. From the ControlStation, a physician has full control of the RP-7 camera (pan, tilt, zoom) and the motorized platform.

Moreover, at the ControlStation a physician can also access the hospital's electronic medical records (EMR) to view patient data. By combining the EMR with Remote Presence a physician now has all the necessary information to conduct a medical consultation.

Who "operates" RP-7?

Physicians and other healthcare professionals who have undergone an RP-7 training program may operate the system.

Is RP-7 easy to use? How long does it take to learn how to use it?

RP-7 is very easy to use. After two 30-minute sessions, users are fully trained and proficient.

What is the cost of RP-7?

There are three main components to the Remote Presence System. The RP-7 Robot, a ControlStation, and an all-inclusive Connectivity Service plan which includes service, support, training, license fees and software updates.

Most of our customers rent the RP-7 System. With a 5 year agreement, the RP-7 Robot and Connectivity Service are available for a monthly cost of about \$5,000.

The ControlStations are available for a one-time purchase price of \$2,500 each.

And finally, there are costs for the wireless network, installation and broadband lines. These costs vary depending on the size of the facility and its accessibility to broadband Internet. Most hospitals already have the necessary network infrastructure in place.

FAQ

What is happening in healthcare today?

There is a significant and growing societal problem due to an increasing aging population and a shortage of healthcare professionals. Over the past 60 years, life expectancy has risen 15 years. This increase in life expectancy, combined with the aging baby boomers, has created an unprecedented growth in healthcare demand. Hospital admissions are on the rise while the shortage of healthcare professionals continues to grow.

According to a 2001 study by the American Hospital Association, 89% of Hospital CEOs reported significant workforce shortages across a broad range of positions including nursing, radiology, pharmacy, medical technology, therapy and physicians. The Bureau of Health Professions projects that the number of healthcare workers will need to grow by more than 5.3 million between 2000 and 2010. Already today there are over 400,000 unfilled nursing positions and this number is expected to exceed 1,000,000 before the end of the decade. These unfilled nursing positions are currently causing healthcare providers across the country to close wings or risk negative outcomes.

With growing shortages across many healthcare professions, an aging population, and no foreseeable solution on the horizon, technology that dramatically increases the effectiveness of healthcare professionals is required.

How will RP-7 benefit the healthcare industry?

InTouch Health is not trying to replace doctors and nurses with Robots – a machine could never replace the human touch.

Rather, the InTouch Health solution enables doctors to more effectively provide consistent, high-quality services to a greater number of both patients and staff. At a moment's notice, RP-7 can instantly bring expertise into a hospital. RP-7 leverages the time and expertise of physicians across many locations to improve the efficiency and effectiveness of care delivery.

Through an increase of timelier patient-doctor interactions, patient care is improved which results in increased patient and doctor satisfaction and decreased length of hospital stay.

What are some of the applications of RP-7?

There are numerous applications for InTouch Health's Remote Presence technology. From within the hospital, clinical office, or even from home, doctors are able to log on to the RP-7 robot from a ControlStation and visit with their patients and patients' families, as well as other doctors and nurses at the hospital.

ICU and Areas of High Acuity

There exists a profound base of clinical evidence that shows 24-7 intensivist-led ICU care yields significantly better patient outcomes including lower mortality rates, fewer complications and reduced length of hospital stay. (An intensivist is a physician who specializes in care of patients in the ICU.) However there is a substantial shortage of intensivists with only 5 to 6 thousand intensivists to cover more than 8,000 ICU's in the US.

Intensivists are able to use RP-7 to monitor, take call, and consult and visit with patients, nursing staff and other physicians in the ICU. InTouch Health's Remote Presence technology enables a hospital's own specialists to not only be available at the point-of-care whenever they're needed, but to provide the 24-7 coverage requirements necessary to comply with the Leapfrog ICU safety and compliance initiatives.

Emergency Department Consults

Specialists such as cardiologists, orthopedic surgeons, neurosurgeons and trauma surgeons are required to take call in the hospital's emergency department. These busy physicians are often tied up in the OR, in their clinic or elsewhere and cannot immediately go to the ED resulting in long delays for patients and overcrowding for the hospital. Remote Presence technology enables specialists to efficiently respond to ED call at the point-of-care whenever they are needed day or night.

Physician Rounds

Physicians usually round on their hospital patients once a day. Through the RP-7 robot, doctors can conduct additional patient rounds each day (including weekends) from home or the office as their busy schedule permits. These additive patient interactions are not only popular among patients and family members anxious to hear the latest information but are an effective tool to advance the care management process. Because most doctors do not feel comfortable discharging their patients without seeing them first, remote presence often facilitates an earlier patient discharge.

Training, Coaching & Mentoring

Healthcare professionals can use RP-7 to extend and leverage their expertise across multiple locations, especially where geographic distances may pose a barrier to more routine interactions. For example, in managing the care of patients in new surgical procedures, a proctor/mentor can use Remote Presence to share their knowledge with any hospital where an RP-7 may be located.

What is the difference between RP-7 and a video conferencing system?

RP-7 allows remote experts to make both planned and spontaneous visits anywhere within the hospital. RP-7's ability to move throughout a hospital allows consultation at the point-of-care, whether in the privacy of a patient's room, in the ICU or at the nurses' station. Additionally, Remote Presence has the power to create the feeling of a real interactive experience that far surpasses that of video conferencing.

Why not just wire the facility and place a camera in every room?

To wire every room in a hospital and install cameras and microphones would be cost prohibitive and moreover, the experience would not be interactive but more like talking to security cameras.

Can a doctor actually examine a patient via RP-7?

Physicians often use telephones and cell phones to consult with nursing staff regarding patient care. Remote Presence allows the physician the added benefit of seeing the patient, patient monitors and other clinical data sources firsthand. This ability improves the physician's clinical information set while reducing the pressure on nursing staff to precisely describe subtle changes in the patient's disposition. RP-7 is the next generation of communications technology for healthcare.

Is RP-7 intended to replace a doctor or nurse? Replace the "personal touch" of care giving?

RP-7 is not intended to replace healthcare professionals, nor their "personal touch". On the contrary, RP-7 is used to enhance and extend their reach by providing additional, frequent and as-needed remote visits. RP-7 brings overextended physicians back to the bedside.

How many sites can one expert using RP-7 reach from his/her remote location?

A remote expert can visit an unlimited number of sites, anywhere in the world, as long as the site is properly connected to the Internet and is equipped with an RP-7 system.

What is the quality of the audio and visual?

RP-7 uses state-of-the-art, hospital-grade HIPAA compliant technology to achieve superior audio and visual capabilities. When combined with the Remote Presence platform, users have the sensation of being there.

What are the other technical functions that are unique to RP-7?

There are numerous aspects of RP-7 that are unique and proprietary. InTouch Health has numerous patents pending for this technology.

One visible example is the holonomic drive system, which allows RP-7 to move under an operator's control in any direction across a flat surface. Unlike driving a car, RP-7 does not need to be parallel parked. RP-7 can simply slide sideways or in any direction required to navigate tight spots.

RP-7 also has over 30 infrared sensors which allow for assisted driving (giving RP-7's user "eyes in the back of his head") and slowing the robot as objects get close.

What has been the reaction from the healthcare community regarding this technology?

RP-7 has received an enthusiastic welcome from hospital patients, nursing staff and physicians. In fact, results from a study conducted at Johns Hopkins Hospital show patients have a very positive response to RP-7. Dr. Louis Kavoussi, the Vice Chairman of Urology at Johns Hopkins Hospital, currently using RP-7 to round on his post-operative patients, says "...Patients love it. I was very surprised how much our patients enjoy remote video interactions via the robot."

For more information, please visit www.intouchhealth.com or phone us at 805-562-8686.