Press Release Jan 2002

TeleVital Enables First Remote Anesthesiological Monitoring Over The Internet

TeleVital's VitalWeb Connects Anesthesiologist In Virginia To Surgeon In Ecuador; Detects potentially Life-Threatening Condition

MILPITAS, CA -- (INTERNET WIRE) -- 01/16/2002 -- TeleVital Inc., a leader in web-based telemedicine achieved a significant milestone today announcing that its VitalWeb™ browser-based vital sign monitoring software enabled the first reported anesthesiological monitoring of a surgical procedure over the Internet.

Using TeleVital's VitalWeb, which monitors and records physiological data in real-time over the Internet, a consulting anesthesiologist at the Virginia Commonwealth University's Medical College of Virginia Hospital monitored the breathing and heart rhythms of a young woman undergoing a gall bladder operation 3,000 miles away in Sucua, Ecuador.

Not only was the operation a success, but VitalWeb technology was further validated when anesthesiologist Dr. Lynne Gehr detected an anomaly in the patient's heart rhythm. The surgeon, Dr. Ronald C. Merrell, Chairman of Surgery at Virginia Commonwealth University's School of Medicine corrected the potentially life threatening condition in the fully-equipped mobile operating room — a converted delivery truck.

The remote anesthesiological monitoring in Ecuador is one more example of how TeleVital enables healthcare professionals to transcend geographical barriers to improve patient care," said Kishore Kumar, president of TeleVital, Inc. . "VitalWeb's real-time data monitoring capabilities opens up a world of possibilities including remote cardiac monitoring, home healthcare and even helping ailing astronauts in space.

"The experience of sitting at my desktop computer in Virginia monitoring a patient's vital signs during an operation in Ecuador was quite remarkable," said Dr. Gehr. "The VitalWeb link provided the same information that I would have received if I had been physically   in the operating room. TeleVital's VitalWeb represents a significant advance in telemedicine with far-reaching benefits for both healthcare professionals and their patients."

The December field test in Ecuador was part of ongoing telemedicine evaluations conducted by VCU-based Medical Informatics and Technology Applications Consortium (MITAC), a Commercial Space Center (CSC) sponsored by the National Aeronautics and Space Administration (NASA).

The project was conducted under the direction of MITAC Executive Director, Charles R. Doarn.

How TeleVital's VitalWare Works

VitalWeb takes traditional store and forward telemedicine the next step by supporting the real-time streaming and viewing of raw and interpreted vital sign data. The full-featured communications application also offers synchronous real-time audio and video communication.

VitalWeb's browser-based open architecture can web-enable any PC medical device on any platform that supports a browser. VitalWeb requires a computer with an Internet connection, a Web browser

and a medical device with a communications port. And because it's completely browser-based, there's never any need to download, install or upgrade software.

The operation, which was performed in a remote area of Ecuador, exemplifies how easy it is to connect to VitalWeb. Using a laptop computer, a member of the surgical team logged into the TeleVital Web site. Using medical devices manufactured by QRS Diagnostics, a two-lead EKG affixed to the patient's extremities and a pulse oximetry clip fastened to the patient's index finger was attached to the computer. The streaming data from the devices was then transmitted via a 64K satellite uplink from the mobile operating room to the consulting anesthesiologist in Richmond, Virginia for real-time viewing on a single computer screen.

While real-time data viewing enables remote monitoring, VitalWeb also simultaneously stores the information in a permanent electronic medical record on its secure database server for easy retrieval or forwarding.

The current release of VitalWeb supports several off-the-shelf wired and wireless EKG, EMG, EEG, blood pressure, spirometry and oximetry, and multi-parameter vital sign monitoring devices.

About TeleVital

TeleVital Inc., based and founded in Milpitas, California, specializes in web-enabling medical devices, and provides the infrastructure that allows for real-time data streaming over the Internet, using its proprietary real-time browser-based software engine, VitalWeb. TeleVital provides a fully-managed connectivity solution that will securely link the healthcare community, and ensure security and confidentiality.