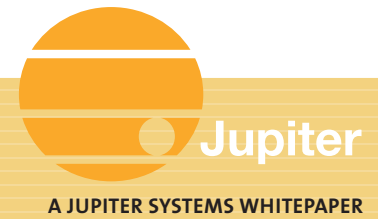


INTELLIGENT SYSTEMS FACILITATE EFFECTIVE HEALTHCARE

NEW AV TECHNOLOGIES ENABLE EFFECTIVE EMERGENCY RESPONSE AND HIGH-QUALITY MEDICAL CARE IN REMOTE AREAS



People requiring emergency medical response or medical care in remote or underserved areas can now get the treatment they need due to advances in communications and audiovisual technologies. Intelligent systems are enabling the fast and effective dispatch of paramedic response teams. Interactive audiovisual technologies are facilitating the exchange of medical information for remote consultations, exams or procedures in everything from medical education to clinical settings.

Telemedicine is an increasingly fast-growing area of clinical medicine. It's a general term that describes a variety of applications such as the transmission of key data for medical assessments, consultations or ongoing monitoring of chronic conditions; the transmission of real-time video and audio to facilitate remote testing, physical exams or even medical procedures; and distance-learning for medical students. Telemedicine in general offers comparable health outcomes to traditional in-person patient care and can be more cost effective. Medical providers who practice telemedicine are making efficient use of their limited time while helping ensure patients receive the care they need.

Medical emergency response organizations include all levels of emergency medical responsiveness from 911 calls to specialized medical teams that serve remote areas. They manage a wide range of medical emergencies, fires, water rescues, industrial accidents, hazardous material incidents and police operations to non-emergency transportation. These centers provide for emergency preparedness, the managing logistics, communications, safety, and information. In a large city these response centers can require the coordination of hundreds of paramedics, responding to tens of thousands of calls.

Jupiter Systems, the leading worldwide supplier of display wall processors used in command and control applications, is helping health care professionals and patients realize the benefits of telemedicine and fast emergency response. Jupiter solutions support the reliable transmission and display of the high-quality video and audio signals and other data inputs that are essential for telemedicine and medical education. Jupiter installations also include a large number of emergency response command and control centers.

CASE 1: T-HEALTH INSTITUTE AT THE UNIVERSITY OF ARIZONA

At the direction of the Arizona state legislature, the University of Arizona College of Medicine developed a pilot model for the Arizona Telemedicine Program in the mid-1990s. Today, the program provides telemedicine service, distance learning and training and technology assessments to communities across Arizona. The program serves 20 communities with medical services through real-time and store-and-forward technologies. It also delivers educational services to communities through two-way videoconferencing.

In 2009, the university upgraded the AV systems and conferencing capabilities at its Institute for Advanced Telemedicine and Telehealth or T-Health Institute. On the third floor of the 100-year-old Phoenix Union High School Auditorium, the T-Health Institute built a state-of-the-art amphitheater featuring a video wall of 12 50-inch Toshiba P503DL DLP Datawall RPU video cubes controlled by a Jupiter Fusion 960 display wall processor. Video images from dozens of sites can be displayed in logical groupings on the display wall or as a single display.

The amphitheater is linked to 71 rural and urban communities in Arizona and is one of three urban hubs of the Arizona Telemedicine Program. The advanced videoconferencing platform will support the development and implementation of new-generation, inter-professional curricula to educate health care professionals. Integrated curricula and education platforms are seen as one solution to the increasing fragmentation of health care in the U.S., which is a factor that is believed to adversely affect patient care.



THE UNIVERSITY OF ARIZONA TELEMEDICINE PROGRAM



OTTAWA CENTRAL AMBULANCE COMMUNICATIONS CENTRE

CASE 2: OTTAWA CENTRAL AMBULANCE COMMUNICATIONS CENTER (OCACC)

In the city of Ottawa, Canada, nearly 400 highly trained paramedics respond to more than 100,000 calls each year involving a wide range of medical emergencies, fires, water rescues, industrial accidents, hazardous material incidents and police operations. They form an integral part of the city's emergency preparedness team and are the sole medically certified providers of out-of-hospital medical treatment. The Ottawa Central Ambulance Communications Center (OCACC) employs a team of 52 communication officers and seven supervisors to handle call taking, prioritization and paramedic deployment for the city as well as a large portion of the eastern Ontario region.

The OCACC is a 24/7/365 operating environment in a newly constructed 5,000 square-foot room with a 14-foot high ceiling and clear sight lines to a 9 x 3 display wall controlled by a Jupiter Fusion 980 Display Wall Processor. Data and video are displayed real-time and can be seen by all operators, enabling high levels of situational awareness. A 400 square-foot room within the building is designated a training lab. The training lab mimics the functionality of the OCACC using a Jupiter PixelNet® Distributed Display Wall System to enable operator training and also serves as the onsite backup center.

ABOUT JUPITER SYSTEMS

Jupiter Systems is the leading worldwide supplier of display wall processors for command and control applications. Jupiter's best-of-breed products are designed for continuous, 24/7 operation and are used in network operation centers, electric power generation and distribution control rooms, boardrooms, intelligent traffic control rooms, 911 dispatch centers, financial management control centers, surveillance and security centers, and fixed and mobile military operations control centers in thousands of installations around the world. All Jupiter products are built in the company's ISO 9001:2008-certified US factory. For more information, please visit www.jupiter.com.

JUPITER SYSTEMS HEALTHCARE INSTALLATIONS

Biodesign Institute, Arizona State University
 CECAT – Catalonia Emergency Call Center,
 Spain
 Coppin State University School of Nursing
 First Health of Arizona

T-Health Institute, University of Arizona
 John Hopkins University
 Ottawa Central Ambulance
 Communications Centre
 Providence Health

U.S. Department of Health & Human
 Services
 World Health Organization