

Glowpoint Telemedicine Case Study: El Camino Hospital

As the healthcare industry struggles under pressures to improve the quality of patient treatment, while attempting to lower costs with few employees on hand, Glowpoint's healthcare-related video communications solutions can enhance and accelerate the transfer of healthcare information, improve efficiencies, increase the quality and reach of patient care, help find new markets and provide new services - and control costs – for healthcare-related organizations.

THE CHALLENGE

El Camino Hospital in Mountain View, California, wanted to enable its physicians to collaborate with off-site clinical teams, located three hundred miles away, on complex cancer cases. They wanted to share high-quality patient diagnostic images with colleagues across the state of California while having face-to-face discussions regarding treatment options and clinical approaches. The diagnostic images needed to be viewable in a crystal-clear format, be discernable during the rapid scrolling of multiple images, and magnifiable for specific details.



THE SOLUTION

El Camino Hospital selected Glowpoint to implement high-quality video connectivity and a managed bridging service to establish secure, high-definition capabilities for remote collaboration.

Glowpoint's medical applications are enabled by two unique capabilities:

- **“Video in the Cloud” Managed Conferencing Services** – A shared infrastructure model managed by Glowpoint, offering HD, gateway, and MCU technologies to medical organizations, reducing the need for capital outlays.
- **TEN** – Glowpoint's Telepresence *interExchange* Network that provides interactivity for medical institutions on different hardware platforms – and on different networks. In this particular case, interactivity was necessary between IP to ISDN.

THE RESULT

Medical Application One: Diagnosis and Care Planning Collaboration

El Camino Hospital conducts monthly, joint-case video conferences between their Cancer Center in Mountain View, California, and the City of Hope, a renowned cancer institute in Duarte, California. During the conferences, academic specialists are available on video to provide additional perspectives on patient treatment options for difficult-to-treat liver tumors. Surgeons, academics, and patients all benefit from a consensus of expert opinions, shared “live” by those at the forefront of their respective fields. Patients have access to as many as 14 expert opinions and can be more assured regarding diagnoses and leading-edge treatment alternatives. The collaboration is achieved via Glowpoint's Telepresence *interExchange* Network (TEN) and typical travel expenses are minimized for all concerned.

Medical Application Two: Diagnosis Collaboration for CT Scans and Tumor Review

El Camino Hospital utilizes Glowpoint's HD Networks to share CT scans (an X-ray technique that produces images of your body that visualize internal structures in cross section) and high-resolution images of pathology slides among the care team participants. El Camino Hospital also benefits from extensive Glowpoint video network connectivity between OR, pathology and on-campus conference rooms, as well as with City of Hope in Duarte, California.

“Since establishing the Glowpoint video-conferencing connection with City of Hope, we have held monthly joint tumor boards, which have benefited patients in both locations,” said Shyamali Singhal, MD PhD, a surgical oncologist who serves as medical director of the Cancer Center at El Camino Hospital. “Each team presents challenging patient cases, including sharing high-definition images of key diagnostics, such as CT scans, digital X-rays, and pathology slides. We seek input from participating oncologists, surgeons, radiologists, pathologists, internists, pharmacists and a wide range of other clinical team members. These robust discussions allow the

team to consider a wide range of medical and surgical perspectives, and capture the latest clinical thinking around the patient's unique situation and best treatment options. We are looking forward to expanding our use of the technology in other clinical areas, and to other locations and care teams."

Medical Application Three: Medical Education

El Camino Hospital collaborated with the American College of Surgeons during a recent medical convention in New Orleans. Surgeons at the conference used Glowpoint's HD technology and network to observe and record surgeries taking place in an El Camino operating room (with patient identity protected), providing an opportunity to educate colleagues on techniques. This real-time, high-quality, remote-observation capability has tremendous potential for expanding educational opportunities across geographic barriers.