Cancer Treatment Center Eases Patient Experience with Video



Moffitt Cancer Center added live and on-demand streaming video for patient education and telepresence for consultations.

EXECUTIVE SUMMARY

Customer Name: Moffitt Cancer Center & Research Institute

Industry: Healthcare

Location: Tampa, Florida

Number of Employees: 4500

Challenge:

- Help patients obtain education and support
- Maximize physician productivity
- Increase efficiency of internal training and communications

Solution:

- Capture video with Cisco TelePresence Content Server and transform it for viewing on any device via the Cisco® MXE Media Experience Engine 3500 with Pulse Analytics
- Share live and pre-recorded video with Cisco Show and Share and Cisco Digital Signs
- Provide an in-person experience for patients and doctors in different locations with Cisco TelePresence Systems

Results:

- Added convenient options for patient education and support without travel
- Freed up physician time by eliminating certain travel requirements
- Enabled all employees to view companywide town hall meetings either live or on-demand

Challenge

H. Lee Moffitt Cancer Center & Research Institute is committed to advancing the prevention and cure of cancer. In addition to private patient rooms, the center provides a large blood and marrow transplant program, outpatient treatment programs, the Moffitt Research Center, and the Lifetime Cancer Screening & Prevention Center. Moffitt is part of an affiliate network with other East Coast hospitals and also partners with international hospitals in Kosovo, Puerto Rico, Italy, China, and Jordan.

Many patients travel long distances multiple times during the course of treatment, for orientation, to consult with their physicians, and to participate in support groups that can serve as an emotional lifeline. "Repeated travel is expensive and time-consuming, and can be especially difficult for cancer patients who are elderly, in poor health, or struggling to keep up with work and family," says David Stringfellow, systems architect for conferencing technology at Moffitt Cancer Center.

The center's IT team saw an opportunity to use video technology to help to ease the burden for patients. Instead of traveling up to four hours to the hospital, patients could watch orientation videos from the comfort of home. And rather than making the trip to meet their doctor when an examination was not necessary, they could go to the closest clinic for an in-person experience with high-definition telepresence. "We wanted to meet our population wherever they were, and provide a personal experience," says John Maass, Moffitt's manager of conferencing technology.

Moffitt also wanted to increase the time that physicians could spend on patient care by reducing the requirement to travel to affiliate hospitals to conduct Grand Rounds. A typical trip takes 1-2 days, and each day a physician is out of the office can mean a longer wait for an appointment. Similarly, video could help the organization maintain its tradition of holding town hall meetings to share internal news, even though the entire workforce could no longer fit in the auditorium. A previous video-streaming system crashed when as few as 60 people viewed the live broadcast, and Moffitt needed to support hundreds of simultaneous viewers.

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David Stringfellow

Systems Architect, Conferencing Technology Moffitt Cancer Center & Research Institute

Solution

By using Cisco video solutions for both live collaboration and streaming content, Moffitt has eased the patient healthcare experience, increase physician productivity and improve organizational communications.

For Education and Support: Live Streaming Video plus Video-on-Demand

Moffitt now provides video that patients and staff can view live or on-demand. Topics include:

- · Educational and support sessions
- Orientation for various medical procedures
- · Doctor introductions, allowing patients to put a face to a name before an appointment
- Clinician education, ranging from the broadcasting of Grand Rounds and unusual surgeries to showing proper patient-lifting techniques.
- New hire training

Center staff can capture video using any device, including desktop PCs, Cisco TelePresence® systems in conference rooms, and traditional video cameras. A centralized Cisco® TelePresence Content Server records the video and sends it to a Cisco® MXE 3500 Media Experience Engine, which automatically transforms the video for viewing on different types of devices, from PCs and smartphones to digital signage at clinics. "In addition, Cisco Pulse™ Video Analytics tags videos by keywords and speakers so that people can search for a particular term, such as 'benign,' and go directly to that part of the video," says Stringfellow.



Patients and staff can view the videos anytime, inside or outside the center, using Cisco Show and Share[®], a webcasting and video-sharing application for desktops, laptops, tablets, and smartphones. The center created one portal for patient videos and another for staff videos. Patients can also view real-time and recorded educational lectures on digital signage at clinics powered by centrally

managed Cisco Digital Media Players, part of the Cisco Digital Signs solution.

For In-Person Interactions: Cisco TelePresence

Moffitt also uses Cisco video solutions to create an in-person experience for patients and clinicians in different locations. Instead of driving to a doctor's location or settling for a phone call, patients can meet with their doctor from the nearest clinic, using Cisco TelePresence systems. Doctors can use a system in a conference room or have a mobile unit brought to their office. "Patients appreciate the in-person experience from Cisco TelePresence, especially when receiving a diagnosis," says Stringfellow. Furthermore, physicians can gauge from the patient's facial expression whether the patient understands the information or needs further explanation.

Home-based employees can also join telepresence sessions on PCs and mobile devices, using Cisco Jabber™ TelePresence for Video software. Adding video to interactions creates an in-person experience that helps remote employees feel more connected to their managers and teams.



Results

Improved Healthcare Experience

Patients like the convenience of watching educational videos and instructions anytime, anywhere, on any device. "Patients are sometimes so overwhelmed that they can't remember all instructions for procedures like bone-marrow transplants," says Stringfellow. "Now they and their families and caregivers can watch videos on Show and Share as often as they need to absorb the information, from the comfort of home." In addition, patients can view videos of doctors introducing themselves and their treatment approaches, associating a face with the name before the first visit.

Cisco Show and Share also extends support groups to patients who cannot attend in person. Many hundreds of patients have viewed live streaming video or video-ondemand of speakers invited as part of the center's Brain Tumor Talks or the Lung and Thoracic Tumor Education Group. Patients can even interact with other support group members by adding comments to the video.

Cisco TelePresence technology also helps to ease the journey for cancer patients by making it possible to include family members anywhere in the world in consultations. "These conversations include treatment planning and much needed family interaction and emotional support," says Maass. Patients can also meet remotely with their interdisciplinary cancer team from a Moffitt clinic closer to home, reducing the burden of lengthy or frequent travel.

Another way that Cisco TelePresence helps Moffitt improve the patient experience is by making it easier to provide language interpretation services, including American Sign Language. A staff member wheels a mobile Cisco TelePresence unit to the examining room and simply touches a button to connect the patient and doctor to an interpreter at the main location.

Improved Physician Productivity and Organizational Communications

Doctors are using Cisco TelePresence to deliver lectures and participate in tumor boards with Moffitt's affiliates in the United States and overseas. Reducing travel time frees more time for patient care. "A physician who saves eight hours of travel with Cisco TelePresence can potentially conduct 32 more patient visits, helping anxious patients get appointments sooner," says Maass.

More Efficient Organizational Communications

Finally, video has increased the efficiency of internal communications that are vital to smooth operations in a growing organization. Rather than asking executives to repeat their presentations in multiple locations, Moffitt records the meetings and publishes them on the internal Cisco Show and Share portal just an hour or two after the live event. The videos are fully searchable, enabling employees to go directly to the portion of a video mentioning a particular person or procedure, for example. More than 700 people attended Moffitt's first live streamed town hall meeting through Cisco Show and Share, and 1000 others with scheduling conflicts viewed the video later. "Almost double the number of people attended with Show and Share than when we had our previous streaming and video-on-demand solution, testament to the high video quality," says Stringfellow.

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John Maass

Manager of Conferencing Technology Moffitt Cancer Center & Research Institute

Next Steps

Moffitt continues to find new ways to apply its video solutions to improve the healthcare experience and increase efficiency. Plans under consideration include:

- Extending video content and telepresence to affiliates, enabling clinicians, researchers, and patients to interact and share video from any location.
- Using Cisco Digital Signs in patient waiting areas to provide streaming video of educational and support group events, as well as video-on-demand.
- Recording educational Cisco WebEx[®] sessions, which combine voice, video, and web sharing, and then sharing them on Cisco Show and Share.
- Using the Cisco MXE 3500 Media Experience Engine's speech-to-text translation capabilities to automatically generate subtitles for viewers with sensory or communication impairments. The Joint Commission, an agency that accredits healthcare organizations, recommends developing a system or services that address communication needs of patients with sensory impairments.

For More Information

To learn more about Cisco Video Content solutions to capture, transform, and share, visit: www.cisco.com/go/video.

Product List

Video Content

- Cisco Digital Signs Solution
- Cisco MXE Media Experience Engine 3500 with Pulse Video Analytics
- Cisco Show and Share
- Cisco TelePresence Content Server

TelePresence

- · Cisco Jabber Video for TelePresence (Movi)
- Cisco TelePresence Codec C60, C40, and C20
- Cisco TelePresence MX200



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