



# Virtually on-sight

See more patients farther and in more detail than ever before

**F**amed American photographer Robert Mapplethorpe said that with photography, you zero in; you put a lot of energy into short moments, and then you go on to the next thing. With Librestream Onsight, the same outcome is expected.

Simply put, Librestream Onsight is mobile collaboration, now being used in telemedicine applications. But it didn't start that way.



Originally developed for industry, Librestream's Onsight Mobile Collaboration system provides one-way video, two-way audio and two-way telestration. Think about it. If you are at a corporate head office in America and your manufacturing facility is in the Far East, what do you do when there's an assembly line problem that only you can resolve?

Traditionally, the technical specialist would board a plane and fly half-way around the world to set things straight. In the meantime, that technician was not available should another problem arise elsewhere.

Librestream fixed that. Workers on the assembly line use a specially designed camera and software to send streaming video of the problem right to the technician's desktop. The parties collaborate on a solution and no one leaves their desk, let alone the country.

Medico patients are not assembly lines but the same theory applies. Specialist

physicians and their patients no longer have to be in the same room or even the same city. Mobile collaboration is better than video conferencing because patients and providers each don't need to book space in a video conferencing facility and then travel there.

"The technology provides just-in-time information and knowledge at the point-of-care, for the patient, say 300 miles away, and for the healthcare provider at their desktop or wherever they are," says Dr. Ray Postuma, Librestream's medical and telehealth advisor, retired pediatric surgeon and one of the co-founders of Manitoba's telehealth.ca. "The beauty of Librestream is basically it isn't video conferencing. It's a device that allows you to collaborate securely. You take the technology to the point-of-care."

Postuma says the device can be taken to the bedside of the patient, but that bedside is already crowded. This technology is mobile, nimble, rugged, un-tethered and safe.

"It looks like an oversized SLR camera but it's very intelligent—streaming audio and telestration two-way and video one-way over the Internet, all wirelessly. The device is with the patient in the wi-fi zone in the patient area and sends a signal securely to an internet address anywhere in the world."

Crystal-clear images can be discussed between the healthcare provider at the near-end, and the patient and nurse at the far-end, and the two can speak as they view an image, move the camera for different views, and even use the two-way telestration feature.

"The nurse or patient says, 'I am worried about this part of the wound' and circles it on the screen of the device. It immediately appears on the physician's screen at the near end. If the physician is more concerned about a different area, he can circle elsewhere on the image and that circle

appears immediately in a different colour on the screen of the device at the patient end. Both can see and hear exactly the same thing."

Security is an important issue, says Postuma, and so the signal is encrypted to the highest standard possible.

And the device isn't just for the convenience of the patient, who may live remotely or be too ill to travel. It's also for the need of the medical specialist who may be in an emergency or operating room working on one patient and needs to advise on a patient at a different location.

"In plastic surgery, they're using the device for training plastic surgeons-to-be. If the plastic surgeon trainee sees a problem in the emergency room while the supervising surgeon is in the operating room, the surgeon can't un-scrub but he can take a few minutes out of the procedure and see on a video screen in the operating room what's going on with the patient in the emergency room," explains Postuma. "It teaches and provides supervision. You can't do that scenario from a conference room."

Librestream's Onsight is being used in a stroke rehabilitation program, improving access for remote patients and increasing the amount of follow-up care. It can also be used on-the-fly in primary care, where the family physician can call on a specialist and show the area of concern while the patient is still in the same room.

Onsight is currently used in wound care, and foot care in diabetic patients, with huge potential in home care, colostomy care and even medical assessment of incarcerated patients. Librestream is using the camera to see farther and in more detail than ever before.

"This is an information technology tool that allows caregivers to truly collaborate securely and privately from point-of-care to point-of-expertise," says Postuma. ●

*Corey Van't Haaff is a Vancouver-based writer and owner of Cohiba Communications. She is Just for Canadian Doctors' technology columnist. She can be reached at [medicalnews@cohibacommunications.com](mailto:medicalnews@cohibacommunications.com) and welcomes ideas for future columns.*