?Sky is no longer the limit? for healthcare at Southlake



By Brock Weir

Take it from an astronaut: ?the sky is no longer the limit? to growth, research and innovation at Southlake Regional Health Centre.

These were the words of Dr. Dave Williams, Southlake's President and CEO, as the local hospital launched its new partnership with Orion, the Ontario Research and Innovation Optical Network, on Friday afternoon.

Through Orion's partnership with Southlake, the local hospital is the first Point of Presence (POP) in York Region to be connected to a rapid-fire fibre optic network connecting the hospital and educational institutions to top flight research around Ontario and the Globe.

?We had a vision of linking the tremendous clinical capacity of our organization to research and innovation, to create new devices that will make a difference in the delivery of healthcare in Ontario that will make a difference in the delivery of healthcare to individuals and clinicians working in our community,? said Dr. Williams. ?The ability to bring high-speed telecommunications to our Region gives us the potential to do things we could never do before.

?We are entering into a new era of healthcare that embraces the concept of ?virtual care.' Not only are we talking about using Orion as a great source of collaborating academically, not only are we talking about creating opportunities for partnerships between public sector organizations, Venture Lab and our frontline clinicians to develop new devices and new technologies that will make a difference in the lives of patients in our community and also stimulate economic growth, we are also talking about the future: the future of healthcare, reaching out from institutions like Southlake to provide virtual care and enhance our ability to support individuals at home through a whole host of sophisticated devices.?

The partnership provides a glimpse of the future, noted Dr. Williams, but that future is very much a present for Dr. Carolyn McGregor, Canada Research Chair in Health Informatics at the University of Ontario Institute of Technology.

Dr. McGregor's research and innovation has developed a mechanism in which, through connections such as Orion, clinicians at hospitals like Southlake can predict up to 24 hours ahead of time how ailing patients, newborns in particular, could decline and get sicker, enabling them to react earlier.
?In my research, we are able to stream live more than 1,200 data points a second per patient,? she demonstrated. ?What we are able to do is learn and discover new things about what we can find if we use the data. Traditionally, these types of monitors are available to nursing staff, but the data isn't used.

?This is the new face of healthcare and I am really delighted that, contrary to advice I have had in innovation that if you reach a

certain point in our research you need to go south of the border. I want to keep my research here and I want to make a difference in the Canadian healthcare environment. To do that, we need these commitments we have from the Ontario Government with infrastructure like Orion because I can't have a network that can go down. I can't have a network I can only use from 9 ? 5. We have people right here right now who need 24/7 support. This quality infrastructure is not just a really big pipe for communication, but it is built to the highest quality.?

Added Darin Graham, President and CEO of Orion: ?This enables [people] to think about the art of the possible. One of the greatest investments we have is the health and future of our people and the Ontario Government is certainly investing a lot of dollars and activity into health. This connectivity is fundamental to all things you do in serving people. It is not just about bringing the hospital onto the network, but ensuring the hospital is connected with universities, colleges and school boards.?