

#### MEDIA RELEASE

For Immediate Release

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# New procedure removes blood clot in 10 minutes, a world's first

(LONDON, Ontario) – A patient at London Health Sciences Centre (LHSC) is the world's first to benefit from a new medical device developed to treat stroke by rapidly removing the offending blood clot in 10 minutes, ultimately reversing the symptoms of stroke and preventing permanent damage to the brain.

As a research-intensive teaching hospital, LHSC is committed to finding and developing innovative health care solutions to treat patients for a variety of emergency conditions, including stroke. On June 24, 2022, Dr. Michael Mayich and his team used a new device called a balloon distal access catheter (BDAC) to successfully remove a blood clot from an artery in the brain of Wilene Leyen. The procedure was performed through a tiny incision over the right hip and took less than 10 minutes, reconstituting blood flow to a large part of the brain and restoring Ms. Leyen's movement and speech almost immediately.

"Performing more than 200 emergency stroke surgeries each year, our team at LHSC knows the importance of identifying strokes and acting quickly," said Dr. Michael Mayich, an Interventional Neuroradiologist at LHSC. "When a blood clot is causing a stroke, over 2 million brain cells can be lost each minute, so seconds count. By locating and removing the clot in a shorter period of time, the patient has a higher probability of regaining mobility and speech. This device offers the possibility of removing clots in fewer attempts, shortening the procedure and maximizing the chances of good outcomes for our patients".

Mechanical thrombectomy is a new minimally invasive treatment for strokes caused by blood clots which block blood flow to the brain. It is performed by a specialized team which includes neuroradiologists, stroke neurologists, neurosurgeons, imaging technologists and anesthesiologists who are on-call 24-7 to provide this emergency service.

LHSC was the first hospital in the world to use the BDAC to treat a patient experiencing a stroke. The device uses a balloon to temporarily halt flow in a vessel while suction is applied to remove clots causing the stroke and restoring flow to the endangered part of the brain. The Health Canada approved device was developed by Vena Medical, based in Kitchener–Waterloo and has since been used to treat stroke patients at The Ottawa Hospital.

"The LHSC stroke team has given me my life back," said Wilene Leyen. "I can do almost everything I was able to do before I suffered the stroke and I'm very grateful Dr. Mayich was able to perform this procedure."

## **Quick Facts**

- Stroke is the third leading cause of death in Canada and a leading cause of disability and 50 per cent of patients who suffer a stroke will be left with a permanent disability
- Since 2015, thrombectomy has become the new standard of care treatment for certain groups of acute stroke patients
- LHSC is the first hospital in the world to use the BDAC to treat a patient experiencing a stroke. The BDAC combines the roles of a balloon guide catheter and distal access catheter increasing chances of success on the first pass and potentially improving patient outcomes

### **About London Health Sciences Centre**

With roots going back a century and a half, London Health Sciences Centre (LHSC), is an award-winning, research-intensive acute tertiary and quaternary teaching hospital, one of only 14 such hospitals in Ontario. LHSC is also home to Children's Hospital, one of just four acute tertiary care paediatric hospitals in the province. Our unique place in the health system positions us well to inform and advise on provincial, national and international health policy. We are the cornerstone of care for many specialized

programs and services in Western Ontario. And, as a major provider of emergency care and through our community hospital mission, we also care for the more than 400,000 people who call London home as well as many in surrounding communities. With Ontario's health system continuing its transformation, LHSC has an opportunity to inform it and to place itself at the locus of the regionalized health system by virtue of its size, specialized capabilities, research and education capacity and its current regional footprint. LHSC's formal relationship and strong bond with Western University provide a mechanism for collaboration to enable the delivery of high-quality care through a process of continuous learning and research. At its core, the affiliation is a reciprocal relationship that leverages the learning, teaching and care environments of both Western University and LHSC. LHSC is a 15,000 person strong team of physicians, staff and volunteers – collaborators, innovators and pioneers, meeting the care needs of those we serve and charting a course for the future. More information about LHSC can be found at www.lhsc.on.ca.

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