

Update on Cardiovascular Surgery



Thunder Bay Regional
Health Sciences
Centre



The Thunder Bay Regional Health Sciences Centre (TBRHSC) and Peter Munk Cardiac Centre (PMCC) at the University Health Network (UHN) continue to develop and strengthen the Two Sites- One Program model of care to deliver a fully operational Comprehensive Cardiovascular Surgical Program to the residents of Northwestern Ontario.

Moving forward, this collaboration will oversee the development of an approximately 70,000 sq. ft. addition off the existing main entrance adjacent to Renal Services. Within the second level a comprehensive cardiovascular clinic will be created offering several specialized services including but not limited to Rapid Access Vascular Examination

(RAVE) and Rapid Cardiac Examination (RACE). The RAVE service will offer timely evaluation of patients presenting with symptoms of vascular disease and/or impairment via on-site rapid vascular ultrasound as well as additional consultation, diagnostics and coordination of follow up. RACE will function to rapidly evaluate non-emergent ambulatory patients with cardiac symptoms and to facilitate timely diagnostic assessments and follow up while supporting Emergency Department (ED) avoidance at TBRHSC.

The third level will proudly house a Cardiovascular Surgery Unit (CVSU), Coronary Care Unit (CCU), and a hybrid Operating Room (OR) while supporting renovations to existing operating

facilities. The CVSU will be a 14-bed unit for patients recovering from various cardiovascular surgeries, while the CCU will house six beds for patients who are admitted for treatment of acute cardiac events. The hybrid OR will be used for minimally invasive cardiovascular procedures, with the ability to perform open surgical cases in a single room with anesthesia and perfusion support, including state-of-the-art imaging equipment.

Stage 2.1 (formerly 3.1), the detailed planning stage of the capital planning process, was submitted to the Ministry of Health in December 2022. Once approval is received, the team will proceed to stage 2.2 which involves the development of the



Sketch Plan Report and costing based on this stage's scope of work.

This past February, members of the CVS project team, BTY consultants, and Parkin architects toured the site at the PMCC in Toronto. Key areas of focus included details on the Cardiovascular Intensive Care Unit, Coronary Intensive Care Unit, Cardiovascular Surgical Ward, multi-purpose OR, Cardiac OR, Ambulatory Cardiovascular clinics and the Cardiovascular Perfusion department.

Throughout the visit, the team was able to observe clinical workflows and spatial layout to aid in design specifications for functioning, major equipment installations, and functionality for clinical environments. Additional information was gathered related to furniture, fixtures and equipment for clinical areas, and

IT needs. The team is prepared to support the ongoing plans and came away with insight and knowledge from seeing the clinical operations and facility first hand.

After the site tour, Dr. Barry Rubin, Program Medical Director for the joint CVS program remarked, "This visit brings us one step closer to realizing our shared vision to enable high-quality cardiac and vascular surgical care in Thunder Bay.... we embarked on this project in 2015, in partnership with TBRHSC and the Ontario government. Since then, we've made huge strides in bringing vascular and cardiovascular care closer to home for Northwestern Ontarians."

With the launch of the CVS Program projected for fall of 2026, discussions surrounding training and recruitment have

begun. The "Grow Your Own Cardiovascular Perfusionist" initiative sponsors TBRHSC employees to complete the two year Cardiovascular Perfusion program at the Michener Institute of Education at UHN. The graduates will return to TBRHSC to begin their careers as Cardiovascular Perfusionists, once the CVS program is in operation. TBRHSC has one graduate of the program currently practicing at UHN and another staff member starting the Michener Program in August 2023. In order to secure and implement a successful program, TBRHSC requires four fully trained Cardiovascular Perfusionists and will seek additional candidates in order to reach the full complement in the near future.