

CANADIAN Healthcare Technology

www.canhealth.com

How one community hospital built a modern compounding facility

Thirty kilometres north of the trans-Canada highway between Sudbury and Sault Ste Marie in a landscape of lake, hills, and rock, Elliot Lake, Ontario, is a close-knit northern community that has transformed from its mining roots into a thriving retirement destination. At the heart of this northern city is St. Joseph's General Hospital Elliot Lake (SJGHLE), which provides essential healthcare services to the community. Since opening its doors in 1959, SJGHLE has served as the region's healthcare hub.

Today, the hospital delivers acute care, emergency services, long-term care, addiction services and specialized outpatient programs, including a satellite oncology clinic in partnership with the Northeast Cancer Centre in Sudbury. This collaboration enables local residents to receive life-saving chemotherapy treatments close to home, sparing patients and families' hours of travel during an already challenging time.

Providing this level of specialized care, however, required the hospital to rethink one of its most critical support services – its pharmacy.

"St. Joseph's General Hospital Elliot Lake is committed to providing excellent care close to home. This pharmacy project affords us the opportunity to continue to provide cancer care in Elliot Lake under the collaborative model of the Northeast Cancer Program," said Leslie Sanders, VP quality, clinical services & chief nursing executive.

"Along with our partners, we are proud of the work that has been accomplished

and the advances in care that this will help us to provide to our patients from Elliot Lake and the surrounding areas."

Meeting a new standard: Like many community hospitals, SJGHLE established its chemotherapy compounding service when expectations for sterile preparation were very different than they are today. In the early 2000s, a biological safety cabinet, trained personnel, and appropriate personal protective equipment represented



The project team at SJGHLE, Elliot Lake.

accepted practice for preparing hazardous medications.

As scientific understanding of occupational exposure to hazardous drugs advanced, so too did the standards designed to protect patients and healthcare workers.

The introduction of the National Association of Pharmacy Regulatory Authorities (NAPRA) Model Standards for Sterile and Hazardous Sterile Compounding fundamentally changed sterile compounding across Canada.

In Ontario, these standards were adopt-

ed and became the minimum expectation, requiring purpose-built cleanrooms, specialized engineering controls, validated environmental monitoring, comprehensive quality assurance programs, and standardized competency assessment for pharmacy personnel.

For many small community hospitals, achieving compliance presented significant financial, operational, and infrastructure challenges.

Rather than scaling back oncology services, SJGHLE chose to invest in the future.

A community investment: What was once a modest chemotherapy preparation room has been transformed and has been built to compliance, a sterile compounding facility featuring dedicated hazardous and non-hazardous cleanrooms, advanced engineering controls, and infrastructure designed to support safe oncology care for decades to come.

The redevelopment was made possible through extraordinary community support.

The St. Joseph's General Hospital Foundation mobilized residents, donors, and community partners around a shared vision of strengthening healthcare in Elliot Lake.

"Every donation, regardless of its size, contributes to meaningful improvements in patient care and the experience of patients and their families," said Deborah Dubois of the St. Joseph's Foundation. "The financial contributions towards the modernization of the pharmacy infrastructure reflects the extraordinary generosity of our community and its commit-

ment to supporting high-quality health-care for current and future generations.”

Building through collaboration: According to pharmacy manager Crystal Horrigan, RPhT, the project’s success was built on collaboration.

The hospital assembled a multi-disciplinary team that included Northwest Telepharmacy Solutions, expert compounding consultant and sterile compounding supervisor Rebecca Lynch, RPhT, facilities and maintenance manager Don Gelinas, Bélanger Salach Architecture, North Engineering, hospital leadership, frontline pharmacy staff, and construction partners.

From the earliest concept drawings to final certification, weekly project meetings ensured every design decision balanced regulatory compliance, operational workflow, and long-term sustainability.

Input from architects, engineers, the sterile compounding expert, and frontline staff helped create a facility designed not only to satisfy rigorous regulatory standards but also to support the realities of practical needs of daily pharmacy operations.

Engineering behind the scenes: Although patients will never see most of the technology supporting the new pharmacy, much of the project’s complexity lies behind the walls.

“From a facilities management perspective, seeing this project evolve from concept to completion has been incredibly rewarding,” said Don Gelinas, facilities and maintenance manager at SJGH.

“Working within a hospital originally built in the late 1950s presented unique challenges, but it also provided an opportunity to modernize the critical infrastructure needed to support today’s pharmacy services,” Gelinas said. “The project required extensive mechanical systems capable of maintaining precise control of air quality, temperature, humidity, and room pressurization to meet stringent sterile compounding standards.”

Gelinas explained that success depended on careful coordination throughout

every phase of the project—from design review and workflow planning to equipment selection, construction oversight, commissioning, environmental testing, and final certification.

Amber Belanger, principal of Bélanger Salach Architecture and North Engineering noted, “This truly collaborative effort of architectural planning and detailed engineering was achieved through intensive coordination beginning at the very onset of the project. Through weekly project meetings, on site investigations, obtaining input and guidance from the compounding pharmacy technicians and Expert Compounding Consultant, the

The project is a long-term investment in patient safety, employee health, and services for Northern Ontario.

team was able to achieve a design that met the functional needs and regulatory requirements for SJGH.

More Than Construction: The project extended well beyond building a new physical space.

New standard operating procedures, environmental monitoring programs, quality assurance systems, staff education, and competency assessments were developed to ensure the facility continues to operate safely and sustainably long after construction was complete.

For Rebecca Lynch, RPhT, expert compounding consultant and contracted sterile compounding supervisor, the project demonstrated what is possible when technical expertise and operational realities come together.

“This project was a unique opportunity for me to bridge industry expertise with operational reality. By collaborating closely with the project team, I helped ensure the new sterile compounding facility was designed and constructed to meet not only industry requirements but also the

practical demands of daily pharmacy operations,” said Lynch.

Investing in safety: The redevelopment represents far more than a renovated pharmacy. It is a long-term investment in patient safety, employee health, and the sustainability of specialized healthcare services in Northern Ontario.

“The importance of having a compliant hazardous cleanroom cannot be overstated,” said Kevin McDonald, director of Northwest Telepharmacy Solutions. “Preparing chemotherapy medications without the appropriate engineering controls can expose pharmacy personnel, environmental services staff, and others within the hospital to hazardous drug residues. Modern sterile compounding facilities significantly reduce those risks while ensuring the highest standards of patient care.”

For pharmacy manager Crystal Horrigan, RPhT the project reflects something even larger.

“Building a pharmacy that meets today’s compounding standards wasn’t simply about regulatory compliance,” she said. “It was about ensuring patients in Elliot Lake and surrounding area can continue to receive safe, high-quality oncology care close to home while providing our staff with an environment that reflects today’s best practices.”

A model for rural healthcare: SJGH’s experience demonstrates that pharmacy modernization is achievable – even for smaller rural hospitals.

Through careful planning, strong leadership, multi-disciplinary collaboration, and remarkable community support, the hospital has created a state-of-the-art sterile compounding facility that will serve northern Ontario for generations.

As healthcare organizations across Canada continue modernizing pharmacy services, SJGH offers an important lesson: innovation is not determined by the size of a hospital, but by the vision, partnerships, and commitment of the people working together to improve patient care.