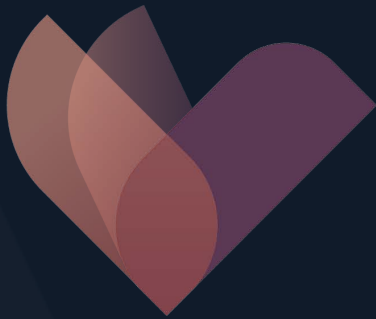




WRHN

Waterloo Regional
Health Network

Office of Research

Annual Report
FY 2025-2026

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Letter from the Vice President



It is my privilege to introduce the annual Research Report for the Waterloo Regional Health Network (WRHN). This past year marks not only the first full year of research under the WRHN banner, but also the continuation of more than two decades of research excellence established at the legacy Grand River Hospital and St. Mary's General Hospital sites. For 22 years, these organizations built strong, respected research programs—advancing clinical trials, fostering academic partnerships, and contributing meaningful evidence that shaped care across our region and beyond. Their legacy forms the foundation on which WRHN Research now stands.

With the creation of WRHN, we have entered a new chapter, one that unifies this history and strengthens our shared infrastructure. Over the past year, WRHN Office of Research has worked diligently to harmonize policies, modernize processes, and build a cohesive governance and operational framework that supports research across all sites and clinical programs. This work ensures that the strengths developed over two decades are not only preserved but amplified.

Our multidisciplinary Office of Research now provides integrated leadership, scientific expertise, regulatory oversight, and operational support that did not previously exist at this regional scale. This unified model allows us to expand research opportunities, strengthen compliance, and support investigators more effectively than ever before. It also enables us to pursue larger, more complex, and more collaborative research initiatives.

This year, the Office of Research supported nearly 30 new studies across cancer, cardiac care, stroke, pharmacy, and other clinical areas. We contributed to landmark findings published in the New England Journal of Medicine, expanded investigator-initiated cardiac research, supported research that helped achieve national recognition for excellence in stroke care, and guided the research projects launched by WRHN's first hospital pharmacy residency program in partnership with the University of Waterloo.

As we look ahead, our commitment is clear: to honour the 22-year legacy of research that brought us here, while building modern, integrated, and ambitious research activities for the future. The achievements highlighted in this report are a testament to the dedication of our investigators, research staff, clinical teams, volunteers, and partners. I am deeply grateful for their expertise, passion, and unwavering commitment to advancing health through research.

Thank you for your continued support of WRHN's research mission. Together, we are shaping a stronger, more innovative, and more connected future for healthcare in our region.

Nicole Thomson PhD, OT Reg. (Ont.), CHE, CPPS

Vice President Patient Care, Quality & Research



Statistics

29 New Studies



11

5

RETROSPECTIVE

PROSPECTIVE

OBSERVATIONAL

CLINICAL TRIAL

1

12

104 Ongoing Studies



13

21

RETROSPECTIVE

PROSPECTIVE

OBSERVATIONAL

CLINICAL TRIAL

17

53

12 INVESTIGATOR INITIATED

4 COOPERATIVE GROUP

8 ACADEMIC PARTNER

5 INDUSTRY SPONSORED

12 INVESTIGATOR INITIATED

21 COOPERATIVE GROUP

57 ACADEMIC PARTNER

14 INDUSTRY SPONSORED



Who We Are

The Office of Research at Waterloo Regional Health Network (WRHN) has evolved into a coordinated, enterprise-wide program that plays a central role in advancing evidence-informed decision-making across the organization. Following the merger, the deliberate integration of research activities and investment in strengthened infrastructure significantly enhanced the scope, capacity, and impact of research across WRHN. This transformation brought together strategic leadership, scientific expertise, and operational excellence within a unified model, while introducing new roles that increased the robustness and functionality of the program. Today, the Office not only supports the efficient and compliant delivery of high-quality research and clinical trials, but also actively enables the generation, translation, and application of evidence to inform clinical practice, policy, and system-level decisions. Through robust governance, streamlined processes, and strong collaboration with internal and external partners, the Office of Research is positioned as a key driver in building a sustainable research culture and advancing WRHN's commitment to innovation, quality, and patient-centered care.

As a result of this integration, we have further strengthened our collaborative, multidisciplinary approach, enhancing our capacity to advance high-quality, ethically grounded research. Our office ensures that all Research endeavours align with organizational priorities, upholds rigorous standards, and fosters meaningful partnerships—ensuring our research remains innovative, integrated, and accountable at every level.

At the core of our work is a commitment to operational excellence. Our management team translates strategic vision into action, overseeing the seamless progression of studies from initiation to completion.



Who We Are

By coordinating across clinical, scientific, and regulatory domains, we ensure that every project is delivered efficiently, on time, and in full compliance with required standards.

Our scientific experts bring depth of knowledge and critical insight, strengthening the design, feasibility, and impact of each study. They work closely with investigators and staff to bridge the gap between discovery and clinical application, ensuring our research is both relevant and transformative.

Supporting this foundation is a network of skilled professionals who enable and sustain our research efforts. From facilitating collaboration and ensuring regulatory compliance to managing data integrity and maintaining secure records, each role contributes to a robust and efficient research infrastructure. Our clinical research coordinators serve on the front lines, delivering studies with precision while prioritizing participant safety and high-quality data.

Together, we create an environment where research can thrive—one that removes barriers, supports innovation, and upholds the highest standards of ethics and excellence.



(Left to Right) Brittany Spadafore, Research Specialist; Jacquelyn Coyne & Tea Lulic, Scientific Specialists

Oncology



Cancer research continues to be a strong focus for WRHN. 17 new studies were activated in the past year with an additional 53 studies ongoing from previous years.

Research Spotlight: Exercise in Oncology

The Waterloo Regional Health Network (WRHN) Cancer Centre was proud to announce its contribution to the landmark findings recently published in the New England Journal of Medicine on the results of the CO.21 (CHALLENGE) study. The study, led by the Canadian Cancer Trials Group, found that structured exercise significantly improves survival in colon cancer patients.

WRHN's Cancer Centre assisted 33 cancer patients from Waterloo Region since 2009 to contribute to the research findings. A total of 889 patients across 55 clinical sites comprised the study's findings that determined integrating exercise into survivorship care positively transforms outcomes for patients.

WRHN's contribution to the study was made possible through a partnership with the University of Waterloo's Centre for Community, Clinical and Applied Research Excellence (CCCARE) and the UW WELL-FIT program. This unique collaboration enabled patients to access supervised, evidence-based exercise interventions tailored specifically to individuals recovering from cancer treatment.

Patients in the structured exercise program experienced a 37 per cent lower risk of death and a 28 per cent reduction in recurrence or development of new cancers compared to those who received only health education materials, the study found.

“This is a transformative moment in oncology and we’re proud to have played a key role in this global research,” said Dr. Stacey Hubay, Medical Oncologist and Principal Investigator at WRHN, who led WRHN's contribution to the global study.

“We’ve long known anecdotally that exercise benefits cancer patients, but to see such clear improvements in disease-free and overall survival, confirmed by rigorous data, is extraordinary. These results suggest that exercise should be incorporated into cancer care, not just as a recommendation, but as an integral part of the treatment plan from diagnosis through survivorship.”

WRHN’s participation in the CO.21 study would not have been possible without the collaboration with CCCARE and the UW WELL-FIT program. What began as an initiative to support individuals undergoing cancer treatment over two decades ago, UW WELL-FIT has expanded to serve a broader patient population and offer ongoing exercise options, with clear evidence that exercise supports physical and mental well-being across the cancer experience.

Following the CO.21 study results, additional work is being done at CCCARE and in partnership with EXE-COPP study led by Principal Investigator Dr. Anupam Batra who is currently examining how exercise can offset physical and cognitive decline in men with metastatic prostate cancer.

In addition, Jacquelyn Coyne, PhD, Scientific Specialist with the Office of Research, is leading a study focused on the barriers to exercise in oncology patients, determining what prevents patients from participating in exercise and the development of solutions to address these barriers.

Continuing the focus on physical impacts to cancer treatment, Tea Lulic, PhD, Scientific Specialist with the Office of Research is conducting a study focused on the impact of radiation therapy on arm function following breast cancer treatment. The study will identify the prevalence of arm dysfunction and characterize the symptoms most commonly attributed to this group. Using these findings, further studies will be developed focusing on interventions aimed at reducing arm dysfunction.



Cardiac

Strengthening Partnerships



Significant investments have been made during year one of WRHN to solidify the partnership between the Office of Research and the Cardiac Research program @Queen's Blvd. The Waterloo Wellington Cardiovascular Research Institute (WWCRI) has a long standing history of participation in industry and academic sponsored research and clinical trials occurring @Queen's Blvd, with the cardiology physician group managing these studies independently.

Effective March 2, 2026, the WRHN Office of Research has assumed responsibility for the administrative and operational management of all new cardiac and cardiovascular research studies conducted by physicians with privileges at WRHN. This includes responsibilities related to study conduct, research ethics submissions, regulatory compliance, and overall study administration.



The Office of Research looks forward to continued growth and expansion of the cardiac research portfolio at WRHN, with several new studies already in the planning phase for the 2026-2027 fiscal year.

Cardiac



This fiscal year saw the addition of 4 new cardiac studies, with a total of 11 ongoing studies continuing from prior years.

Research Spotlight: Dr. William Chan, Cardiologist



Four new cardiac Investigator Initiated studies were activated under the guidance of Principal Investigator, Dr. William Chan. These retrospective review studies have taken a focus on comparing newly implemented techniques to standard of care processes, including remote versus in person MRI programming of cardiac implantable electronic devices (CIEDs); the use of the variable loop circular catheter (Varipulse) for the treatment of atrial fibrillation; rapid lab access for catheter ablation for patients with atrial fibrillation; and, pulse field ablation performed outside of the OR.

Dr. Chan's strong engagement in research has led to the onboarding of a number of Research Affiliates (university and medical school student volunteers) and Medical Residents to be actively engaged in research design, implementation, data collection, and reporting activities. Recruitment and training of new Research Affiliates make WRHN an attractive environment for highly qualified personnel in clinical and academic research.

This year saw several notable milestones. Dr. Chan and Melani Keshishi published their study on zero fluoroscopy pulmonary vein isolation using the variable loop circular catheter in Pacing and Clinical Electrophysiology (PACE). Hamza Wajid, MD BSc, now in cardiology training, published a case report entitled "Atrial fibrillation and tachy-brady syndrome in a 68-year-old woman" in the Canadian Medical Association Journal (CMAJ), one of Canada's highest impact medical journals.

Asim Shaikh's project examining rapid lab access versus standard referral pathways for catheter ablation in patients with atrial fibrillation was selected for an oral presentation at the McMaster Medical Student Research Day (MMSRD) 2026, a competitive distinction awarded to only five presenters.

Ridam Panesar was selected for an oral presentation at the 2026 IGNITE Conference at Royal Victoria Hospital in Barrie, Ontario, for her work leveraging SmartSync Technology to program CIEDs in emergent and elective patients undergoing MRI in a community cardiology hospital. She also previously presented this research at the International Arrhythmia School conference in Collingwood, Ontario.

All four of these studies were conducted without dedicated funding, and expenses for student travel and lodging to conferences were covered out of pocket.

Building on this foundation, Dr. Chan has secured collaborative research funding through the Graham Seed Fund at the University of Waterloo, partnering with Professor Sharon Ferguson of the Faculty of Engineering (Department of Management Science and Engineering) on a \$35,000 grant entitled "A socio-technical readiness framework for AI-driven data capture and workflow analysis in procedural community care settings: The case of AFib Ablation." This award represents a scaling of the collaboration between WRHN and the University of Waterloo into externally funded, interdisciplinary research.

Looking ahead, Dr. Chan hopes to build on this success by securing additional internal and external funding and donations to support more students and to begin engagement with the University of Waterloo co-op program.

Stroke

Celebrating Distinction



A strong focus on research within the stroke program was instrumental for WRHN to achieve the prestigious Stroke Distinction™ award from Accreditation Canada in June 2025. As a member of the Central South Regional Stroke Network in Ontario, this distinction highlights WRHN's achievements in providing exceptional stroke care to patients both locally and beyond the region.

Stroke Distinction™ is one of the most rigorous and respected accreditation programs for stroke rehabilitation in Canada. It evaluates organizations against stringent requirements related to evidence-based protocols and standards, data submission, education and self-management, and innovation initiatives.

Through a four-year assessment cycle, the program recognizes institutions that meet the highest standards of quality in stroke care and consistently deliver excellent patient outcomes aligned with the Canadian Stroke Best Practice Recommendations.

This recognition reflects WRHN's ongoing dedication to continuous improvement and to achieving better outcomes for the communities it serves. By embedding research into clinical practice, prioritizing participation in studies, and using data-driven insights to continuously refine pathways, the organization has strengthened its ability to delivery truly evidence-based stroke care.

Led by Principal Investigator Dr. Stephen Gillick, in partnership with the University of Waterloo and funded by the Graham Seed Fund, a Door-to-Needle study examined treatment timelines for patients with ischemic stroke, with particular emphasis on achieving treatment administration within the 30-minute target outlined in the Canadian Stroke Best Practice Guidelines.

The project analyzed both observational and historical data to quantify door-to-needle times. Findings from this research generated valuable insights that supported renewed program success and improvements in performance against key treatment benchmarks.

In an effort to move stroke care beyond the walls of WRHN, a Stroke Navigator role was introduced in the fall of 2024. The transition period from hospital to home serves as a critical window during which a lack of post-discharge support can lead to adverse events for stroke patients, including complications and unplanned hospital readmissions. The implementation of the Stroke Navigator ensures patients have a clear understanding of their medications, follow-up plans are in place, and ongoing education can be provided within a few days of discharge.

Moving beyond implementation to evaluation, a new study, lead by Principal Investigator Caitlin Shultz, District Stroke Navigator, Holly Arnold, District Stroke Manager, and Tea Lulic, Scientific Specialist, aims to evaluate the stroke navigator role, assess sociodemographic factors that impact transition success, and identify high-risk patients which may require further interventions.



Pharmacy



Research Spotlight: Pharmacy Residency Program

In December 2025, the Waterloo Regional Health Network (WRHN), in partnership with the University of Waterloo School of Pharmacy, officially launched a 52-week hospital pharmacy residency program designed to attract, develop, and retain talent within the region.

The program provides residents with comprehensive training across direct patient care, hospital distribution and administration, education, and research. Residents matched to the WRHN program can select elective rotations in areas such as pediatrics, nephrology, oncology, and ambulatory care.

This formal partnership with the School of Pharmacy creates additional opportunities for WRHN to engage in faculty-led research, mentor PharmD co-op students, and contribute to academic instruction for future pharmacists.

A key component of the residency is a year-long research project, during which residents collaborate with a project team to develop a research question, collect and analyze data, and potentially publish their findings.

Scientific Specialists within the Office of Research played a key role in supporting the Pharmacy residents in transforming their early-stage research proposals into fully designed study protocols.



Anthony Amadio, Director, Pharmacy Services, **Michael Collins**, Residency Coordinator along with two pharmacy residents

Collaboration with pharmacy on the research component of their residency program catalyzed the establishment of an expedited, two-stage review process in partnership the Waterloo Wellington Research Ethics Board (WWREB), improving efficiency for time-sensitive, minimal risk studies while upholding high standards of administrative and ethics review. As a result, minimal risk studies are being reviewed and approved by the WRHN Research Committee and WWREB in as little as 20 days.

Two pharmacy residency studies have successfully activated. One is using clinical pharmacy key performance indicators to assess pharmacy services provided by the Medication Assessment by Pharmacist (MAP) Clinic for ambulatory oncology patients in the Cancer Centre. The other aims to identify patient-specific factors associated with decreased vaccine uptake and potential barriers to vaccination in adults living with chronic kidney disease who are receiving care at WRHN. Both studies intend to improve care provided at WRHN.



Jackie Diebold, Clinical Pharmacist, Oncology, WRHN



Research Affiliate Role

The Office of Research was pleased to announce an important step forward in how we welcome and support volunteers contributing to research across our organization. In collaboration with Volunteer Resources, a formalized Research Affiliate role was launched and a standardized onboarding workflow for volunteers participating in research activities was developed.

What This Means

- **Standardized Role:** A formal Research Affiliate profile has been created, ensuring clear expectations for all research volunteers and supervisors.
- **Enhanced Oversight:** A new collaborative workflow ensures every Research Affiliate meets all mandatory corporate onboarding requirements for their role, monitored by Volunteer Resources, alongside all research specific requirements, monitored by the Office of Research.
- **Career Value and Growth:** The formalized Research Affiliate role offers a competitive entry-level opportunity that passionate research volunteers can feature on their resumes.

Over the 2025-2026 fiscal year, we've welcomed over 20 new Research Affiliates who are playing key roles in supporting research at WRHN across all portfolios. The Office of Research has been buzzing with new talent, and has continued to support this growth by providing space, equipment, and hands-on operational guidance. Notably, much of this support is delivered in the absence of dedicated operational, industry, or grant funding, underscoring both the demand for research infrastructure and the Office's commitment to enabling high-quality research across the network.



Alyssa N, Coop Student (front)
Nora G, Research Affiliate (rear)



Ridam P, Research Affiliate



Ridam presented her findings at the 2026 International Arrhythmia Conference



Jakob G, Research Affiliate (front)
Alyssa N, Coop Student (middle)
Nolan H, Research Affiliate (rear)



Mobilizing Knowledge & Evidence

Knowledge Mobilization is an emerging and strategically important function within the Office of Research, focused on ensuring that evidence generated through research is translated into meaningful action that improves patient outcomes, enhances care delivery, and strengthens health system performance. At its core, it bridges the gap between knowledge generation and real-world implementation.

To build capacity, both the Director and Scientific Specialists have completed formal training in Knowledge Mobilization, equipping the Office with the expertise to design and support effective translation strategies. This investment reflects a shift toward more intentional, structured, and impact-oriented approaches to evidence use.

Over the past year, the research team and affiliated investigators have advanced scientific knowledge through presentations at regional, national, and international conferences, fostering dialogue, critical feedback, and the uptake of evidence-informed practices across care settings.

Engagement in collaborative learning has also been strengthened through participation in Communities of Practice, including those led by the University of Waterloo and the Community Hospitals Research Network. These partnerships support shared learning, alignment with leading practices, and co-development of approaches tailored to community-based health systems.

Looking ahead, the focus is on advancing a more systematic and integrated approach to Knowledge Mobilization. Priorities include developing formal translation pathways that incorporate clinician engagement, change management, and evaluation frameworks, as well as expanding opportunities for knowledge exchange through forums, grand rounds, and targeted events connecting researchers, clinicians, and operational leaders. Through these efforts, Knowledge Mobilization will serve as a key enabler in ensuring research leads to measurable and sustained improvements in patient care and health system outcomes.





WRHN

Waterloo Regional
Health Network

Outstanding care that's personal,
seamless, and reimagined.