



Alberta Real World Evidence Consortium

# ANNUAL REPORT

REAL WORLD EVIDENCE  
Driving Real World Impact

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# LAND ACKNOWLEDGEMENT



The Alberta Real World Evidence Consortium acknowledges that it is located on the territory of Néhiyaw (Cree), Niitsitapi (Blackfoot), Métis, Nakoda (Stoney), Dene, Haudenosaunee (Iroquois) and Anishinaabe (Ojibway/Saulteaux), lands that are now known as part of Treaties 6, 7 and 8 and homeland of the Métis. We respect the sovereignty, lands, histories, languages, knowledge systems, and cultures of all Indigenous peoples.



## WHO WE ARE

The Alberta Real World Evidence Consortium (ARWEC) is a pan-provincial academic research team based at the University of Alberta and University of Calgary, in collaboration with the Institute of Health Economics.

Rooted in a university environment, we conduct timely, high-quality real world evidence (RWE) research that draws on Alberta's world-class health system data. We collaborate with private and public sector partners while upholding academic standards that ensure the integrity of our results.

ARWEC was founded in 2018 through a \$1.2 million joint investment by Alberta Innovates, the Government of Alberta, Alberta Health Services, and our three founding institutions.

Championed by Alberta's Ministries of Innovation and Technology and Health, and guided by the Deans of Medicine at the time—Dr. Richard Fedorak (University of Alberta) and Dr. John Meddings (University of Calgary)—ARWEC was built on a shared vision to showcase Alberta's exceptional health data and position the province as a national and global leader in RWE.

Today, we continue to build on that foundation, providing results that support improved health outcomes and evidence-informed decision-making for Canadians.



## FROM THE CO-DIRECTORS

Alberta holds some of the richest, most comprehensive health system data in the world. Province-wide coverage, linked administrative and clinical records, and decades of continuity give us an asset that most jurisdictions can only aspire to.

But data, however exceptional, does not speak for itself. Turning it into evidence that decision-makers can act on requires the right people asking the right questions, applying rigorous methods, and delivering results on timelines that matter.

That is where our team makes the difference. The strength of ARWEC has never been data alone. It is the depth of expertise our investigators, statisticians, and operational leads bring to every study. They understand the data assets intimately, hold to the highest methodological standards, and translate complexity into clarity for the people who need it. Our team is the reason world-class data becomes decision-grade evidence.

This past year reaffirmed what is possible when exceptional data meets an exceptional team. We are proud of the work reflected in this report, and grateful to the people behind it.

Scott Klarenbach, MD, MSc, FRCPC | Tyler Williamson, PhD  
Co-Directors, Alberta Real World Evidence Consortium



# OUR PURPOSE

We leverage Alberta's world-class health system data to deliver timely decision-grade results.

# OUR CORE VALUES



## Integrity.

We uphold the highest academic standards and best practices.



## Collaboration.

We achieve goals by working together with respect and transparency.



## support.

We advance health by providing evidence to guide informed decision making.





# OUR EXPERTISE

01

## CROSS SECTOR RESEARCH COLLABORATION

We advance multi-sector partnerships and clinical key opinion leader engagement to generate real world evidence that informs policy and clinical practice.



02

## RESEARCH GOVERNANCE

We manage legal agreements, ethics approvals, data custodian requirements, and privacy compliance requirements specific to real world evidence studies.



## OUR EXPERTISE

Generating real world evidence that informs policy and clinical practice.

03

## METHODOLOGICAL EXPERTISE

We develop research questions and study designs to generate meaningful evidence while applying best practices.



## STUDY EXECUTION

We deliver high-quality analytics while ensuring the integrity of results and robust, actionable evidence.



04

## KNOWLEDGE MOBILIZATION

We support evidence-informed decision-making through dissemination activities, including reports and peer-reviewed publications.



05



MULTI-SECTOR PARTNERSHIPS



TRUST & COMPLIANCE



SCIENTIFIC RIGOR



HIGH-QUALITY EVIDENCE



IMPACTFUL DECISIONS

We build multi-sector partnerships to generate real world evidence that shapes health policy and clinical practice.



# OUR TEAM

Our core team has a proven track record of timely execution of decision grade evidence, with deep knowledge of data assets, methodology, and project management. Our university based setting allow participation of national and internationally renowned clinical experts.

## Co-Directors



Scott Klarenbach, MD, MSc, FRCPC



Tyler Williamson, PhD



Karen Martins, PhD  
Associate Director,  
Research & Strategy



Brandee Borne, BSc  
Associate Director,  
Operations & Strategy



Colin Josephson  
MD, MSc, FRCPC,  
CSCN (EEG), Investigator



Jeff Round, PhD  
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Huong Luu, MD, PhD  
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Khanh Vu, MD, PhD  
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Elsa Hansen, PhD  
Project Lead, Research



Mani Liu, MSc  
Biostatistician

Brent Korte, BA  
Business Development Lead



Melanie Boldt, BComm, PAg  
Communications Officer



# PROJECT LIFE CYCLE





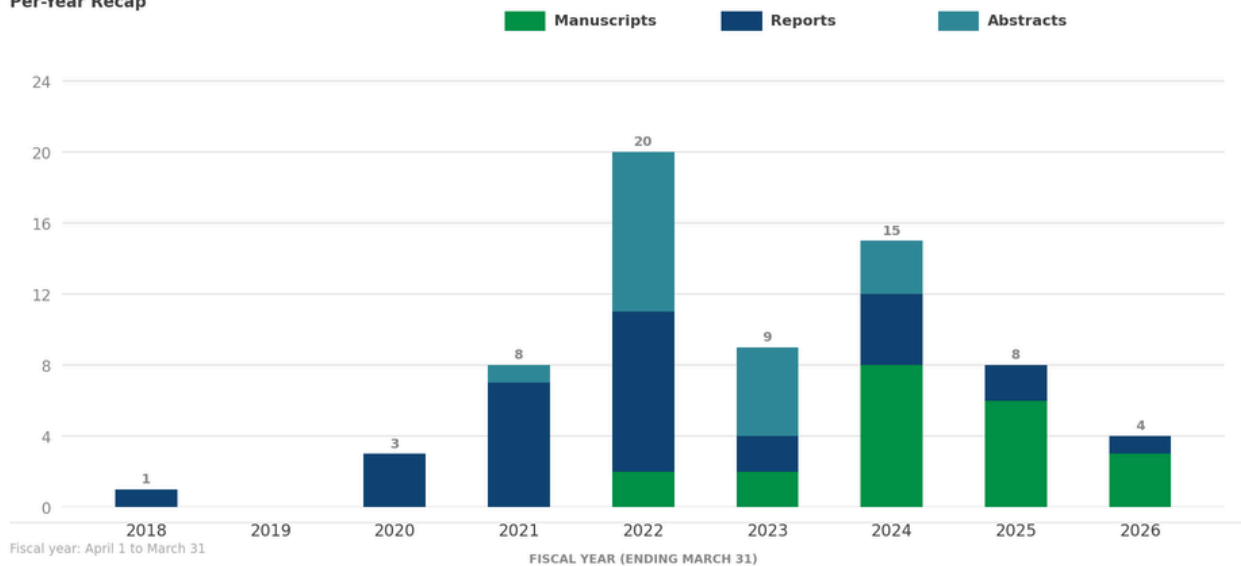
# PROJECTS, PUBLICATIONS & MANUSCRIPTS

## ARWEC Publication Summary

PUBLICATION OUTPUTS BY TYPE — TOTAL



Per-Year Recap



ARWEC has conducted retrospective observational research studies utilizing health system data in a wide variety of focus areas including neurology, respiratory health, mental health, COVID-19, obesity, kidney disease, ulcerative colitis, rare disease, immunoglobulin therapy, pain management, acute care, and medical devices.



A publication list and links can be found at <https://albertarwe.ca/manuscripts/>.

# IMPACT SUMMARY

## Mobilizing Expertise Across Alberta and Beyond

ARWEC has engaged 60 faculty, staff, and trainees from the University of Alberta and University of Calgary, and individuals across six provincial and interprovincial organizations: The College of Physicians and Surgeons of Alberta, Alberta Health Services, Alberta Precision Laboratories, primary health care providers, Saiani Health, and the University of Toronto, as co-authors on peer-reviewed manuscripts, reflecting the strong collaborative capacity our team has cultivated.

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 60

University faculty, staff and trainee co-authors on manuscripts

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 6

Provincial and interprovincial organizational collaborating co-authors on manuscripts

# IMPACT SUMMARY

On this and the following page are two examples of research studies conducted by ARWEC that informed decision making for improved health.

## **How does robotically assisted surgery compare with conventional surgery on patient and system important outcomes in Alberta?**

**The value of robotically assisted surgical systems in Alberta.** The real world comparison of robot assisted versus conventional surgery on health system and patient outcomes was identified as a need by Alberta's provincial health authority. Through funding provided by Intuitive Surgical Incorporated (a medical device company that manufactures and markets one of these systems), ARWEC was able to address this knowledge gap for Alberta decision-makers.

**Impact:** These findings provided key evidence for decision-making by the provincial health authority and informing the Provincial Robotic Surgery Action Plan. Other provinces have been using results from this study to inform their decision-making as well.

### **Manuscript:**

Luu, H, Martins, KJB, Sabourin, J, Jago, CA, Lester, ELW, Nguyen, PU, Williamson, T, and Klarenbach, SW. Acute outcome comparisons of robotic versus laparoscopic and open hysterectomy for endometrial cancer: a retrospective cohort study from Alberta, Canada. Canadian Journal of Surgery. 2026, April, Accepted. Manuscript ID: CJS-0017-25-OA.R1.

# IMPACT SUMMARY

## **Who is at risk of severe outcomes from COVID-19 as it becomes endemic?**

**Support for the National Advisory Committee on Immunization (NACI).** Moderna funded an ARWEC research study that investigated factors associated with severe COVID-19 outcomes among adults with at least a primary vaccination schedule. The ARWEC academic research team was invited by and presented findings to NACI.

**Impact:** Study results provided Canadian empirical evidence that may be used to inform recommendations for the guidance and use of COVID-19 vaccines.

### **Manuscript:**

Aponte-Hao, S, Luu, H, Martins, KJB, Randall, JR, Saxinger, L, Rennert-May, E, Leal, J, Williamson, T, Wilson, A, Blake, M, Lu, T, Iqbal, SM, Mansi, JA, Araujo, AB, Martin, D, and Klarenbach, S. Factors associated with severe COVID-19 outcomes among adults with at least a primary vaccination schedule: a retrospective cohort study from Alberta, Canada. MedRxiv (non-peer reviewed pre-print). 2025 August 25. MEDRXIV/2025/334000. doi: <https://doi.org/10.1101/2025.08.19.25334000>.

# ACKNOWLEDGEMENTS



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# CONTACT US

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