



# APPROACH: Risk Prediction to support shared decision-making for managing heart disease

## **Project Snapshot**

Heart disease is common in people with chronic kidney disease (CKD), and is a major cause of hospitalization and death. However, people with CKD are less likely to receive tests and treatments for their heart disease than those without CKD. Identifying and meeting the information needs of patients and care providers is important to support patient-oriented approaches to care, especially when complex decisions must be made that require weighing of risks versus benefits.







**Todd Wilson,** PhD candidate in Epidemiology, has been working diligently to develop and validate the prediction models that provide personalized information on the risks of important patient outcomes. The results of his

work provide new knowledge and approaches that we are incorporating into our decision aid that will support the shared decision-making process between patients with CKD and their care providers. Todd will be defending his PhD thesis on June 24th titled "Patient preferences and individualized risk prediction for management of acute coronary syndrome in chronic kidney disease". Good luck with your defense Todd!



As we move forward with development of the decision aid, we would like to **welcome** our newest team member **Julie Babione**. Julie has a background in computer science, information visualization, experience with human centered design and development for clinical decision support and patient-centred care.

She enjoys salsa dancing, skiing, and knitting. Julie will be helping turn the paper-based decision aid into an interactive and collaborative computer-based decision-making tool.



## Patient Partner Spotlight

**Wayne Gerber** is a patient partner whose journey started at age 42 when he was diagnosed with diabetes. Following an angiogram confirming his heart disease, he would start peritoneal dialysis. Wayne

was later removed from the kidney transplant list as his heart would be deemed not strong enough for a transplant surgery and was then given 2 years of life. Facing a complex care decision in 2018; he had open heart bypass surgery which was successful and allowed him to be placed back on the transplant list. Wayne received his new kidney in 2019. Wayne is extremely grateful to be able to give back to others who are facing similar decisions through his involvement with CanSOLVE.





The Canadian Journal of Cardiology Open has published our article "Patient Experience Following Risk Stratification and Follow-up for Acute Kidney Injury After Cardiac Catheterization". Have a read at: https://doi.org/10.1016/j.cjco.2020.10.019

### **Project Phases**



Phase I – Complete

Phase II – In Progress

Development and validation of risk prediction models for important clinical outcomes identified by patients and care providers. Measurement of attributes of treatment decision making that are important to patients and the value they place on them.

We have completed recruitment of 150 patients from Alberta and are commencing recruitment of an additional 50 patients from British Columbia to measure patient treatment preferences and values through the discrete choice experiment.

#### Phase III – In Progress

In this co-design phase, we are working with patients, their family members, and relevant healthcare providers, alongside research experts in clinical decision aids, in an iterative process to develop and refine a decision aid for use within a shared decision-making framework. This will be followed by testing of a digitized format of the decision aid with patients and care providers.

