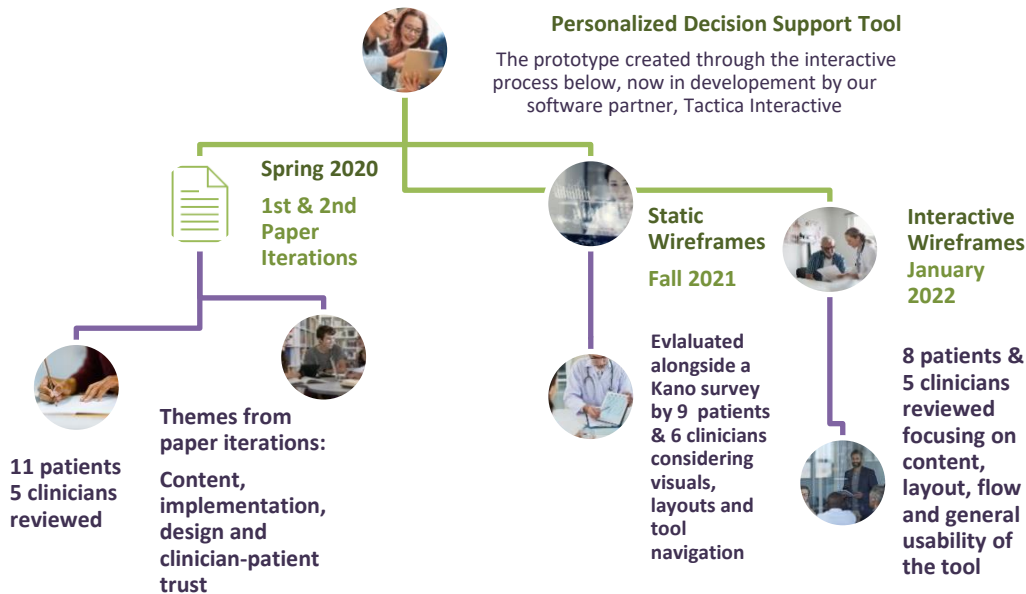# APPROACH: Risk Prediction to support shared decision-making for managing heart disease

Project Update – Journey from Paper to Technology

In the spring of 2020, we interviewed eleven patients and five clinicians with the first paper iteration of our decision support tool. Themes from interviews centered on content, implementation, design and the importance of clinician-patient trust and relationships for shared decision making. This feedback informed a second paper-based iteration reviewed in Spring 2021. Static wireframes were created in Fall 2021 and evaluated alongside a Kano survey by nine patients/patient partners and six clinicians, who prioritized and selected potential visuals, layouts, and tool navigation during their review. In January 2022 we followed up with the creation of an interactive wireframe prototype that has been evaluated by a further eight patients and five clinicians focusing on content, layout, flow and general tool usability as they worked through various patient scenarios. We have now handed over the latest prototype to our software development team (Tactica Interactive) to create the electronic version of our shared decision-making tool.

Personalized Decision Support Tool

The prototype created through the interactive process below, now in developement by our software partner, Tactica Interactive

Spring 2020
1st & 2nd Paper Iterations

11 patients 5 clinicians reviewed

Themes from paper iterations:

Content, implementation, design and clinician-patient trust

Static Wireframes
Fall 2021

Evlaluated alongside a Kano survey by 9 patients & 6 clinicians considering visuals, layouts and tool navigation

Interactive Wireframes January 2022

8 patients & 5 clinicians reviewed focusing on content, layout, flow and general usability of the tool

Patient Partner Spotlight

Loretta's health journey started 30 years ago when diagnosed with CKD at a young age of 26 while busy raising her infant daughter. She had a successful cadaveric transplant in 1999 just before needing dialysis. Loretta's transplant lasted 20 years, enabling her to complete her Master of Nursing, raise her daughter, and enjoy many of life's memorable moments. Unfortunately, as Loretta says "All good things come to an end" as did her transplant. Loretta started dialysis in 2018, a time she remembers as stressful juggling work and evening dialysis treatments. Loretta, now retired, sees her nursing career as a privilege and a blessing. She looks forward to sharing her professional and personal knowledge in support of CKD patients

Our team was excited to produce a **Video Project Update** for the **Can-SOLVE Network Annual Meeting in Sept 2021**. The video takes you on a journey of why a decision support tool can make a difference in explaining the decisions facing patients with CKD and heart disease. We were honored to receive the award for "Largest and Most Diverse Cast". **Watch the video at the link below:**
https://www.dropbox.com/s/5uirtaphnz1dgzl/annual%20meeting%20video%20d2.mp4?dl=0

Project Phases

Phase II – In Progress ✓

We are continuing 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, family members, and relevant healthcare providers, alongside research experts in clinical decision support tools, in an iterative process to develop and refine a decision aid for use within a shared decision-making framework for patients with CKD and heart disease.

Can-SOLVE Phase 2.0 Grant

A proposal for the next phase of our work was one of the projects selected for inclusion in the Can-SOLVE CKD Network Phase 2.0 grant proposal submitted to the Canadian Institutes of Health Research (CIHR) in November 2021. The proposal will mobilize research-generated knowledge from the first phase of the project by implementing our decision aid into practice to improve health decisions for patients with CKD and heart disease.

To learn more: cansolveckd.ca/research/earlier-diagnosis/risk-prediction-to-support-shared-decision-making-for-managing-heart-disease/

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