

Accelerating Innovations into CarE – Validate Program (AICE-Validate)



Artificial Intelligence Driven Gait, Balance and Mobility Assessments

PROJECT FAST FACTS

RECIPIENT: OKAKI Health Intelligence Inc.

AWARD: \$300,000

AWARD DATE: August 1, 2024

PROJECT DURATION: 12 months

THE PROBLEM

Gait and balance assessments are used in healthcare to assess the risk of a fall and movement difficulties, including those occurring from normal aging, neurodegenerative conditions like Alzheimer's, dementia or Parkinson's, and injuries like concussions. Gait assessments are administered by trained health professionals who rely on their clinical observation and judgement. These assessments lack sensitivity, precision and reliability in detecting subtle abnormalities or changes in disease and treatment progression. Metrics like trunk sway, step cadence and step length and width are hard to measure in routine clinical settings without special sensors or equipment.

THE SOLUTION

Gaitly® is a mobile- and web-friendly software application that aims to make a sixth functional vital sign – gait assessment – accessible to clinicians and patients in any setting, including virtual care and remote monitoring. Gaitly® uses state-of-the-art computer vision and natural language processing to capture gait, balance, and dual task (motor + cognitive) metrics. Gaitly® will enable more accurate monitoring of all risks including functional health and disease or treatment progression and addressing the shortcomings of routine clinical assessment instruments.

PROJECT OBJECTIVES

1. *Design and initiate studies required for regulatory applications and device authorization.*
2. *Achieve a prototype required for healthcare partner and potential customer testing.*
3. *Obtain regulatory approvals in Canada and the USA .*
4. *Build new features to support Remote Therapy Monitoring (RTM).*
5. *Achieve business readiness to secure pre-seed investment.*

ABOUT THE AICE-VALIDATE PROGRAM

AICE-Validate is an opportunity for Alberta's health-tech innovators to accelerate commercialization of digital and data-enabled health technologies through the early validation phase. If you'd like to learn more, please check out [AICE Validate on the Alberta Innovates website](#).

Learn how

albertainnovates.ca