Longitudinal Studies and Interventions

1) To lead international collaborative analysis of longitudinal studies of cognitive aging and dementia. 2) To develop a prospective cohort study to improve the accuracy of detecting cognitive change and risk for dementia. 3) To advance prevention and treatment options for individuals with subjective cognitive decline and cognitive impairment.

To improve predictive models to identify individuals at risk for transitions into higher levels of care.

To meet the needs of vulnerable populations (e.g., persons living with dementia, end of life, caregivers) in the achievement and promotion of quality of life.

Care and Technological Innovations

To advance development and evaluation of assistive technology, in partnership with CanAssist, to support independence and autonomy at home.

To improve health services for those at end of life and for vulnerable populations.

To provide continual feedback and refinement from end-user studies to improve design and impact of technologies to support independent living.

Data Analytics

To advance data analytics for detecting change and quantifying individual risk for acute events with home-based monitoring.

To build learning analytic systems in health care for improving clinical decision support, care coordination, and patient outcomes.