



Canadian  
Frailty  
Network

Réseau canadien  
des soins aux  
personnes fragilisées

In Partnership With

Canadian Foundation for **Healthcare Improvement**

Fondation canadienne pour l'amélioration des services de santé



Canadian Institutes of  
Health Research  
Instituts de recherche  
en santé du Canada

# FRAILTY MATTERS

## *Innovation Showcase*

Thursday, September 20, 2018, Toronto, Canada

# TOP 30 INNOVATIONS





Applications were assessed by an external review panel. Following this review CFN selected 30 Frailty Innovations to be highlighted from the 79 submissions received. The Top 5 were granted panel and storyboard presentations. The next 25 were granted storyboard presentations. Final selection was made to be reflective of innovation happening across Canada, emerging or demonstrated, that is improving, or has the potential to improve experience, quality of life and value for money provided for older Canadians living with frailty, and their families, caregivers, and care providers. Innovations could be a new way of delivering care that shows promising results, or one that improved current practice.

The FRAILTY MATTERS Innovation Showcase was presented in partnership with the **Canadian Foundation for Healthcare Improvement (CFHI)** and the **Canadian Institutes of Health Research – Institute of Aging (CIHR-IA)**.

*Thank you to our review panel members for their time and expertise:*

- **Carlota Basualdo-Hammond** – Executive Director, Nutrition Services, Provincial Strategy, Standards and Practice, Alberta Health Services
- **Angus Campbell** – Executive Director, Caregivers Nova Scotia
- **Debbie DeLancey** – former Deputy Minister, Health and Social Services, Government of NWT
- **Flora M. Dell, C.M., O.N.B.**, gerontologist, citizen advocate/volunteer
- **Jean Gray** – Professor Emeritus, Medical Education, Medicine, and Pharmacology, Dalhousie University
- **Fred Horne** – Health Policy Consultant, Adjunct Professor University of Alberta’s School of Public Health
- **Yves Joannette** - Scientific Director, Canadian Institutes of Health Research – Institute of Aging
- **Isobel Mackenzie** – Seniors Advocate, Province of British Columbia
- **Wanda Morris** – Vice President of Advocacy and COO, Canadian Association of Retired Persons (CARP)
- **Christine Quinn** – Director of Programs, Canadian Foundation for Healthcare Improvement
- **Joyce Resin** – Public Engagement Consultant
- **Stephen Samis**-- Deputy Minister, Health and Social Services, Government of Yukon
- **Shirlee Sharkey** – CEO, Saint Elizabeth Health
- **Chris Simpson** – Acting Dean, Faculty of Health Sciences, Queen’s University
- **Duncan Sinclair** – former Vice-Principal Health Sciences; Fellow in School of Public Studies, Queen’s University
- **Stephen Vail** – Director of Policy, Canadian Medical Association
- **Hazel Wilson** – Citizen/Advocate, Patient Partners in Arthritis member

#### **About CFN:**

The [Canadian Frailty Network](#) is a not-for-profit organization funded by the Government of Canada’s Networks of Centres of Excellence (NCE) program. CFN is Canada’s sole network devoted to improving care for older Canadians living with frailty and supporting their families/caregivers. We do this by



increasing frailty recognition and assessment, increasing evidence for decision-making, advancing evidence-based changes to care, educating the next generation, and engaging with older adults and caregivers. We are a multi-disciplinary national network, nurturing productive multi-sectoral partnerships and collaborations, and always including patients, families and caregivers.

## 2018 CFN FRAILTY MATTERS Innovation Showcase Podium Presentations

### **Edmonton Oliver Primary Care Network (Alberta)**

#### *Seniors' Community Hub*

**Project Lead: Marjan Abbasi**

**Presenters: Marjan Abbasi, Shenay Khera**



The Seniors' Community Hub (SCH) was co-created by a Care of the Elderly and a Primary care physician working in Alberta. The overarching goal of the initiative is to transform primary care into a central hub to better meet the dynamic health and social needs of older adults with frailty and their family/friend caregivers. The objectives of the Seniors' Community Hub are to: maintain and enhance seniors' health and wellness; build integrated primary health care that is centered on the goals and priorities of older adults; develop effective information sharing between patients, care providers and settings; provide community-based support to family/friend caregivers to prevent or alleviate caregiver burden; and foster long-term sustainability in the primary care setting.

The SCH builds capacity in primary care by mobilizing available Primary Care Network resources, proactively supporting older adults and their family/friend caregivers in maintaining their intrinsic capacity, strengthening their resilience, and, ultimately, mitigating frailty. This has been achieved by the SCH structured process of care; education of the healthcare workforce; patient and caregiver empowerment; and building partnerships in care. Successes of the program thus far have been improvements to quality of life with improvement or maintenance of patient independence, acquisition of self-management skills with respect to health and medications, improved chronic disease management, improved access to community resources through navigational support, lower caregiver sense of burden and stronger connections to their medical home and community.

### **Health PEI - Home Care and Geriatric Programs (PEI)**

#### *COACH (Caring for Older Adults in Community and at Home) Program*

**Project Lead: Elaine Campbell**

**Presenters: Elaine Campbell, Kirsten Mallard, Tim Stultz**



With the older adult living with frailty and their family at the center, the COACH program is delivered by an integrated interdisciplinary expert team of health professionals who collaborate with existing resources in partner programs; Home Care, Primary Care and Geriatrics. The COACH team includes a Geriatric Nurse Practitioner, the client's Primary Care Physician and a Care Coordinator. The Nurse



Practitioner plays a key role on the team, as the interconnecting “glue” between various areas of the healthcare system\*.

The COACH team provides direct client care at home, on a timely basis, in an effort to predict and prevent (or proactively manage), health crises when they occur and ideally decrease the need for emergency services or admission to hospital. The team encourages advanced care planning and access to community support, with the goal of improved quality care for older adults living with frailty. System utilization data from the COACH pilot demonstrated decreases in hospital inpatient stays by two thirds, emergency visits by one third and primary care visits by one half. COACH clients are better able to self-manage and make informed decisions that positively impact their quality of life at home and, when necessary, support smoother transitions to and from acute care or long-term care.

Seniors must be referred to the COACH Program by a health professional. Program admissions are approved by a panel of health care professionals from Home Care and Geriatric Programs, based on established eligibility criteria, assessed need and available program and partner resources.

<https://www.princeedwardisland.ca/en/information/health-pei/coach-program>

## **Fraser Health Authority (B.C.)**

*CARES: Early Frailty Identification and Prevention Strategy*



### **Project Lead/Presenter: Annette Garm**

Frailty threatens the quality of life for seniors as well as the sustainability of the health care system. Evidence suggests a collaborative approach in the primary care setting involving early geriatric assessment of “at risk” seniors combined with a community-based health coaching intervention can prevent or delay frailty. Based on this knowledge Fraser Health developed the CARES model designed as an upstream approach to address preventable frailty.

CARES (Community Action and Resources Empowering Seniors) is an evidenced based model that supports General Practitioners (GPs) working within a multidisciplinary team framework to identify seniors “at risk” for frailty early by using an electronic comprehensive geriatric assessment tool which generates a frailty index (eFI-CGA) at point of service. The Frailty Index (FI) is a reliable and sensitive measure of frailty generated from the CGA. Targeting seniors with Clinical Frailty Scores between 3 and 6 CARES uses the results of eFI-CGA to develop individualized care plans and then supports seniors to connect with free health coaches through the UVIC’s Self-Management Health Coaching program to support and develop the senior’s self-management capacity. Telephone based health coaches help seniors to improve their exercise, nutrition and socialization within their local community. Over a period of 3 to 6 months health coaches support seniors to adopt health protective behaviours which reduce their risk for frailty while improving their functional capacity. After a period of a year the eFI-CGA is repeated in the GP’s office to measure the senior’s progression toward or movement away from frailty.

## **Hamilton Health Sciences (Ontario)**

*Hospital Without Walls: Bridging the Gap in Health*

*Disparities for Adults Living with Frailty*



### **Project Lead/Presenter: Kelly O’Halloran**



Hamilton Health Sciences (HHS) is transforming care for patients at high risk for frailty by aligning its hospital and community-based teams. By following patients from the emergency department (ED) until they successfully transition back home, HHS is improving patient experience while reducing ED visits, admissions, readmissions, length of stay, and achieving cost savings.

Patients aged 65+ years are screened in the EDs, and those identified as high risk for frailty are referred to the *Centralized Care and Transition Team (CCaTT)*, an interdisciplinary team with geriatric experience. The CCaTT assesses mood, memory, function, social supports, medications, and develop evidence-based interventions and recommendations aligned with Ontario's *Assess & Restore Guidelines*. The CCaTT refers patients at highest risk to HHS' Outreach Team.

*HHS' Outreach Team* utilizes Ontario's *Health Links Model of Care*. The Outreach Team partners with patients in their homes to identify: what is most concerning to them about their health, what is most important to them right now, and what they hope to achieve. Goals are developed with patients, and the Outreach Team collaborates with partners such as: primary care, geriatrics, home care, and community service organizations to initiate actions that will help patients achieve their goals. Typically, the Outreach Team's patients have: 4+ chronic conditions, lack of social supports, low health literacy, low mood, functional and/or memory impairment, limited finances, and high hospital visits.

## **Centre for Family Medicine Family Health Team (Ontario)** *Case-finding for Complex Chronic Conditions in persons 75+ ("C5-75")*



**Project Lead: Linda Lee**

**Presenters: Linda Lee, Tejal Patel**

Given the aging population, Canada's critical shortage of geriatricians, and a healthcare system adapting to meet the needs of persons living with frailty, it is increasingly recognized that primary care must accept a greater role in caring for older adults living with frailty. Yet early recognition of frailty and its contributing conditions has been challenging. To address this need, the Centre for Family Medicine Family Health Team created the C5-75 program as a way to identify and manage frailty within primary care.

Through annual screening during routine office visits, C5-75 aims to systematically identify and better manage frailty and unrecognized associated medical and psychosocial conditions that contribute to poor health outcomes, enabling individuals to maintain health and quality of life and community living for as long as possible. With iterative revisions to increase efficiency, the program has demonstrated feasibility and acceptability, having been sustained for over 5 years in 19 family practices; 1073 persons aged 75+ have been screened and 7% identified as frail. As well, the program has demonstrated feasibility within a less-resourced family practice setting in collaboration with a community pharmacy.

Elements that make C5-75 suitable for Canadian family practices include: (i) the development of a feasible, objective, valid means of screening for frailty during busy clinical practice using gait speed with hand grip strength; (ii) its structured, multidisciplinary, evidence-informed approach to systematically screen for and manage frailty and associated conditions, and (iii) being developed by practicing primary care practitioners, tested, and designed for integration into Canadian primary care.





## 2018 CFN FRAILITY MATTERS Innovation Showcase Storyboard Presentations

### Extra-Mural Program/Department of Social Development (New Brunswick)



#### *Rehabilitation and Reablement Services for Seniors: An Integrated, Home-Based Approach to Promote Independence*

##### **Project Lead: David Arbeau**

*Rehabilitation and Reablement* is a patient centered, integrated service delivered in the senior's home or assisted living facility. It is an enhanced, rapidly accessible service that provides intensive rehabilitation and reablement to promote independence so that seniors can remain in their homes longer. It is delivered in collaboration by the Extra-Mural Program (EMP) team and the Department of Social Development.

In the proof of concept, patients were screened by an Extra Mural clinician either in the hospital or community. In order to be eligible, patients needed to demonstrate the potential for improvement within 9 weeks using evidence-based assessments. Once deemed appropriate, patients were discharged from hospital within 24-48 hours with the necessary supports in place at no cost to the patient or family. Targeted diagnoses such as chronic obstructive pulmonary disease, congestive heart failure, diabetes, mild/moderate stroke/transient ischemic attack, falls, musculoskeletal injuries, fractures and dementia (mild to moderate) were areas of focus.

The home health care services included a team of nurses (RN and LPN), physiotherapists, occupational therapists, speech and language pathologists, rehabilitation assistants, respiratory therapists, dietitians and social workers. Care was tailored to the specific needs of the patient using a tool called "My Health Plan". My Health Plan uses a patient centered interdisciplinary approach in the development of the focus of care and is kept with the patient.

Results were very encouraging with over 80% of seniors meeting identified goals and completing care successfully at home. Hospitalizations and ED visits were decreased, as well as overall mortality.

### **BC Centre for Palliative Care (British Columbia)**



#### *The Peer-facilitated Advance Care Planning Workshops for The Public*

##### **Project Leader: Doris Barwich**

Advance Care Planning (ACP) helps us get the care that aligns with our wishes. ACP starts by thinking of our personal values, goals and preferences regarding health-care then sharing this information with our families and health-care providers. Seniors need to initiate their ACP before a crisis happens. The risk of seniors becoming unable to express their wishes and make health-care decisions for themselves doubles every five years after the age of 65. A recent study showed low level of awareness and engagement in ACP among British Columbians.



The BC Centre for Palliative Care partnered with two community organizations to develop the ACP public education model; named *The peer-facilitated ACP sessions*. The goal is to bring ACP conversations where people live and have their wishes known and respected. The model includes: 1) Online and in-person training curriculum for volunteers to equip them with the knowledge and skills to become peer-facilitators for ACP sessions; 2) Start-up toolkit that includes resources for community organizations interested in adopting this model; for facilitators, and for the public. The start-up costs for establishing a community-delivered program based on this model is approximately \$2500-\$3000. The model was adopted by 24 community organizations across B.C. Evaluation of over 40 sessions indicates that the model is effective at all levels. The public participants' knowledge and readiness to engage in ACP increased 4-6 weeks after attending the sessions. The training is effective at preparing volunteers to facilitate public sessions. Community organizations reported raised profile, improved connections and new partnerships. [www.bc-cpc.ca](http://www.bc-cpc.ca)

## **Middlesex-London Paramedic Service (Ontario)**



### *Vulnerable Patient Program*

#### **Project Lead: Dustin Carter**

The risk of falls presents a serious cause of injury, mortality, and strain on the healthcare system. In Middlesex-London, falls are the second highest source of 9-1-1 repeat callers. However, some falls result in a growing non-emergent call type referred to as a "lift assist" (LA). A LA is a non-medical, non-urgent call for Paramedic services to assist a patient from their current position, generally after a fall. Falls resulting in LAs are not always a benign occurrence; they can be indicative of frailty and health decline in older adults. Properly attending LAs is crucial for early detection of underlying health concerns and an opportunity to proactively implement measures to preserve an individual's health.

Currently the only service available to older adults who require a LA is to call 9-1-1 and wait for Paramedic services. In 2017, Middlesex-London Paramedic Service (MLPS) responded to over 1,800 LA calls. These calls accounted for over 62 days' worth of Paramedic services use and cost approximately CAN\$300,000. The Vulnerable Patient Program (VPP) presents the benefits of enrolling repeat LA callers into MLPS' existing digital health monitoring program to promote high-quality coordinated care.

The VPP links older adults who require LA to a dedicated service with Paramedics specially trained in geriatric assessment to identify acute and chronic conditions that drive LAs to mitigate risks for future falls. A dedicated response vehicle and Paramedic team would ensure people requiring LA get the help they need in a timely manner. [www.mlems.ca](http://www.mlems.ca)

## **Alberta Health Services (Alberta)**



### *Elder Friendly Care in Alberta*

#### **Project Lead: Mollie Cole**

Current practice of older adults living with frailty in acute care is self-defeating and unsustainable: excessive use of pharmacologic, mechanical, physical and environmental restraint contributes to confusion, insomnia, agitation, deconditioning, incontinence, delirium, falls and other negative



outcomes for older adults living with frailty. This extends length of stay in acute care, increases demand for scarce Continuing Care services and drives overcapacity.

The Seniors Health Strategic Clinical Network™ (SH SCN™) in Alberta is working to change this current practice through an initiative called Elder Friendly Care (EFC). The SH SCN is a provincial team that collaborates with operational leaders and staff across practice settings to enhance health outcomes of older adults living with frailty.

The Elder Friendly Care project brings together care teams to enhance care of older adults living with frailty across the spectrum of care in facilities and/or communities. Innovation Collaboratives (Learning Workshops with Action Periods between) are offered in large urban hospitals and rural communities. Teams from inpatient medical, surgical, transition and psychiatry units participate along with teams from Emergency Departments, and outpatient clinics. In rural areas teams from LTC/Supportive Living/Home care and physician-led clinics are also invited. Content in the workshops includes: strategies to prevent restraints, delirium and falls using best practices to encourage mobility, continence, nutrition and hydration, sleep, pain management and minimize medication use.

Restraint use has been chosen as a proxy outcome measure for quality of care of older adults living with frailty. A newly released provincial Restraint as a Last Resort policy is a motivator for teams to participate in this initiative. <https://www.albertahealthservices.ca/scns/Page13345.aspx>

## **Alberta Health Services, Provincial Oral Health Office (Alberta)**

### *Mouth Care Training for Care Staff in Continuing Care*



#### **Project Leads: Cindi de Graaff and Sabrina Lopresti**

In 2012, a gap was identified related to policy and standards surrounding oral hygiene care in Alberta Continuing Care (CC) facilities. This lead Alberta Health Services' (AHS), Provincial Oral Health Office to develop a standardized provincial training program for care providers to support daily oral care for residents.

After a successful pilot in 2014, a mouth care train-the-trainer program was rolled out across Alberta to increase the capacity of facility site champions and educators to train on-site care providers. This innovation positively impacts the work of health care providers and transforms lives by improving quality of life for residents and their families.

Innovative methods of disseminating the training is available to meet the distinct needs of care settings. Training is offered in-person, via on-line presentation technology and self-directed YouTube video presentations. Continuing Care Desktop, a web-training platform available to all CC health care providers, increases reach and accessibility of training and resource materials. The training program is utilized in diverse settings in both urban and rural areas. This includes participants from CC facilities, acute care, home care, and nursing and health care aide educational programs.

Sustainability of the program is supported by the Alberta 2016 Continuing Care Health Service Standards and the AHS Provincial Oral Hygiene Policy which outlines that residents within CC facilities be offered oral care assistance twice a day and more frequently as required. Ongoing facility audits and training evaluation monitors both adherence to the program and satisfaction of participants, residents and their families.





## University Health Network/Sinai Health System (Ontario)

*A prospective clinical surveillance tool for identifying patients nearing the end of life*



### **Project Lead: James Downar**

One of the most important obstacles to improving end-of-life (EOL) care is the failure of clinicians to reliably identify those who are approaching EOL. This is particularly true among older Canadians living with frailty, who are far less likely to receive palliative care interventions than those dying of cancer or organ failure.

We developed a modified Hospital One-Year Mortality Risk (mHOMR) tool that reliably identifies admitted patients nearing EOL using existing administrative data in real time and prompts healthcare providers to assess them for unmet palliative needs. We conducted a mixed-methods feasibility study of the tool at two hospitals and found that the tool was reliable and possibly effective for changing the EOL care delivered to patients. Notably, 57% of those identified by the tool were admitted with a frailty condition, suggesting that the tool may help to close the gap in EOL care between frailty and cancer. In a subsequent study, we found that a large majority of patients identified by the mHOMR tool had severe physical or emotional symptoms or had a desire to speak with their admitting physician about their care preferences as they came closer to the EOL. Taken together, these findings suggest that the mHOMR tool is a feasible, scalable and reliable tool for identifying people who are nearing the EOL and have unmet palliative needs. The tool could be used to enhance the real-world effectiveness of any palliative intervention, particularly among those with frailty, and facilitate research and quality improvement by reliably identifying people who might benefit and prompting staff to assess them.

## Nova Scotia Health Authority (Nova Scotia)



*Success...Proof of Concept: Leading the Way with Diabetes and Frailty Quality Initiative. Taking the Attention off Tight Targets*

### **Project Leads: Peggy Dunbar and Crystal MacNeil**

Guidelines for diabetes management in older adults living with frailty, released in 2010 to all Nova Scotia (NS) Long-Term Care (LTC) Facilities, showed positive results for patients and health care providers (HCPs). As this patient population is often more aggressively managed in Acute Care with tighter glycemic targets, this 2017 quality initiative focused on educating HCPs caring for older adults living with frailty who have been medically discharged to Veteran’s Units or awaiting LTC placement in Transitional/Alternate Level of Care beds. This Initiative was conducted in two communities in the Western Zone (WZ) of NS.

A quality process, using an educational intervention, emphasized appropriate care to achieve patient safety and improved quality of life. In efforts to reduce over/under management, topics included appropriate glycemic targets, monitoring frequency for A1C/blood glucose, and correct identification/treatment of hypoglycemia. Pre- and post-education session HCP knowledge surveys and chart audits, education session evaluations, and stakeholder feedback all demonstrated Initiative effectiveness.



This Initiative built on a similar project conducted in other WZ locations between 2014-2016; however, it used a nursing and nutrition Co-lead model at each site, building on local capacity. A centralized Project Coordinator provided support with presentation logistics/promotions; material preparation; survey collection/compilation; chart audits; data capture/analysis/reporting; and communications. Standardized processes and evaluation metrics/materials ensured project fidelity and comparability. This process was highly valued by the stakeholders, including the implementation team, and resulted in positive change for the targeted HCPs and their patients. It will be used in other parts of NS, with easy application to other provinces. <http://diabetescare.nshealth.ca/events-initiatives/special-projects-partnerships/western-zone-diabetes-quality-initiative-2017>

**Résidence Lucien Saindon and Westford Nursing Home/University of Moncton (New Brunswick)**



UNIVERSITÉ DE MONCTON  
EDMUNDSTON MONCTON SHIPPAGAN

*Nursing Homes Without Walls*

**Project Lead: Suzanne Dupuis-Blanchard**

Most seniors want to age at home. While the topic of “aging in place” has been widely discussed in the last few years, many provinces do not have a well-organized system to provide services, especially in rural communities, that is cost-effective and meets vulnerable seniors’ needs for aging at home. The idea of nursing homes providing services to vulnerable seniors’ living at home is being proposed to : 1) offer services in the community by trained personnel who work at the local nursing home while also providing full-time employment to casual employees; 2) allow vulnerable seniors to age at home longer, delaying their admission to hospital and long-term care facilities; 3) provide support to caregivers as well as respite care; 4) address loneliness in seniors by providing friendly visits and calls; 5) keep older adults living with frailty healthy by providing, for example, balanced meals, exercise programs, outings, help with medication, health promotion and prevention programs.

Nursing Homes Without Walls is in its early stages and expansion is ongoing with local nursing homes in New Brunswick. Two pilot projects have been successfully conducted so far with results showing great interest and openness in the possibilities of nursing home staff providing services to vulnerable seniors in the community. Nursing Homes Without Walls has the potential to change aging at home. Given that population aging will have an effect for the next 30 years, the proposed model is an innovative service delivery model that could continually improve the lives of vulnerable seniors.

**St. Joseph's Health Care London (Ontario)**



*Improving CARE Partnerships Together*

**Project Lead: Jacobi Elliott**

An estimated 8 million people in Canada are family caregivers and save the healthcare system over \$31 billion annually, yet, they are often referred to as “silent partners” in care. This project is one of four Changing CARE partnerships funded by The Change Foundation, with the primary objective of improving family caregiver experiences. In year one, St. Joseph’s Health Care London focused its efforts on older adults living with frailty.

An innovative experience-based co-design approach was used (Point of Care UK, 2016). Staff (n=133), physicians (n=7), patients and family caregivers (n=90) worked together to identify three priority areas



through interviews and surveys: i) caregiver involvement; ii) transitions of care; and iii) family caregiver education. Staff and family caregivers have co-created four innovations to improve the experiences related to the above priorities. These innovations include:

- 1) Healthcare Team Roles List:** Name, role description and contact information will be included for all providers to ensure continuity of communication and understanding of their role in the care plan.
- 2) Education Checklist:** A template was developed to ensure family caregiver training is transparent and consistent.
- 3) Discharge Checklist:** A formal process to ensure that patients and family caregivers are prepared for discharge.
- 4) Care Binder:** An individualized binder given at admission and updated throughout the stay. Upon discharge, the binder will act as a portable resource and record of the patient's journey for on-going care needs.

These innovations are being tested and modified in geriatric inpatient and outpatient units.

**GERAS Centre (Ontario)**   

*ABLE – Arts-Based Exercise enhancing LongEvity*

**Project Leads: Paula Gardner and Caitlin McArthur**

Older adults are often given exercises to do at home, but they may not be motivated to do them, or forget what they are, how many times to do them. Also, older adults may not be able to leave their houses to go to community exercise classes. We developed ABLE to make exercises at home more exciting, interactive, and easy to remember.

ABLE is an interactive technology that turns the movements of older adults into an artistic expression, like a virtual painting or a digital music creation. ABLE consists of a wireless sensor (clipped onto clothes), a tablet, and a mini-computer, which connect to a television. When the older adult moves, the wireless sensor transmits data to the mini-computer which produces either a visual effect (on the screen) or an auditory response (through the speakers).

The tablet is used by the older adult and/or family members to begin the interaction and to choose their exercise and art experience (e.g., painting or music). Exercise thus rewards the user with an effect – such as a digital painting, a sound scape. ABLE allows older adults to engage in meaningful art-based activities, improve their physical functioning through exercise, and helps them interact with family members, peers, and care providers. ABLE also reduces boredom and stimulates new learning while encouraging exercise. Doing something creative, being with people, and being active can reduce social isolation and keep older adults physically and mentally fit. <https://pulselab.humanities.mcmaster.ca/> [www.gerascentre.ca](http://www.gerascentre.ca)

**Schlegel-UW Research Institute for Aging (Ontario)**

*Enhancing Knowledge for Interprofessional Care in Heart Failure (EKWIP-HF)*

**Project Lead: George Heckman**

The primary objective of the Enhancing Knowledge for Interprofessional Care in Heart Failure (EKWIP-HF) intervention is to better identify, treat and manage heart failure in residents living in long-term care. For many reasons heart failure is difficult to diagnose, especially in older adults who live with cognitive





impairment. By increasing knowledge of heart failure and cardiac specialist mentoring of interprofessional teams, this program increases the capacity of interprofessional staff in long-term care to identify, treat and manage heart failure.

EKWIP-HF was developed to overcome the barriers to good HF identification and management in LTC - lack of HF knowledge and poor interprofessional communication. The Schlegel-UW Research Institute for Aging (RIA) is a charitable non-profit organization that aims to enhance the quality of life and care of older adults in long-term care and retirement living through partnerships in research, education and practice. Our primary partnerships are with the University of Waterloo, Conestoga College and Schlegel Villages, however, we collaborate with a broad array of Canadian and international research institutes, universities and colleges, long-term care and retirement service providers, and family and resident associations. We develop products such as evidence-based education programs and interventions based on knowledge generated at the RIA.

The overall preliminary impact of EKWIP-HF includes fewer hospitalizations and, more importantly, better quality of life for residents including improved mood, cognition, and functional capability. Team members also report that EKWIP-HF improves team communication and allows them to identify and treat residents with heart failure more quickly. Finally, some team members have reported that their enhanced knowledge and skills have facilitated better palliation of older adults living with frailty and heart failure in the LTC home itself. The program allows care teams to be more proactive and identify possible signs of heart failure exacerbation before it happens.

**Extendicare Canada and Shalom Village (Ontario)**



### ***Strengthening a Palliative Approach in Long-Term Care (SPA-LTC)***

#### **Project Leads: Sharon Kaasalainen and Tamara Sussman**

There is an increasing number of older adults living with frailty and dying in long term care (LTC) homes. However, LTC homes face unique challenges that hinder a palliative approach to care, such as negative perceptions of LTC homes as a place of deterioration and death. Unfortunately, failure to proactively discuss and identify palliative issues often leads to costly hospitalizations and creates added stress and burden for family. To address these concerns, the Strengthening a Palliative Approach in Long-Term Care (SPA-LTC) program was developed.

SPA-LTC is a multi-component program that aims to improve quality of care by empowering families, residents and staff to identify transitional points along the living-dying continuum and engage in a collaborative approach to care. The innovation has been implemented in eight Canadian LTC homes across four provinces.

There are six key components of the innovation. **Palliative Champion Teams** are interdisciplinary teams that guide implementation. **Comfort Care Rounds** provide staff with a forum to engage in discussions about deceased or dying residents, and education. The **Palliative Performance Scale (PPS)** helps staff to identify residents' conditions, transitions into comfort care and the need for communication about changes in health status. **Palliative Care Conferences**, provide families, staff and residents with a structured forum to discuss and document end-of-life goals of care. **Illness Trajectory Pamphlets** and **Bereavement Pamphlets** help to support residents and/or families by providing information, reflective questions to trigger communication and additional

resources. <https://www.extendicare.com/> <https://www.shalomvillage.ca/>



## Canadian Malnutrition Task Force Canadian Nutrition Society (Ottawa)



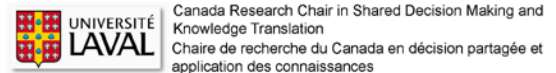
### *The Integrated Nutrition Pathway for Acute Care (INPAC)*

#### **Project Lead: Heather Keller**

One-third of adult patients in Canadian hospitals are at risk of being malnourished. These patients are often not diagnosed at admission and treatment is delayed or absent. Malnutrition at admission and poor food intake during hospitalization lengthens the hospital stay, with many returning to the community in the same or worse nutritional status. Malnutrition perpetuates frailty and those living with frailty are more likely to be malnourished at hospital admission. To overcome this situation, best practice was summarized by Canadian experts into the Integrated Nutrition Pathway for Acute Care (INPAC).

INPAC ensures that key activities and processes are put into place to identify, treat, monitor and plan for discharge, so that the nutrition care and food intake of patients is improved, promoting recovery and limiting frailty. In a recent study conducted in five hospitals in four provinces, this pathway was put into place over a one-year period. By the end of the study, 75% of patients were being screened for malnutrition on admission and all identified to be malnourished received treatment; there was a two-fold increase in provision of nutrition treatment and barriers to food intake, such as difficulty eating, were resolved. Champions and site teams lead this initiative with the support of the research team. Steps, strategies and tools that supported the implementation of INPAC in these five sites were summarized into a virtual toolkit that is available on the Canadian Malnutrition Task Force website ([www.nutritioncareincanada.ca](http://www.nutritioncareincanada.ca)). This innovation has supported many other hospitals, including internationally, to improve their practices.

## Centre de santé et de services sociaux de la Capitale Nationale (Quebec)



### *Improving caregivers' and patients' participation in housing decisions*

#### **Project Lead: France Légaré**

In Canada, about one in five adults over 65 could have delayed or avoided admission to residential care if they had been better informed about their options. Over the last decade, we have developed an interprofessional (IP) approach to shared decision making (SDM) to help home care teams support older adults living with frailty and their family/friend caregivers participate in decisions about staying at home or moving into residential care.

Our IP-SDM training program has three components: 1) a 1.5 hour online tutorial; 2) a decision guide for older adults and their caregivers facing a housing decision that facilitates discussion about options and preferences; 3) a 3.5 hour skills-building workshop. We implemented our training in a CFN-funded pragmatic two-arm cluster randomized trial with IP home care teams from 16 health and social services centres (HSSCs) in the Province of Quebec. The proportion of caregivers reporting active/collaborative participation in decision-making increased by 12% (95% CI -2%–27%; p=0.10). The match between caregivers' preferred and actual level of participation in decision-making increased by 14% (95% CI: 7%–21%; p<0.0001).





We are currently conducting a CIHR-funded, pragmatic stepped-wedge cluster randomized trial study with IP home care teams from 16 other HSSCs in Quebec. We are comparing the impact of passively disseminating the decision guide with providing all three elements of the innovation. Outcomes are caregivers' and patients' self-reported levels of participation in decision-making.

Our IP-SDM innovation is effective, adaptable, and could be scaled up to different healthcare systems and frailty contexts. [decision.chaire.fmed.ulaval.ca](http://decision.chaire.fmed.ulaval.ca)

## McGill University Health Centre (Quebec)



*MedSafer*

### Project Lead: Emily G. McDonald

**MedSafer**  
Working Towards Safer Prescribing

Polypharmacy is a staggering problem: overmedicated seniors are an unseen epidemic, with nearly two thirds of community dwelling older adults prescribed 5 or more medications. Polypharmacy can lead to harm from medication side effects including sedation, falls, bleeding complications, hospitalization, and even death. Deprescribing is a newer concept that rationally reduces and eliminates potentially harmful drugs. However, the process can be time consuming and not all institutions have access to the required resources. MedSafer is an electronic tool that automates deprescribing and generates individualized, prioritized deprescribing opportunities for older adults. It has been successfully piloted on more than 4000 hospitalized patients and has been shown to be fast, safe, and effective.

Time constraints for health care providers is a common barrier to deprescribing and automation and prioritization of opportunities helps overcome this. The proposed MedSafer innovation addresses the needs of both patients and clinicians in order to facilitate safe and timely deprescribing in Canadian nursing homes. A patient's medical conditions and list of medications are analyzed by the MedSafer software using a technology called an application programming interface (API). The API automatically cross-references the available information and generates a list of deprescribing opportunities.

Opportunities are individualized and prioritized based on severity, ease of discontinuation, potential for harm, and factor in a measure of a patient's frailty and life expectancy. Whenever necessary, suggestions for safely tapering medications are also provided. Finally, educational brochures are provided to directly engage patients in the process of deprescribing by detailing the rationale for the intervention. [www.medsafer.org](http://www.medsafer.org)

## The Ottawa Hospital (Ontario)

*Exercise prehabilitation for older people with frailty before surgery*



### Project Lead: Daniel I Mclsaac

Older people are the fastest growing segment of the surgical population. The presence of frailty is a key predictor of bad outcomes. The complexity and risk profile of people with frailty means that they may derive significant benefit from exercise before surgery (exercise prehabilitation).

Our objective is to test whether home-based exercise prehabilitation for people with frailty can improve function and quality of life after surgery. We hypothesize that, compared to standard care, older people with frailty who exercise using our program for at least three weeks before elective cancer surgery, will



have improved ability to walk after surgery (using the 6-minute walk test), and will have better quality of life.

People with frailty are identified in our cancer assessment clinic using the Clinical Frailty Scale. If surgery is planned, those interested are enrolled in the exercise program and are provided with initial teaching, an exercise log and guide, pedometer, resistance band, and video instructions. Each week participants perform 3 types of exercise (3 times each, total 3 hours a week). These include: 1) strength exercises (using the resistance band, modified to reduce risk of falls); 2) aerobic exercise (moderate intensity, using the individual's modality of choice); and 3) stretching (arms, legs and core).

Participants are called weekly to answer questions about compliance, adverse events, and to discuss exercise modifications. After surgery, participants are asked to complete a walk and balance test, quality of life scales, and a patient experience interview to identify opportunities to improve the program.

Published Protocol: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6020976/> Clinical Trials Registry: <https://www.clinicaltrials.gov/ct2/show/NCT02934230?term=prehabilitation&cond=frailty%2C+cancer&cntry=CA&rank=1>

## Island Health (British Columbia)



### *The Home Support Neighbourhood – A Paradigm Shift, Delivering a Client Centred Approach to Caring for Frail Adults*

#### **Project Lead: Doreh Mohsenzadeh**

Older adults living with frailty and their loved ones often identify home supports to be a stressful experience of care. Island Health clients told us that poor continuity of caregivers, and a lack of flexibility in meeting changing care needs and preferences, was a frustrating part of receiving home supports. Staff surveys identified dissatisfaction stemming from an inability to deliver care to the same client in order to build relationships, and work design resulting in unpredictable hours, excessive travel, and few opportunities to work as a team.

In response to these challenges, Island Health redesigned home supports to create a responsive, patient-centred and sustainable model, capable of meeting real-time changing needs of increasingly frail clients. Innovation has enabled a consistent and highly mobile team of satisfied care providers to work in close proximity, in a model encouraging frequent communication, responsiveness to client needs in the moment, and assisting one another in meeting the unpredictable needs of older adults living with frailty.

Changes in known clients are now recognized, allowing early intervention. Communication supported by technology-enablers between home support and the community professional services teams result in a new definition of rapid and effective response. A secondary outcome from the Neighbourhood model is the efficiencies realized from working with known clients, resulting in better care delivered more effectively. Leaning of unproductive time spent on travel has resulted in increased quality hours spent face-to-face with clients, more visits over the course of the day, and the ability to deliver care when unexpected needs arise.



## Nova Scotia Health Authority (Nova Scotia)



### *Nova Scotia Health Authority (NSHA) Central Zone Frailty Strategy*

#### **Project Lead: Paige Moorhouse**

Front line care providers across NSHA identify frailty as a clinical challenge. Several departments identified addressing frailty a strategic priority. In 2014, a Frailty Strategy was developed to ensure a shared understanding, measurement and care considerations of frailty across health care sectors. The strategy aims to optimize experiences in frailty. Focus is on six areas: *Understanding, Engagement, Care, Evaluation, Research and Knowledge Implementation, Information Technology/Management and Governance*. These areas enable, and guide the alignment of, a collective effort to mobilize new and existing frailty-focused initiatives across all organizational, community, and societal sectors. Across care sectors, initial activity focuses on: building an awareness and understanding of frailty, developing and facilitating opportunities for provider and public frailty education and care practice, routine screening, assessment, and monitoring of frailty, and providing adaptable and appropriate frailty care that engages persons experiencing frailty. A communication strategy is initiated. Education materials for providers, patients, and families on frailty, its impact, stages and care are available. Opportunities for training from local geriatricians, an on-line training module and a library resource guide are available. A frailty identification tool, based on the Clinical Frailty Scale, has been developed to identify and stage frailty for use outside Geriatrics. Care guidelines offer key aspects of frailty care to address and follow-up actions for patients transitioning to other care sectors. An e-version of the frailty tool, care guidelines and resources are in development. Establishing an information management structure that provides frailty-specific data to inform care and health system planning is in progress.

## Baycrest Health Sciences (Ontario)



### *Toronto HEARS: A new model of care for seniors with untreated hearing loss*

#### **Project Lead: Marilyn Reed**

Hearing loss is highly prevalent among older adults and is associated with declines in cognitive, physical, and mental health. Only 20% of adults with hearing loss use hearing aids. Reasons for this include stigma, cost of devices and the challenges of accessing hearing health care. The HEARS (Hearing Equality through Accessible Research Solutions) program is a new model of care created for seniors by a team at Johns Hopkins University to address the concern of untreated hearing loss and the factors that deter people from seeking help. Key elements of HEARS are accessibility, acceptability and affordability. HEARS was adapted for delivery in four Community Centers in low income neighborhoods in Toronto, with the goal of identifying hearing loss and mitigating the risk of its impact on social isolation and healthy aging. After screening for hearing loss and determining eligibility for the program, we delivered a one-stop hearing education and counselling intervention tailored to seniors, combined with an optional low-cost amplification device. Communication challenges and goals were identified, and education about age-related hearing loss and the use of effective behavioral communication strategies



was provided to participants and their communication partners, supported with age-appropriate written materials.

The program was successful in achieving its goals, identifying hearing loss in individuals who were unaware that they had a deficit, and providing an effective, accessible, low-cost intervention. Improvements in communication, social participation, quality of life and self-efficacy were reported by participants and their communication partners, as well as community center staff.

## **Mount Sinai Hospital**



### *Integrated Hip Fracture Inpatient Program (I-HIP)*

#### **Project Leads: Christine Soong and Hedieh Molla Ghanbari**

Mount Sinai Hospital (MSH) is an acute care urban academic health sciences center, servicing patients requiring specialized care within its local catchment area and beyond. Annually, approximately 200 patients are admitted to the orthopedics service with a primary diagnosis of hip fracture. These patients are predominantly complex older adults with chronic disease.

Historically, care processes inadvertently led to fragmented care for hip fracture patients including delayed access to the Operating Room (OR) and extended length of stay (LOS). Patients were admitted to a general orthopedics service that was increasingly challenged with the growing complexity of this population. Internal data revealed suboptimal performance compared to peer hospitals including the longest LOS and wait times to OR.

An interprofessional team formed to re-engineer the care model, reduce LOS and access to OR, and to implement best practices in hip fracture care. The program consists of: 1) active co-management by hospitalists; 2) coordinated care across services; 3) participation in quality improvement projects; and 4) standardization of care. Secondary measures included mortality rate, MSH readmission rate (30-day), echocardiogram use, and initiation of osteoporosis (OP) treatment.

Following i-HIP, all outcomes improved: reduced LOS (19 to 5 days), reduced costs (by \$4,953 per case), decreased time from admission to surgery (46 to 26 hours), increased initiation of OP treatment (56% to 96% of patients), reduced preoperative echocardiogram utilization (16% to 9%), and decreased mortality (5% to 2%). Since adoption, MSH is consistently the top performer in mortality and length of stay in comparison to provincial peers.

## **Ontario and Alberta**



### *The Mobilization of Vulnerable Elders (MOVE) Program*

#### **Project Leads: Sharon Straus, Barbara Liu and Jayna Holroyd-Leduc**

The Mobilization of Vulnerable Elders (MOVE) program was developed to encourage early and progressive mobilization and prevent functional decline in older, hospitalized patients. We used evidence-based implementation strategies targeted to staff, patients and families.

MOVE began in 2011 as a pilot project and continued to expand to hospitals across Ontario and Alberta. We evaluated MOVE in 18 hospitals in Ontario and 8 hospitals in Alberta and assessed mobilization for over 19,000 patients, making this the largest study of an early mobilization program to date. Results across these iterations similarly demonstrated an increasing trend in mobility during the intervention



phase that continued in the post-intervention phase, indicating sustained intervention impact. We also found a trend for decreased length of stay and positive attitudes toward encouraging mobility across the health care team.

In addition to active scale up, MOVE has spread nationally and globally, including hospitals in Saskatchewan, United States, Australia and the UK. To support spread and scale up, a Central Team provides ongoing implementation support to potential sites. The team has supported over 130 hospitals and 300 hospital staff to improve mobilization in Ontario and Alberta alone. Additionally, implementation resources are freely available at the MOVE Online Portal ([www.movescanada.ca](http://www.movescanada.ca)), and tools to enhance organizational readiness, barriers and facilitators assessments, and mobility assessments were developed to support implementation.

Overall, MOVE is an exemplary program that is evidence-based, low-cost, and easy to implement, and that continues to capture the interest of hospitals in Canada and worldwide.

## **Geriatric Medicine Research (Nova Scotia)**



### *Pictorial Fit-Frail Scale*

#### **Project Lead: Olga Theou**

Researchers and policy makers are unable to agree on the best way to measure frailty and often question frailty assessment feasibility and consistency in practice. We saw this as an opportunity to create a frailty assessment using a multidimensional and comprehensive approach that is both feasible and easy to administer and captures multiple perspectives. The Pictorial Fit-Frail Scale (PFFS) uses simple visual cues which makes it accessible across cultures and literacy levels. This is a patient-centered assessment that can generate dialogue between patients, caregivers, and healthcare professionals (HCPs) encompassing all aspects of a person's life.

The PFFS uses pictures to assess a person's frailty. It can be completed by the patients themselves, or by their caregiver or HCP. It is comprised of 14 domains, each with three to six corresponding pictures. The assessor chooses one picture from each domain that best represents the usual state of the patient. Preliminary analysis suggests that the PFFS is a feasible and reliable frailty measure. Most patients, including those with cognitive impairments and physical limitations, are able to complete the PFFS while waiting for their appointment (in less than five minutes) - it takes HCPs less than two minutes to complete. The tool appears reliable in this sample of patients with varying age and degree of cognitive level, but further analysis is necessary. Testing is ongoing.

We believe this could be a valuable tool used across clinical and community settings to capture a person's frailty level and create a dialogue between HCPs and patients.

## **Northwest Territories**



### *Elders in Motion*

#### **Project Lead: Sheena Tremblay**

Older adults are the fastest growing demographic in the NWT. They have high rates of chronic conditions and incur almost half of health care expenditures in the territory. Historically, older adults were overlooked in recreation programming, which only exacerbated existing health concerns, while also negatively impacting mental and emotional wellbeing. We routinely hear from Elders that being active and independent are vital to living a good life.





Elders in Motion (EIM) was created to improve access to and the quality of recreation opportunities for older adults in the NWT. Through EIM training and mentorship, community leaders enhance their knowledge, skills, and confidence in organizing and leading quality recreation programs for older adults. These programs promote independence, functional mobility, and wellness of body, mind, and spirit. The training and associated materials were adapted from evidence-based workshops developed by the Canadian Centre for Activity and Aging to fit the NWT context. Community support includes: community visits; a facilitated program planning meeting; mentorship opportunities; assistance in creating EIM committees; donation of materials and equipment; and program evaluation. Our annual conference provides an additional opportunity for Elders and program leaders to learn, collaborate, and celebrate. The NWT Recreation and Parks Association developed and continues to lead EIM, in partnership with other government and non-governmental organizations. These partnerships are crucial for the development, evolution, and sustainability of EIM. EIM is popular and valued in NWT communities, and has evolved into a platform for a wide range of recreational, physical, and socio-cultural activities. [www.nwtrpa.org](http://www.nwtrpa.org)

## ISMP CANADA



### *Empowering Patients - 5 questions to ask about your medications*

#### **Project Lead: Alice Watt**

Medication errors continue to be a significant source of preventable harm, especially for older adults living with frailty. There is a need to empower patients and to correct the imbalance of knowledge among patients and their care providers. A National Medication Safety Summit in Canada identified the need to create a communication tool to improve patient engagement in medication safety and prevent medication harm.

A communication tool called the '5 Questions' was co-developed and tested by patients and healthcare providers to improve content and design. The primary goal of the '5 Questions' is to help patients have meaningful conversations with their healthcare providers about their medications, particularly at times of transition, such as the patient moving from hospital to home or to long term care.

Prompting patients to ask their healthcare providers these '5 Questions' can help improve their knowledge and confidence to manage their medications. These conversations along with a medication review to see if any can be stopped or reduced, can also help to reduce harm from polypharmacy, adverse drug reactions (including drug-related falls), and medication errors.

The '5 Questions', with translation in 22 languages and visible endorsements from over 180 organizations, has demonstrated a shared interest in empowering patients living with frailty and their caregivers to improve safe medication use.

*"This poster helps patients identify which questions to ask to help improve their own medication safety. This one simple tool is effective, and its use will reduce medication harm." Member, Patients for Patient Safety Canada. <https://www.ismp-canada.org/medrec/5questions.htm>*



## University of British Columbia (B.C)



THE UNIVERSITY OF BRITISH COLUMBIA

### *The University of British Columbia Geriatric Dentistry Program*

#### **Project Leads: Chris Wyatt and Shunhan To**

As a dental researcher investigating prevention of tooth decay in older adults living with frailty residing in long-term care facilities, I was constantly approached by nursing staff to provide much needed dental treatment. This was surprising when the facilities were in close proximity to community dental offices. Realizing the barriers to care were the ability to transfer older adults living with frailty and capacity of community dentists to treat older adults, especially those with dementia, I developed the **University of British Columbia (UBC) Geriatric Dentistry Program**.

Today, the program operates in 27 long-term care and assisted living facilities with a team of 7 dentists, 6 dental hygienists, 4 certified dental assistants, and is supported by a specialized team of 3 administrative personnel and 2 dental hygiene educators based at UBC. The dental care is provided bedside with portable equipment, in dental clinics within larger hospital settings, and at the UBC dental clinic.

We have been innovative in setting up wheelchair friendly clinics and using our small delivery vans to move equipment and supplies to the facilities we serve within metro Vancouver. In addition to dental services, the program is also committed to education and research. Dental and dental hygiene students provide much needed no cost care to older adults living with frailty under our supervision. UBC professors and their graduate students are involved in research projects from the prevention of oral disease to patient satisfaction. We have developed a model of care that is available to other health regions in the province and beyond. [www.gdp.dentistry.ubc.ca](http://www.gdp.dentistry.ubc.ca)



Canadian  
Frailty  
Network

Réseau canadien  
des soins aux  
personnes fragilisées



NCE RCE

™ Trademark of Technology Evaluation in the Elderly Network (Canadian Frailty Network or CFN). © Canadian Frailty Network, 2012-22. Released 2018 08. CFN is supported by the Government of Canada through the Networks of Centres of Excellence (NCE) program.