



**10. Management of fragility fracture: an integrated interdisciplinary approach.**

**Marie-Claude Beaulieu**, Université de Sherbrooke, Canada; Hélène Corriveau, Université de Sherbrooke, Canada; Gilles Boire, Centre Hospitalier Universitaire De Sherbrooke, Canada; François Cabana, CHUS, Canada; Earl Bogoch, St. Michael's Hospital, Canada; Pierre Dagenais, INESS, Canada; Suzanne Gosselin, Université de Sherbrooke, Canada; Diane Theriault, Canada; Bernard Burnand, CHUV, Switzerland; Sonia Jean, Institut National de Santé Publique du Québec, Canada; Johanne Filiatrault, Université de Montréal, Canada; Sophie Laforest, Université de Montréal, Canada; Marie Rochette, MSSQ, Canada; Alvine Fansi, Université de Sherbrooke, Canada; Isabelle Gaboury, Université de Sherbrooke, Canada.

In most Canadian provinces, governmental and community organizations provide fall prevention or fragility fracture (FF) prevention programs; however, none fully integrates fall prevention with post-fracture management. It is increasingly accepted that the success of fall prevention and post-fracture screening and treatment programs is mediated by the context in which interventions occur within the local healthcare system and with primary care practitioners.

A secondary FF prevention model is currently under implementation in the province of Québec (Canada). The program is complemented by a research project which aims to 1) compare the performance of these integrated programs to results from conventional care, using a pragmatic study design; 2) identify barriers as well as factors that improve effectiveness across different implementation milieus; and 3) develop and engage in active knowledge transfer activities with clinicians.

The program relies on a collaborative process between secondary healthcare (orthopaedic surgeons and bone specialists), primary care physicians (PCPs), and local and provincial fall prevention programs. This is orchestrated by a program coordinator. The 3192 expected participants are identified for recruitment as outpatients in orthopaedic clinics, inpatients with hip fracture, and from administrative discharge data from the emergency departments and hospital wards. An integrated approach (pharmacological intervention, promotion of healthy habits and fall prevention program) is offered to the intervention group. The research program measures different short-, intermediate-, and long-term outcomes over a 18-month period, including: recurrent fractures, initiation and compliance with osteoporosis treatment, time to first subsequent fall, number of falls, FF-related death, practice of physical activities, participant's quality of life, FF related costs, and perception of care integration. This novel integrated FF prevention program will help health professionals to improve patient-centered care, and promote chronic disease prevention and management, including interprofessional collaboration and communication between both primary and secondary healthcare practitioners. Lastly, the pragmatic evaluative design of this project will provide estimates of the effectiveness of a FF prevention program in different geopolitical contexts.