

BULLETIN UPDATE

SPRING/SUMMER 2009

This bulletin provides a brief summary of accomplishments to date of the Frailty and Aging Team's six research projects. Please note that publications (articles, chapters, abstracts, reports) and the list of scientific presentations are available at the following link : <http://www.frailty-research.ca/e/publications.htm>

Project 1: International Database Inquiry on Frailty (FrData)
Principal Investigators: Howard Bergman, Christina Wolfson
Co-Investigator: François Béland

Progress to date

The methodology for the exploratory and prediction analysis of frailty domains has been finalized. Systematic programming and automated reports are in place for the nine databases: (MUNS (Montreal Unmet Needs Study); CSHA (Canadian Study of Health and Aging); SIPA (Services intégrés pour personnes âgées); LASA (Longitudinal Aging Study in Amsterdam); NuAge (Longitudinal Study on Nutrition as a Determinant of Successful Aging); MHAS (Mexican Health and Aging Study); EPESE (Established Populations for Epidemiologic Studies of the Elderly) Boston; EPESE Iowa; and InChianti (Aging in Chianti).

- MCA (Multiple Correspondence Analysis) results have been interpreted and circulated to study investigators;
- Analysis of the ability of frailty domains to predict adverse outcomes has been completed or is underway for SIPA, NuAge, MHAS and LASA;
- A website with a public and private members section has been created at www.frdata.ca

Developments anticipated over the next 12 months

- Disseminate summary report of data analysis findings across all studies to collaborators;
- Commence prediction analysis in EPESE (Boston and Iowa) and InChianti;
- Resubmit two papers - MCA methodology, and the MUNS, CHSA and SIPA results which have both been provisionally accepted, to the Journal of Clinical Epidemiology in July 2009;
- Present the FrData study at XIX Congress Gerontology and Geriatrics (IAGG) in Paris, July 2009.

Project 2 : Frailty: A longitudinal study of its expressions (FRÉLE: Fragilité, une étude longitudinale de ses expressions)

Principal Investigator: François Béland

Co-Investigators: Hélène Payette, Howard Bergman, Christina Wolfson, José Morais, Pierrette Gaudreau, Tomas Fulop, Réjean Hébert, René Verreault, Johanne Desrosiers, Louise Demers, Marie-Jeanne Kergoat, Maria-Victoria Zunzunegui, Bryna Shatenstein

Progress to date

- A systematic literature review on frailty and its applications has been carried out. A review and comparison of measurement levels of different parameters of frailty has also been completed. These reviews are available to researchers in an effort to share findings;
- The questionnaire for face-to-face interviews has been completed and is awaiting final approval of co-investigators;
- The internal ethics committee of the Jewish General Hospital, and the ethics department of the MSSS of the province of Quebec have been approached and the approval process is moving ahead. An agreement to consider the study as monocentric has been secured;
- Communication with partners and with the study sites has been established to prepare for the work ahead and to facilitate collaboration;
- the MSSS has accepted to award complementary funding to projects 2 and 3, enabling the projects to have a representative statistical sample.

Developments anticipated over the next 12 months

- The final version of the questionnaire will be available in near future, followed by the users guide for interviewers;
- The verification of partners and preparation and training of interviewer teams is to be finalised in the coming months. Regular meetings with the coordinating team, and analysis of results will take place as the project progresses;
- Final approval from the Jewish General Hospital ethics committee will be obtained in the coming weeks;
- A recruitment strategy and the composition of the population sample at the different sites will be determined;
- Work in the field for phases T0 and T1 will be started and a preliminary analysis of data will be conducted;
- The preliminary results will be made available to all co-investigators, and meetings will be held to keep researchers up to date on progress of the project;
- Three conferences will be presented on the project FRÉLE at the XIX Congress Gerontology and Geriatrics (IAGG) in Paris, July 2009.

Note : The principal investigator, François Béland, was absent for six months at the beginning of the project due to serious illness, resulting in a delay in project development.

Project 3 : Access, utilization and costs of health and social care associated with frailty profiles and their trajectories

Principal Investigators: François Béland, Nicole Dubuc, Madeleine Rochon

Co-Investigator: Michel Tousignant

Progress to date

- The MSSS has accepted to award complementary funding to projects 2 and 3, enabling the projects to have a representative statistical sample. The grant will be used to conduct a more in-depth micro-analysis similar to the one used in the SIPA project. This micro-analysis will be conducted on emergency room visits, CLSC physicians, CLSC nurses, CLSC allied health care professionals, CLSC homecare, external clinics, day hospitals, daycares, rehabilitation and long-term care centres. Acute care hospitalizations will be costed using Niveau d'intensité relative des ressources utilisées (NIRRU) as originally proposed in the Équipe des IRSC sur la fragilité et le vieillissement grant submission;
- Reviewed economic evaluation methodology from the SIPA project (C. Morales and A.P. Contandriopoulos). Reviewed Step Down Approach for cost allocations and automated computer code to extract costs for electronic data from AS-471 Annual Financial Reports;
- Conducted a preliminary analysis using the SIPA data, comparing the number of emergency room visits based on RAMQ physician billing compared to electronic administrative data extracted from acute care hospitals. The analysis will inform method used to collect emergency room data;
- The internal ethics committee of the Jewish General Hospital, and the ethics department of the MSSS of the province of Quebec have been approached and the approval process is moving ahead. An agreement to consider the study as monocentric has been secured.

Developments anticipated over the next 12 months

- Prepare and submit project to ethics committee, DSP and CAI-RAMQ;
- Develop participant list and recruit in conjunction with RAMQ guidelines;
- Plan and implement storage, security and access of study data;
- Contact data providers (enquire about variables, extraction, and availability);
- Execute first minor and T0+6 data extraction for FRÉLE participants;
- Execute major data extraction for NuAge.

Note : The principal investigator, François Béland, was absent for six months at the beginning of the project due to serious illness, resulting in a delay in project development.

Project 4 : Implanting service integration for frail elders in the practices of senior administrators, managers and clinicians

Principal Investigator: Louis Demers

Co-Investigators: Yves Couturier, Denise Malo, Diane Morin, André Tourigny, Liette Lapointe

Progress to date

From March 2008 to January 2009 : 1° hiring and training of staff necessary to carry out research; 2° compilation and initial analysis of pertinent documents produced at the MSSS, the three regional agencies concerned, and the

three CSSS partners (orientation, policies, regulations, organizational model of services for older persons, clinical projects, budgets, protocols, and planning and preparation of field research); 3° recruitment of a new CSSS (Arthabaska-et-de-l'Érable) following the withdrawal of CSSS Pommerai; 4° formalized agreements with the three CSSS partners (Bordeaux-Cartierville-Saint-Laurent, Vieille-Capitale and Arthabaska-et-de-l'Érable) and confirmation of details of collaboration; 5° necessary approval was secured to carry out the project from the ethics bodies of four organizations, (ENAP, three CSSS) as well as the authorisation to consult clinical files in the three CSSS; 6° completion, transcription and analysis of 15 interviews at CSSS Vieille-Capitale et d'Arthabaska-et-de-l'Érable (older persons, non-professional caregivers and case managers).

From February to March 2009 : 1° completion, transcription and analysis of 9 interviews at CSSS Bordeaux-Cartierville-Saint-Laurent (older persons, non-professional caregivers and case managers); 2° ethics approval was secured from the Université de Sherbrooke; 3° interviews with directors and managers of the three CSSS partners were initiated.

Developments anticipated over the next 12 months

From April 2009 to March 2010 : 1° completion, transcription and analysis of 27 interviews with directors and managers of the three CSSS partners; 2° completion, transcription and analysis of 30 interviews with older persons, caregivers, case managers and clinical staff of the three CSSS partners; 3° observation of meetings of various administrative and clinical committees dealing with the question of services for older persons and analysis of this information; 4° provide final analysis of pertinent documentation produced at the MSSS, the three regional agencies concerned, and the three CSSS partners (orientation, policies, regulations, organizational model of services for older persons, clinical projects, budgets, protocols, and planning and preparation of field research); 5° prepare theoretical article on the integration of services; 6° make presentations at a national and an international congress.

Project 5 : Development, implementation and evaluation of a computerized care management system based on extended care pathways for frail users of community-based integrated care

Principal Investigators: Nicole Dubuc, Luc Mathieu, Michel Tousignant

Co-Investigators: André Tourigny, Lucie Bonin, Yves Couturier, Diane Morin

Progress to date

Since the start of the project, we have completed a literature review and a new document search. We have submitted the project for review by the CSSS-IUGS research ethics committee and have obtained approval. Various documents have been produced, including the interview outline for older persons and caregivers, solicitation letters, sociodemographic questionnaires, an evaluation grid for clinical files, consent forms, documents for Delphi (eg letters, announcements) and documents for use in consultation of experts (questionnaires). We are in process of building vignettes (clinical scenarios). As well, a meeting has been held with representatives involved in the management of older persons at the MSSS in an effort to collaborate in the development of the data processing solution RSIPA.

Developments anticipated over the next 12 months

Over the next 12 months, we plan to develop tools of clinical pathways (OCC). To accomplish this, we will validate the clinical vignettes, solicit and meet with individuals in management positions in institutions/organizations, and obtain the consent of these organizations to participate. We anticipate carrying out the consultations with experts, completing interviews with frail older persons and caregivers, the analysis of verbatim material, and codification. The data bank will be prepared, as well as an analysis of+ the needs of the information technology system and a plan for the information system.

Project 6: Knowledge transfer and the implementation strategy

Principal Investigator: Liette Lapointe

Co-Investigators: François Béland, Howard Bergman

Progress to date

Development of a typology of information technology used in geriatrics and an analysis of the process of adoption by means of a dissemination model of innovations (Rogers – late/early adopters); proposition of a contingency model.

- Completed systematic literature review;
- Construction of a typologie;
- Analysis of déterminants of completed dissemination;
- Article for submission to JAGS.

Study of the impact of information technology use to better understand the contradictory results obtained in published studies in management and health. Proposal of a model which integrates the "paradox of productivity" and the "stakeholders theory".

- Completed review of literature on health and management;
- Development of conceptual framework;
- Validation using empirical secondary data;
- Article for submission to JAMA.

Developments anticipated over the next 12 months

Development of a knowledge exchange model which would include:

- Existing theories and models;
- Role and characteristics of various stakeholders in geriatrics;
- Specific context of programs and intervention policies for frail older persons.
 - Literature review on the barriers of information exchange;
 - Identification of an appropriate theory;
 - Adaptation of a model in the context of geriatrics;
 - Development of an interviewers guide.