

Case studies: Primary health service delivery models for the Francophone minority

Report prepared for French Language Health Planning Entities 1 and 2 (Erie St. Clair/South West and Waterloo Wellington, Hamilton, Niagara, Haldimand Brant)

and

the French Health Network of Central Southwestern Ontario

TABLE OF CONTENTS

1		FOREWORD	4
2		MANDATE	5
3		METHODOLOGY	5
	3.1	Literature review	5
	3.2	Excel database	8
4		MENTAL HEALTH	9
	4.1	Battling Prejudice on the Psychiatric and Mental Health Hospital: documentary web series and website	9
	4.2	Program to Encourage Active, Rewarding Lives for Seniors (PEARLS)	13
	4.3	Support for Victims of Torture - Mount Sinai Hospital	17
	4.4	Families and Schools Together (F&ST)	19
	4.5	Fourth R: Skills for Youth Relationships	25
	4.6	Occupational Safety System for Community Workers	28
5		PRIMARY HEALTH	30
	5.1	Boréal Health Clinic	30
	5.2	Saskatoon Primary Health Bus	33
	5.3	Bridging General and Specialist Care (BGSC) Project	38
	5.4	Patient and Family Engagement: Putting patients at the centre of their care	43
	5.5	Alberta Project Promoting active Living and healthy Eating in Schools (APPLE Schools)	49
	5.6	First Nations and Inuit Home and Community Care	50
	5.7	Network Mapping and Development	55
	5.8	California Prevention & Education Project: HealthSpace Community	56
	5.9	Alternatives for Girls: Love Chat	57
	5.10	Integrated Care for Complex Populations	58
6		SENIOR CARE	60
	6.1	More <i>Humanitude</i> in End-of-Life Program	60
	6.2	Group Exercise Programs for Long-Term Care Homes	64
	6.3	West Prince Telehospice	67
	6.4	Seniors Awareness Program	72

7	CHRONIC DISEASES	76
7.1	Bringing chronic disease self-management to rural and remote regions in Rocher-Percé	76
7.2	Improving the treatment of diabetic patients using telemedicine	80
7.3	Patient access to personal health information for the self-management of asthma	82

1 FOREWORD

In several regions of the province, Francophones are in a minority situation. In several places, health services in French are minimal or even non-existent. Many stakeholders are trying to find solutions to improve or implement health services in French. Often these solutions are not always easy to identify or put in place.

In this context, the Erie St. Clair/SouthWest French Language Health Planning Entity has used the services of a consultant who did an analysis of best practices in minority situations across North America and in other countries. This first analysis consists of a brief description of 352 practices developed to meet the needs of minority populations receiving few, if any, health services in their communities.

Following this report, we have continued this research jointly with the Waterloo Wellington, Hamilton, Niagara, Haldimand Brant Entity² and the French Health Network of Central Southwestern Ontario. Our purpose was to be able to identify 5 or 6 best practices in minority situations that might be applicable in our respective regions under the subject areas: primary health care, seniors care, mental illness and chronic disease. Each of the partners could study identified practices and ask more detailed explanations on certain practices that seemed more appropriate to respond to their local needs.

We are proud to share with you the results of our study.

Many thanks to all of the people involved in this work:

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2 MANDATE

The French Language Health Planning Entities (Entités de planification des services de santé en français) for Erie St. Clair/South-West and for Waterloo Wellington, Hamilton, Niagara, Haldimand Brant, along with the French Health Network of Central Southwestern Ontario (Réseau franco-santé du Sud de l'Ontario), wish to explore best practices for primary healthcare delivery in contexts targeting minority populations, or populations that are marginalized, have distinctive characteristics or meet unique challenges compared to the general population. A brief exploration was undertaken, which allowed to identify 352 best practices in Ontario, in Canada and abroad, in official language minority communities or under circumstances where the beneficiaries are outnumbered or marginalized in relation to a majority community.

Best practices were outlined. A first level of analysis identified best practices for Francophone communities of Erie St. Clair and the South-West region of Ontario, especially rural or isolated communities, the target clienteles.

With the initial key considerations in mind, selected best practices were further explored in the form of more detailed case studies to provide decision-makers with an illustration of the critical elements of each practice, and to summarily assess feasibility factors in Ontario's Francophone minority context. Particular emphasis was placed on four areas: primary health, mental health, seniors, and chronic diseases.

3 METHODOLOGY

3.1 Literature review

<u>Objective</u>: To make an inventory of best practices in the delivery of health services to people living in a minority or marginalized situation, focusing on four areas: primary health, mental health, seniors, and chronic diseases.

The inventory of best practices is presented in an Excel spreadsheet embedded in this document. The web search principally targeted the following agencies and/or institutions:

- La Société Santé en français (SSF) and its member networks;
- The Canadian Alliance of Community Health Centre Associations (CACHCA) and the Association of Ontario Health Centres (AOHC);
- The Primary Healthcare Transition Fund (Health Canada 2000 to 2006);
- The Public Health Agency of Canada (Canadian Best Practices Portal);
- The Canadian Institute for Health Information (CIHI), the Health Council of Canada and Accreditation Canada (Leading Practices Database);
- Research reports from the Commission on the Future of Health Care in Canada (Romanow Commission, 2002) and the Canadian Health Services Research Foundation;
- The Ministry of Health and Long-Term Care and the Local Health Integration Networks (LHINs) in Ontario;

- Health Quality Ontario and other provincial and territorial Health Quality Councils;
- The Canadian Nurses Association and other professional associations;
- Agency for Healthcare Research and Quality, Bureau of Primary Health Care Models that Work Campaign (Health Center / Look-Alikes) - U.S. Department of Health and Human Services – and National Institutes of Health in the United States of America;
- Rural and Regional Health Australia (Department of Health), Australian Institute of Health and Welfare and Australian Primary Care Collaboratives;
- The King's Fund (England) Primary and community care, National Health Services Institute for Innovation and Improvement (Primary Care) in Britain;
- Other web explorations according to discovered links.

Explanatory notes for the use of the Excel database

The proposed methodology intended to identify between 200 and 250 relevant best practices in terms of potential models for services in French, with an emphasis on the following areas: primary health, mental health, seniors, and chronic diseases. A total of 352 practices were identified. These projects/practices were included in an Excel database containing six tabs, labeled:

- 1st tab: Filtered by category
- 2nd tab: Mental health
- 3rd tab: Primary health
- 4th tab: Seniors
- 5th tab: Chronic diseases
- 6th tab: Projects addressing several issues

The first tab includes all projects/practices identified. In general, projects/practices targeting seniors also have a focus area – mental health, chronic diseases or primary health. Within each spreadsheet, projects/practices are presented with each of the following fields/headings.

Column A - Project title

This field displays the complete title of the project/practice. In instances where the title is bilingual, it was recorded in both languages (English and French).

Column B - Category

This field displays the category on which the project/practice focuses, among the four categories listed in the methodology.

Column C - Year of publication / implementation

This field indicates the year of publication or implementation. This data was not available for 178 entries. In such cases, the year was not found in the document or on the website that presented the project/practice. Some sites had time periods (e.g., 2002-2003). In these cases, the first year of the period was recorded.

Column D - Author

This field includes the first name of the author followed by his/her last name. Additional authors are included in the same cell; for entries involving more than four authors, only the first author is mentioned, followed by the words "et al.". If the author is an institution or organization, the field contains the name of that institution/organization.

Column E - Hyperlink

The web address (URL) where the project/practice is described was copied and pasted. At the time the database was finalized and submitted, all hyperlinks were operational.

Column F - Target community

This field contains a description of the target population of the project/practice. If the project involves a community outside of Canada, the field specifies the country.

Column G - Key points

The key points of each project/practice are highlighted, to enable a targeting of actions each project entails.

Column H - Theme addressed

Subjects that are addressed meaningfully in each project/practice are identified. Some projects/practices may address more than one theme. For example, projects for seniors generally addressed issues relating to either mental health, primary health or chronic diseases.

Column I - Relevance of practice

This field is an assessment of the level of relevance, i.e. 1, 2 or 3 respectively corresponding to marginally, quite or very relevant, in connection with the project.

Note on English-language projects/practices

If the original information on the project/practice is in English, a short paragraph written in French or English (in some cases) appears in columns G and H.

Overview of literature review database

The main product of the analysis is an Excel database. Excel allows the use of filters to narrow the search and display projects/practices that match chosen categories in each field/column.

Thus, by applying and closing filters, users of the database can quickly identify projects/practices published or implemented in 2009 which address mental health, primary health care or chronic diseases.

Lines 1 to 5 of each spreadsheet were frozen to ensure that the title lines are always displayed when scrolling down the screen to access the data/records.

The last line of each spreadsheet provides information on the total of projects/practices identified in each category. It should be noted that the first sheet (Filtered by category) includes all projects/practices identified. The sum of totals from each spreadsheet exceeds the total number of records indicated in the first sheet, as projects/practices may be present in several categories, as appropriate.

3.2 Excel database

The Excel database produced and submitted separately presents the 352 best practices listed in the four categories identified.

Excel file embedded in the electronic version of this document:



Case studies

4 MENTAL HEALTH

4.1 Battling Prejudice on the Psychiatric and Mental Health Hospital: documentary web series and website

4.1.1 Description

In 2008, the Louis-H. Lafontaine Hospital, now known as the Institut universitaire en santé mentale de Montréal, set the objective to fight prejudice around mental health. The initiative hired an intern who was to carry out the project over the summer months. Student and filmmaker Alexandre Hamel applied for the job and was hired for an eight-week contract around a project called "Clé 56" (or Key 56). By reference to the master key that gives access to the hospital's care units.

Cle56.com is more than a website. It is also an interactive platform that bring us into the world of psychiatric care in everyday life. Through interviews, images and stories put together by Alexandre, the audience gets the opportunity to witness the daily reality of patients and staff of this Montreal psychiatric institute. In total, six five-minute episodes were filmed without any filter or restriction other than to respect the will of users and staff who did not wish to participate. Indeed, the young filmmaker had the master key and wandered where he wanted, when he wanted inside the hospital.

Thus, people who testify in the video clips produced during this project agreed to be filmed. The clips provide a better understanding of the treatment of patients who walk toward their recovery. The themes of accompaniment, confrontation, treatment, medication, isolation, confinement, etc., make up the informative segments of the clips, but also of the project website. The informative sections on various topics and prejudices that accompany the clips are available to website visitors, and are also used for dialogues on the project's Facebook page.

4.1.2 Stages of implementation / programming

The project was initiated by Jean Lepage and Catherine Dion from the Hospital's department of communications and public relations. The first step was to set up a project with about \$6,000 in hand. This budget covered the intern's salary. The project started upon Alexandre's hiring.

Subsequently, the team informed the hospital's staff, patients and members of management of the project that would be taking place over the summer. The filming started with the filmmaker having absolute carte blanche. He spent time in different places among the attendants and patients during breakfast, lunch and dinner. The editing led to six clips being produced.

Meanwhile, the communications team prepared and programmed the website that would feature the clips and informative sections on mental health.

Concurrently, a communication plan was developed to announce and disseminate the clips among the general public. The last step was to assess and monitor the impact and effect of the clips that were shown to the public.

4.1.3 Strengths

- The communications team managed the project and facilitated its progress.
- This project helped break down prejudices and uncover the mystery of what happens behind the doors of a psychiatric institute, through unfiltered images.
- The staff, including the heads of care units, adequately participated in the conduct and success of the project.
- The doors were more widely opened as the same staff repeatedly assisted the filmmaker's effort.
- The project helped to expose and understand the vicious circle patients sometimes experience (they want out, but are forced to internment, and if they do not take their medication, their stay is prolonged, because they fail to demonstrate recovery as planned, etc.)

4.1.4 Challenges

- Some staff perceived the project as an annoyance or as a disturbance in their work.
- Obtaining consent from certain staff to open up and show their daily work, and to sign image rights.
- Various religious beliefs and cultures came into play during the filming.
- Note that there are risks of instability, crisis or emergency situations during the shooting.
- Editing several weeks of filming into only 6 capsules of about 5 minutes each, to be distributed on the cle56.com website via YouTube.

4.1.5 Resource requirements

Human resources

- A filmmaker, a student, a final year student in film studies or a related program, or a student in the area of health.
- A project supervisor.
- A team of professionals, doctors or nurses, and management willing to open up to the camera.
- Patients who are willing to testify before the camera.
- A programmer / web designer.

Infrastructure and equipment

- Filmmaker's filming equipment (camera, microphone, batteries, tripods, etc.).
- As necessary, editing studio or computer.
- A psychiatric hospital or a center offering similar treatments / services.

4.1.6 Time and skills requirements

- The featured project required eight weeks of filming in the corridors and offices of the Louis-H. Lafontaine Hospital. This is in addition to the time necessary to edit the clips and to design the cle56.com website, over several weeks.
- Patience, understanding, openness and curiosity were essential during the course of this shooting.
- This project was a great video editing and sound capture experience, with the participation of an artist filmmaker, producer or videographer.
- This was also an academic project, using a student or intern from the field of cinema, photography, media arts, short film, in a mental health program.

4.1.7 Funding

This project was supported by the Institut universitaire de santé mentale, which opened its doors in order to help reduce the stigma in mental health. Mental health-related community partners, as well as colleges that offer film, photography or mental health programs also contributed to this project.

4.1.8 Impacts

- 800 Facebook members; 90,000 views, and 18,000 visitors to the site "cle56.com" according to information retrieved in 2010.
- In November 2009, in the Bédard building of the Frederic Grunberg teaching center, 230 members of the public attended a debate on "Mental health: Not stage managed by the movie guy!" hosted by journalist Yannick Villedieu.
- Numerous newspaper articles, TV reports and media interviews were published.
- This project led to a second, eight-episode documentary series broadcast on TV5 entitled "Maison de fous" ("Madhouse"), which had two nominations for a Gemini Award.

4.1.9 Rationale

The relevance of the project is linked to the data collected through a survey on the mental health of Montrealers in 2002. Altogether (all types of issues taken into consideration), only 50% of people requiring assistance had used mental health services. In addition, the survey revealed that the stigma adds to the suffering and limitations of persons struggling with mental illness, leading to social isolation. That is the broader context that led the Hospital to emphasize an open, public conversation on mental health to fight prejudice.

The documentary format was preferred because it allows to report on what is witnessed and experienced, rather than to fit a centre's or institution's corporate message onto selected, predetermined images – or even a script. Free choice in the narrative precludes the usual filters of a corporate video. Taking this angle, a documentary is the perfect vehicle to illustrate the reality and break down prejudices.

Similar projects on the web were less "popular" in terms of number of views due to the fact that they were scripted and directed (interviews, traditional prepared testimonials, etc.). Moreover, the filmmaker Alexandre Hamel recommends that, if the project were to be repeated, rather than a static website, it would be fitting to go directly to social media platforms, increasingly popular not only with youth, but with the general public as well. These people are more likely to be reached through these platforms, in particular due to their video and online content viewing habits (in the evening, people tend to log in to their Facebook accounts rather than browse websites).

Various facets of Cle56 could be used in a similar project targeted to the service area, as a range of services offered to young learners through partnerships with school boards seem well underway. It is likely that the battle against mental health prejudices using social networks, including Facebook in particular, will strengthen efforts outside the classroom and allow the sharing of video clips among circles of friends, in French. The website werkids.ca, for young people in Windsor Essex, is designed in English only. While it features a section dedicated to Indigenous people, nothing is available to Francophone adolescents and young families in the region.

As mental health promotion and illness prevention services appear to be only embryonic and scarce in the region, clips that open the doors of a psychiatric institute and show real, normal interventions could help prevent prejudice. According to Children's Mental Health Ontario, 70% of mental health problems come about during adolescence. Working with the LHINs, promoters could choose to intervene early on this matter to support at-risk Francophone youth in the region.

The accessibility aspect can also be conveyed in such clips by highlighting the reception given to users, their care, and especially the guidance that is provided in French. This addresses the fear of ending up in a place where crazy people with hospital gowns spend their days walking in long corridors — a prejudice that can be dispelled by these vignettes.

4.1.10 Contact information

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4.1.11 References

- https://accreditation.ca/battling-prejudice-psychiatric-and-mental-health-hospital
- www.cle56.com
- http://www.iusmm.ca/institut.html

4.1.12 Related projects

- Alexandre Hamel, documentary filmmaker: http://alexhamel.com/maisons-de-fous/
- Luc Vigneault, peer helper, speaker and filmmaker:
 http://www.iusmm.ca/institut/actualites/pair-aidant-a-tlmep.html
 <a href="http://www.performance-edition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php?option=com_virtuemart&page=shop.product_details&flypage=fledition.com/index.php.product_details&flypage=fledition.com/index.php.product_details&flypage=fledition.com/index.php.product_details&flypage=fledition.com/index.php.product_details&flypage=fledition.com/index.php.product_details&flypage=fledition.com/index.php.product_details&flypage=fledition.com/index.php.product_details&flypage=fledition.com/index.php.product_details&flypage=fledition.com/index.php.product_details&flypage=fledition.com/index.php.product_details&flypage=fledition.com/index.php.product_details&flypage=fledition.com/index.php.product_details&flypage=fledition.com/in

<u>ypage.tpl&category_id=31&product_id=121&Itemid=54</u> and http://www.contrerlastigmatisation.ca/lecture.shtml

4.2 Program to Encourage Active, Rewarding Lives for Seniors (PEARLS)

4.2.1 Description

PEARLS for Older Adults was designed to treat minor depression and dysthymic disorder in adults aged sixty and older who receive at-home social services offered by community service organizations. Individuals in this study were relatively homebound and had an average of five chronic medical conditions. The program aims to reduce the symptoms of depression and improve health-related quality of life.

The PEARLS intervention is typically conducted over six to eight 50-minute sessions in a sixmonth period and consists of problem solving treatment (PST), behavioral activation, and pleasant activities scheduling. The counselors encourage participants to use existing community services and attend local events. Those who were treated with the PEARLS Program were three times as likely to experience a reduction in their depressive symptoms as those who were not treated with the PEARLS Program)

4.2.2 Stages of implementation / critical service elements

The program consists of eight 50-minute sessions over a period of 19 weeks with a trained social worker and takes place in the participants' homes. During the intervention, counselors use three depression management techniques. The first is a problem solving treatment in which participants learn to recognize symptoms of depression, understand the link between unsolved problems and depression, and apply a highly effective approach to solving their problems. The second technique is based on social and physical activation, and the third technique is pleasant

activity scheduling. Over the 19 weeks of the program, patients receive eight weeks of counseling (50 minutes each) during weeks 1, 2, 3, 5, 7, 11, 15 and 19. Before regular counseling sessions, a process for recruiting potential participants and for screening depressive disorders must first take place. During treatment, counselors must pay attention to the needs of participants and adapt their methods for conducting the sessions. Throughout the sessions, participants are offered sustained clinical monitoring on a weekly or biweekly basis.

The program was initially implemented in Seattle (Washington, USA) in two local centers that provide services to the targeted groups. To recruit participants, promoters contacted the centers to reach out to the targeted patients, and some people contacted the program themselves. Those whose applications had been submitted by a third party were selected using a structured clinical interview based on the Diagnostic and Statistical Manual of Mental Disorders (DSM), Fourth Edition. People who were excluded from the study were either not depressed or suffered from major depression, bipolar disorder, psychosis, substance abuse, or cognitive impairment (screened through the Mini-Mental State Examination - MMSE).

The two centers conducted the counselling program as part of the first PEARLS controlled trial conducted by the designer in 2000. Since 2008, over 40 PEARLS projects have been active in the United States. Agencies that have implemented the program include seniors' organizations, community mental health centers and other community organizations. Approximately 1,900 clients participated in these projects and more than 300 providers have been trained to date. Technical assistance is offered by the University of Washington's Health Promotion Research Center. Program providers have been conducting evaluations of their program for internal purposes or reporting to funders.

4.2.3 Strengths

- Improves lifestyle and develops skills.
- Increases capacity to adapt.
- Develops a social support network-and diminishes social isolation.
- Provides information on the dangers of a risk factor or condition.
- Offers brief counseling to those who are at high risk for a chronic disease.
- Establishes links with existing community infrastructure.
- Contributes to better care for seniors with mental illness.
- Provides support to caregivers.
- Improves availability of home care services.
- Fosters partnership between academic circles and the community.

4.2.4 Challenges

Some difficulties in implementing the program were identified, for instance: the risk of recruiting people who are not eligible for the program, especially in the case of patients who present themselves; common beliefs regarding depression screening instruments and

techniques; and the additional workload of case managers. In many cases, the stigma on mental illness can be an obstacle to recruiting people who are in need of treatment.

Veterans (men and women), members of ethnic minorities, people with limited proficiency in English, seniors aged over 75 years, low-income seniors and people living in rural communities were identified as difficult to reach. In short, target clientele recruitment challenges are related to stigma, patient mistrust, negative perceptions about research projects, the isolation created by the geographical location of some communities, and socio-economic barriers.

4.2.5 Resource requirements

Human resources

- Delivery Agents.
- Professionals and para-professionals.

Infrastructure and equipment

- Accessible community centers in the community.
- Toolbox (implementation guidelines, forms, data collection tools, collaboration agreements, etc.).
- Training materials (delivery agents receive two days of training outside the workplace).
- Online training modules.
- Monthly technical support (via teleconference).

4.2.6 Time and skills requirements

The program takes place over a period of about 6 months (eight sessions offered over 19 weeks) and is delivered by community centers working with seniors and patients with or showing signs of mental illness. The time required for the development of the program is not mentioned in the literature. The program requires the participation of staff with advanced skills (social workers with at least a master's degree, psychiatrists and other mental health professionals), but who remain easily accessible within the context. The team must be highly competent and have a very high capacity for collaboration. The required expertise must also be readily available in the intervention context.

4.2.7 Funding

The literature does not provide information on the cost of the intervention.

4.2.8 Impacts

The program uses the following tools to measure individual behavior of participants: the HSCL-20 scale (Hopkins Symptoms Checklist 20) for symptoms of depression and the FACT-G (Functional Assessment of Cancer Therapy Scale-General) questionnaire for health-related quality of life. After 12 months, those treated under the program were three times more likely to experience a reduction in their depressive symptoms than those who had not participated in the program. Participants indicated that the program, in addition to treating their depression, brought them other benefits such as increased physical activity and leisure, social support,

better quality of life and increased independence. The program was also administered to participants with epilepsy and concomitant depression. In the latter case, the study observed a reduction in depression and depressive thoughts, and an increased sense of well-being.

In 2007, with the support of the Washington State Aging and Disability Services Administration, the PEARLS toolkits were further developed to promote the popularization of the program and its implementation in community centers across several states. Program providers and trained participants from 14 states participate in the technical support sessions (via teleconference) facilitated by the program's research team. These sessions provide an opportunity to find solutions to problems and submit strategies to overcome organizational barriers. The program was included in certain drug treatment plans, and received an award for innovation in 2011.

4.2.9 Rationale

Contrary to popular belief, depression is not necessarily or exclusively associated with aging. It can occur in people of all ages, and it needs to be treated. Although depression and aging do not go hand in hand, depression does affect a significant number of seniors. According to the Canadian Psychological Association (CPA), a significant number of symptoms of depression affects seniors in the country. According to CPA statistics, 5 to 20% of independent seniors in Canada experience clinical levels of depression and the rate is higher among patients with serious medical problems (25%). The CPA estimates that 25% of elderly people with Alzheimer's disease will battle depression in the initial stages of their illness. Moreover, among the elderly living in nursing homes or in their own homes, the rate of depression is even higher (30 to 50%) and 25 to 50% of older people who care for a family member with dementia will suffer from depression themselves.

It is well established that although both rural and urban seniors were identified as being at risk of social isolation, the risk factors may differ between them. For example, rural or remote communities often do not have a full range of available resources or the infrastructure to enable seniors to remain connected within their communities (lack of transportation options, fewer community supports, limited or no connectivity to the internet). For older urban citizens, social isolation may be more a result of living in an unsafe neighbourhood, a higher cost of living or being less connected and anonymous to their neighbors.

Screening, diagnosis and treatment of depression could help prevent suicide because depression is the mental health problem most often associated with suicide in older people. Research results generally suggest treatment by a combination of psychotherapy and antidepressant medications. The PEARLS program is considered one of the most useful psychological approaches to treat depression among seniors is the United States. It could be adapted to meet the needs and improve the condition of Ontario's aging population. The program strengthens the capacity of communities and organizations to take action to tackle the issues of isolation, poverty and depression among seniors. It builds on the efforts of key stakeholders and provides a multidisciplinary approach (academic and community). Collaboration and continuous action were mentioned as essential elements in the program's implementation.

4.2.10 Contact information

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4.2.11 References

- http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2871&lang=en
- http://jama.jamanetwork.com/article.aspx?articleid=198486
- http://www.pearlsprogram.org/Our-Program.aspx
- http://depts.washington.edu/hprc/depression

4.2.12 Related projects

Fourth R: Skills for Youth Relationships: http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2844&lang=en

Families and Schools Together (F&ST): http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2865&lang=en

4.3 Support for Victims of Torture - Mount Sinai Hospital

4.3.1 Description

Mount Sinai offers managerial support to the Canadian Centre for Victims of Torture. Senior-level managers visit the Centre to educate the staff. In addition, four days each week, physicians from the Mental Health Service go to the Centre to offer their services to the victims. Since many victims come from cultural backgrounds that stigmatize those who seek psychological or psychiatric support, they find this more acceptable than attending clinics at a health care facility, thus resulting in more people being appropriately treated.

4.3.2 Stages of implementation / critical service elements

The partnership between Toronto's Mount Sinai Hospital, Sherbourne Clinic, Regent Park, East End Community Health Centres and a group of physicians who are members of the Canadian Centre for Victims of Torture network has made access to mental health care possible for clients the Canadian Centre for Victims of Torture. This group of collaborators visits the Centre to offer on-site consultations to clients needing care. The care also includes crisis intervention. Services are provided based on the patients' language, profile and age. This approach facilitates the creation of networks and promotes links among newcomers who are often disconnected.

The project could not be described in full detail, due to limited information.

4.3.3 Strengths

- Collaboration between community, hospital and university settings.
- Support for vulnerable people.

- Accommodation of users.
- Demystifying mental illness.
- Improved service delivery.
- Support for disadvantaged communities.

4.3.4 Challenges

- Challenges managing groups with certain cultural values.
- Identification of people needing care.
- Stigmatisation of victims of torture.

4.3.5 Resource requirements

Human resources

- Professional caregivers (nurses, specialists)
- Project delivery agents
- Support staff

Infrastructure and equipment

- Consultation room
- Community hall
- Awareness sheet
- DVDs for awareness-raising

4.3.6 Time and skills requirements

Information not available.

4.3.7 Funding

Information not available.

4.3.8 Impacts

Information not available.

4.3.9 Contact information

Mount Sinai Hospital

Canadian Centre for Victims of Torture

4.3.10 References

https://accreditation.ca/support-victims-torture

The following projects and practices were identified and developed during the initial phase of the literature review. They are similar to models that already exist in Ontario, or are in fields of activity outside the mandate of the French Language Health Planning Entities or LHINs. Summaries are included for general information only.

4.4 Families and Schools Together (F&ST)

4.4.1 Description

Families & Schools Together (F&ST, pronounced FAST) is a group-based family program that strengthens the parent—child bond, family functioning and family social networks and thus reduces children's emotional and behavioural difficulties. The program has a general and a targeted approach: all families can take part in F&ST. Children with multiple risk factors are identified by their class teacher and their families are actively recruited to participate in the program. The goals of Families & Schools Together are to:

- Improve family relationships and build stronger family bonds by giving parents and their children an opportunity to spend high-quality time together;
- Promote children's success in school;
- Prevent substance abuse by children and their families;
- Reduce the stress that parents and children experience in daily life by give parents and their children the chance to enjoy and support one another;
- Increase parents' involvement in their children's school and in their community.

The initiative was originally developed and implemented in 1988 in Madison (Wisconsin) by Dr. Lynn McDonald. Since then the program has grown and expanded. It is now available in 2,000 schools in 48 states in the United States, as well as in Canada (under Family Service Canada), Australia, Austria, England, Germany, Russia and the Netherlands. It has also been adapted for use with different cultures (i.e. Aboriginal and Latin American populations), and with different ages (i.e. Baby F&ST [0-3 years], Early Childhood F&ST [3-5 years], Elementary F&ST [4-8 years] and Middle Years F&ST [9-12 years]).

The program has been offered in six schools in four Canadian provinces over a period of three years. Models adapted to various segments of the community (program variations) are presented in a document available on the website of the Centre de transfert de la réussite éducative du Québec (knowledge transfer and innovation sharing portal). These different versions of the program are:

- Baby F&ST is an evidence-based prevention and family support model for infants and toddlers (0-3 years) and their teenage mothers.
- Early Childhood F&ST is an innovative cooperation program focused on prevention and emphasizing strengths, for children 3 to 5 years and their families. This is a dynamic and effective program that aims to encourage parental responsibility and involvement and promote family development and cohesion. It is specifically designed to facilitate the transition from preschool to formal schooling.

- Elementary F&ST helps children 5 to 8 years to succeed by offering a structured and safe environment that promotes their voluntary participation in frequent, positive, personal, communicative and interactive activities that contribute to bonding. The activities enable the creation of links between parents and the school, and help parents become "protective agents" for their children.
- Middle Years F&ST is a prevention and early intervention program focused on collaboration and is designed for preadolescents (9 to 12 years) who are more vulnerable to school failure, drug and alcohol abuse or juvenile delinquency. The ultimate goal of the program is to increase the pre-teens' chances of success at home, in school and in their communities, and aims to meet the needs of 5th and 6th-graders as they make the transition from elementary school to middle school and begin their adolescence.
- F&ST for Aboriginal Communities is an adaptation of the initial approach taken by F&ST Canada (Elementary F&ST) which aims to address the needs of Aboriginal people in rural and urban areas.

4.4.2 Stages of implementation / programming

F&ST consists of 8 weekly 2½ hour meetings in which the whole family participate. These sessions include opening and closing traditions, a family meal prepared in turn by each family in the group, structured family activities, parent mutual-support time, kids' time and parent—child one-on-one time with the child originally identified as needing the program. During the graduation ceremony, the school principal presents the participating families with a certificate of completion. After the 8-week intensive program, parents can choose to participate in F&STWORKS, a 2-year follow-up program consisting of monthly parent meetings. F&STWORKS is designed to maintain an active social network for the parents and further develop parent community involvement.

The program offers a range of tools such as implementation guides, activity and animation programs focusing on various themes (physical activity, health, alcohol, tobacco and drug use, the importance of family activities, etc.).

4.4.3 Strengths

- Strong understanding of the issue and/or related environment (physical, psychological, social, political, economic);
- Unified vision, values and beliefs;
- Senior champion;
- Synergies with other strategies;
- Cooperation between key stakeholders;
- Support from the community;
- Links to existing community infrastructure;
- Collaborative and inclusive decision-making process.

4.4.4 Challenges

- Management of tensions between the need to preserve the integrity of the program and the need to allow for flexibility and innovation in its implementation;
- Difficulty in determining the specific services that need to be provides to better support local-level outcomes;
- Improving the ability to learn and communicate essential elements that promote the success of the program in the centers.

4.4.5 Resource requirements

Human resources

- Community partners: a social worker (community family services organization) and an addiction counselor (drug addiction prevention and treatment community organization);
- A director and two teachers;
- One or two parents representing the school community.

Infrastructure and equipment

- Facilities for holding the meetings (kitchen and equipment to serve meals to ten or more families, playground for children, meeting room, room for the care of very young children as necessary, storage space for program-related materials, etc.);
- The sessions are conducted by a qualified team, which includes school management, a teacher, a family services counselor or a mental health professional, a parent, a drug, alcohol and gambling addiction counselor, and other volunteers.

4.4.6 Time and skills requirements

- Program implementation requires eight 2.5-hour sessions, followed by monthly family support meetings for 2 years. Each 8-week session is evaluated.
- The intervention does not require highly specialized training on the part of individuals or groups, but training will be provided to individuals or groups as part of the program's implementation.
- Specialized skills need to be readily available. The program requires the participation of staff with advanced skills (e.g., physicians, epidemiologists, social workers), who are easily accessible within the context.

4.4.7 Funding

The literature does not provide information on budget figures for the project. Possible funding sources for the development, implementation and/or evaluation of the intervention are mentioned. The following organizations and bodies were identified: provincial and municipal governments, school boards, businesses, faith-based organizations, Ontario Trillium Foundation, United Way, family and youth service agencies, community organizations, various foundations, non-governmental organizations and the private sector.

That said, the resource persons and organizations that have invested in the program's implementation in the past may be contacted for guidance on estimating financial resources necessary to set up an adapted program.

4.4.8 Impacts

Several evaluations in the United States and Canada show F&ST to be effective at improving children's social skills, decreasing the externalization of certain behaviours, improving children's academic performance and decreasing referrals to special education, and improving family adaptability and parents' feelings of social isolation. Program results indicate positive long-term impacts for participants.

At the individual level, descriptive data showed that there were fewer requests for special education services for F&ST children (one case) compared with the control group (four cases). Parents' scores obtained through a children's behaviours checklist reported a statistically significant reduction in F&ST participants' externalizing behaviors (mean = 56.0 before the program, and 50.3 for first-year monitoring, which gives a before-and-after difference of -5.7) compared with the control group (mean = 55.6 and 53.7 respectively, which gives a difference of 1.9, d = 0.68, p < 0.05).

At the interpersonal level, the program was associated with a significant positive impact on the adaptability of the family. Although the adaptability scores decreased from a descriptive point of view (which shows a lesser adaptability) under the experimental conditions, program participants showed a smaller decline at the statistical level (mean = 23.8 before the program, and 22.9 for first-year monitoring, or a difference of -0.9) compared with the control group (mean = 27.0 and 23.7 respectively, or a difference of -3.3), which gave an effect size of d = 0.79 (p < 0.05).

4.4.9 Rationale

Families and Schools Together (F&ST) is a program that promotes bridging between family and school, but also brings individual families together and facilitates links between families. This program offers a collective approach based on collaboration, focusing on the strengths of families, schools and organizations so that they can together achieve results that one group could not achieve. The intervention shows great adaptability, as it has been implemented in different contexts and with diverse populations or different service providers. The values inherent to the intervention can be summarized as follows:

- Health (e.g., holistic health physical, mental, spiritual health; optimal health for all);
- Improving community social environment (e.g., enhancing social capital);
- Individual and community enrichment (e.g., creativity, critical reflection, social connectedness);
- Power sharing (e.g., reduction of power differentials; empowerment);
- Social justice (e.g., fair distribution of resources; respect for diversity).

A particular focus is put on the following social determinants of health:

- Education and literacy;
- Healthy child development;
- Personal health practices and coping skills;
- Social environments;
- Social relationships that respect diversity;
- Social support networks.

According to the latest Statistics Canada census (2011), Francophones generally have a less favorable profile than the rest of Ontario's population, including in the Entities' geographical area. This is reflected among others in the level of alcohol consumption, a key element covered by the F&ST program. Smoking and exposure to second-hand smoke are also at higher levels, which concerns children whose parents are smokers. In this context, given that the Francophone population of the area served present a higher incidence of smoking than the English-speaking population, it is likely that the program could reach out to this segment of the population, and moreover would reach the program objective of targeting children who may be exposed to second-hand smoke.

Also, considering the region has nearly 19% of Francophone immigrants, such a program would facilitate community integration while reducing the potential isolation of newcomer families in Ontario. Finally, as the average income of Francophone seniors in the region is slightly lower (about 5% less) compared to Anglophone seniors, such a program adapted to the region could build in a mechanism to allow Francophone seniors to participate actively in meetings with their grandchildren or among friends, to socialize, reduce isolation, share healthy eating habits, encourage the sharing of knowledge, as well as to promote French-language health services available in the area, etc. Ultimately, in addition to encouraging healthy behaviors, the program has the potential to prevent substance abuse among youth and alleviate stress at school or in the home.

In partnership with French-language school boards, the program can be set up in the community in collaboration with organizations such as the YMCA, ACFO, a health center, etc.

<u>Note</u>: The development of this practice requires an analysis of the impact and relationship of LHINs with Community Care Access Centres (CCACs) in terms of family services, as these services are not funded by the LHINs but rather by the public health units that are present in schools.

4.4.10 Contact information

In Canada

Laurie Rektor, Community Programs Director Family Services Ottawa Families and Schools Together Canada Telephone: (613) 725-3601, ext. 118

E-mail: <u>lrektor@familyservicesottawa.org</u>

In the United States

Dr. Lynn McDonald

Family Services of America (now the Alliance for Children and Families)

Families and Schools Together Inc.

2801 International Lane Madison, WI 53704-3151 Telephone: (608) 663-2382 Toll-free: (888) 629-2481

Fax: (608) 663-2336

4.4.11 References

- http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2865&lang=en
- <u>Families and Schools Together website</u>
- Office of Juvenile Justice and Delinquency Prevention Juvenile Justice Bulletin: Families and Schools Together
- National Centre for Mental Health Promotion and Youth Violence Prevention: Families and Schools Together
- Kratchowill TR, L McDonald, JR Levin, PA Scalia and G Coover. <u>Families and Schools</u>
 <u>Together: An experimental study of multi-family support groups for children at risk.</u>
 <u>Journal of School Psychology</u>. 2009; 47(4): 245-265.
- Kratchowill TR, L McDonald, JR Levin, H Young Bear-Tibbetts and MK Demaray. <u>Families and Schools Together: an experimental analysis of a parent-mediated multi-family group program for American Indian children</u>. Journal of School Psychology. 2004; 42(5):359-383.
- Hernandez L. <u>Families and Schools Together: Building organizational capacity for family-</u> school partnerships. Cambridge (MA): Harvard Family Research Project; 2000 May.

4.4.12 Related projects

- Family Thriving Program (FTP): http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2985&lang=en
- Fourth R: Skills for Youth Relationships: http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2844&lang=en
- Adolescent Treatment and Learning Alternative Service: http://www.health.gov.on.ca/en/pro/programs/transformation/docs/medal/ministers_medal_adolescent.pdf

Early Risers

• http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=10004&lang=en

- http://www.psychiatry.umn.edu/research/earlyrisers/overview/home.html
- Early Risers Brochure
- Early Risers Skills for Success

4.5 Fourth R: Skills for Youth Relationships

4.5.1 Description

This program promotes a comprehensive school-wide approach to prevent violence and bullying by improving interpersonal relationships. The Fourth R is a spin-off of the Youth Relationships Project, a program aimed at preventing dating violence in youth who have faced abuse and violence in their own family. In Canada, the program was designed by the Centre for Prevention Science, Centre for Addiction and Mental Health (CAMH), University of Toronto; the Centre for Research and Education on Violence Against Women and Children, Faculty of Education, University of Western Ontario; and the Thames Valley District School Board.

The Fourth R is a 21-lesson skill-based program that promotes healthy relationships and targets violence, high-risk sexual behaviour, and substance use among adolescents. The intervention meets the Ontario curriculum requirements for Grade 9 Health and Physical Education course, under the theory that relationship skills can be taught in a similar academic setting to the other 'three Rs' (Reading, 'Riting, and 'Rithmetic). The program is given by classroom teachers, who have received a 6-hour training workshop to familiarize them with the materials and methods needed to implement the intervention. The intervention takes a gender-strategic approach, with slightly different exercises for males and females to maximize relevance and minimize defensiveness in participants.

According to the authors, prevention with adolescents requires an understanding of the gender forces they are facing, and programming to match their world view about these gender realities. High school students are developmentally at a stage where notions of gender tend to be very rigid. Because they lack the gendered understanding of important differences in the nature of this violence, both boys and girls will be hypersensitive to messages that they hear as "boy bashing".

The Fourth R targets gender awareness through media deconstruction activities, discussions about different expectations and standards for boys and girls, and sometimes using different activities for boys and girls. Opportunities to discuss these issues in single sex groupings provide increased comfort while debating sensitive issues. In summary, the Fourth R program is aimed at reducing three interconnected risk behaviours in adolescence: violence (bullying, peer and dating violence), substance abuse, and unsafe sex.

Stages of implementation / critical service elements

The Fourth R curriculum has 3 main units, each containing seven 75-minute lessons:

- personal safety and injury prevention;
- healthy growth and sexuality;
- substance use and abuse.

Core components of the program are the 3-unit skill-based curriculum. Other key components focus on the wider school community and parents. School interventions include staff and teacher awareness education, information about the program, and supplementary activities by the student-led committees. Parents are oriented to the program, to developmental changes in adolescents and to parenting strategies.

4.5.2 Strengths

- Individual and community enrichment (e.g., creativity, critical reflection, social interdependence);
- Collaborative and inclusive decision-making;
- Cooperation among key stakeholders;
- Links to existing community infrastructure;
- Strong understanding of the issue-related environment (physical, psychological, social, political, economic);
- Synergies with other strategies;
- Unified vision, values, beliefs;
- Awareness-building and skills development among teachers;
- Education and skills development behavioral change;
- Skills for building positive intimate relationships;
- Program satisfaction among key stakeholders (directors/superintendents/consultants), implementers (educators) and target population (students);
- Easy to integrate to existing requirements of the curriculum.

4.5.3 Challenges

The main challenge is maintaining the program in a sustainable fashion. Research limitations were also noted. Evaluation design limitations include the use of self-reported acts of dating violence perpetration, which cannot capture the intensity, frequency, or context of such behaviour.

4.5.4 Resource requirements

Human resources

- Staff and teachers trained on awareness-raising among youth;
- Delivery agents Professionals;
- Trainer-of-trainers.

Other resources

Training and intervention tools.

4.5.5 Time and skills requirements

- Development of intervention: 2 years;
- Implementing the intervention: 21 75-minute lessons;
- Evaluation of intervention: 2.5 years.

4.5.6 Funding

The literature does not provide information on budget figures for the project. The organizations that have invested in the program's implementation in the past may be contacted for guidance on estimating financial resources necessary to set up an adapted program.

4.5.7 Impacts

The programme was evaluated using a cluster randomized trial that compared 10 control-group schools (standard Health and Physical Education curriculum) and 10 intervention group schools (Fourth R curriculum). Outcomes were evaluated 2.5 years after the program implementation, and included primary (perpetration of physical dating violence) and secondary outcomes (physical peer violence, experience with alcohol and illicit drugs, and condom use).

Preliminary results show that participants in the program, when confronted with pressures to engage in high-risk behavior, are twice as likely as non-participants to use negotiation to handle such situations. There is therefore reason to believe that this program is able to prevent or at least reduce bullying, by providing potential victims and perpetrators of bullying appropriate tools to reduce the risk of being involved in this kind of behavior.

4.5.8 Rationale

The literature indicates that there is a very close relationship between the fact of intimidating during childhood and antisocial behavior during adolescence and adulthood. According to studies conducted in Canada, approximately 6% of students aged 12 to 19 reported bullying someone at least once a week, 8% were bullied at least once a week, and 1% of interviewed students have been both victims and perpetrators of bullying at least once a week (Volk, Craig, Boyce and King, 2003; Rivers and Smith, 1994; Haynie et al., 2001). News stories in recent years indicate that schools in the service area are not exempt of bullying. In this context, as an addition to existing programs in schools, the Fourth R program could support schools in fulfilling their primary mandate, which is to provide a safe and healthy environment for children and adults in their region. It is also a "pre-adult" preventive program that warrants support from the LHINs.

In addition to preventing violence and bullying by improving relationships between young people, the Fourth R empowers members of the school community to better recognize problems and threats and to intervene effectively. Considering all the problems teenagers face, the Fourth R emphasizes the importance of choosing the right intervention, and of targeting the issues – such as violence, bullying, the use of substances and high-risk sexual behavior – that arise for the first time during adolescence. Interventions during this period of life will only be effective to the extent that they take into account the specific context and challenges of adolescence. For this reason, an approach based on health promotion and harm reduction, as

recommended by the Fourth R program, proved to be more effective than traditional methods of intervention that aim to eradicate risk behaviors rather that to mitigate them.

The program puts an emphasis on health determinants such as education, literacy and gender (other than biological differences). The intervention was developed to meet the Ontario Health and Physical Education grade 9 curriculum. Since the original development of the programme, it has been expanded and adapted in several ways. This includes adaptations for all other provinces, for Alternative Education settings, Aboriginal Perspective, and Ontario Catholic curriculum, with slight changes to the number of lessons, content, and the way that the information is presented. The programme material has been expanded to include curriculum for grade 8 Health and Physical Education, and grades 10 and 11 English classes.

4.5.9 Contact information

- Centre for Prevention Science, Centre for Addiction and Mental Health (CAMH), University of Toronto
- Centre for Research and Education on Violence Against Women and Children, Faculty of Education, University of Western Ontario
- Thames Valley District School Board

4.5.10 References

- http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2844&lang=en
- The Fourth R: A Relationship Based Program for Grade 10 English
- Report: Lessons from the Fourth R
- Abstract: A school-based program to prevent adolescent dating violence

4.5.11 Related projects

Bullying prevention programs: http://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/bllng-prvntn/index-en.aspx

- Bully-Proofing Your School (BPYS)
- Olweus Bullying Prevention Program
- Together We Light the Way (TWLTW)
- Success in Stages

4.6 Occupational Safety System for Community Workers

4.6.1 Description

The City of Toronto Homemakers and Nursing Services is the first site in Ontario to pilot the iGuard system, an occupational safety system for community workers. The city has a diverse mix of clients with mental health and addictions issues that make community workers doing home visits alone especially vulnerable. With the iGuard system, workers use a swipe card that

monitors their location. An alert is triggered when they have not reported in for a period of time. Staff can also trigger an alert in an emergency. The organization provides safety education for staff in collaboration with the Toronto Police Service.

4.6.2 Reference

https://accreditation.ca/occupational-safety-system-community-workers

E-mail: tbernar@toronto.ca

4.6.3 Related projects

- Mental Wellness in the Workplace: https://accreditation.ca/node/7338
- Interactive Mental Health Simulations for First Responders:
 https://accreditation.ca/interactive-mental-health-simulations-first-responders

5 PRIMARY HEALTH

5.1 Boréal Health Clinic

5.1.1 Description

Thanks to an agreement between Collège Boréal, Bradley Pharmacy, and École secondaire du Sacré-Cœur, Collège Boréal students can now offer certain health services, free of charge, to the Greater Sudbury community. Students enrolled in Collège Boréal's School of Health Sciences will now have the opportunity to work in the clinic, as part of their practical training, and apply the theoretical concepts and knowledge learned in the classroom. Collège Boréal students, under the supervision of qualified personnel, will offer the following services, free of charge at very low cost: temperature, pulse, and blood pressure checks, therapeutic massages, dental examinations, promotion of good health practices, among others.

The National Health Training Consortium (Consortium) supports this community project which ensures the delivery of health services related to physiotherapy and occupational therapy programs, practical nursing, massage therapy and dental hygiene.

École secondaire du Sacré-Coeur students enrolled in a Health and Well-Being Specialist High Skills Major program will also benefit from this partnership by getting practical learning experience through a COOP placement at the Boréal Health Clinic.

5.1.2 Stages of implementation / programming

The Boréal Health Clinic model is not unique since it had already been explored at the Sudbury campus of Collège Boréal. At the time, some services were offered to the community, by appointment, with a limited number of places, and reduced hours. Services were scattered on different floors, in various departments on campus, and did not allow for awareness or capacity building related to interprofessionalism.

The combination of all these services in a single location situated directly in the community is an ideal single-window approach for all. The model still works by appointment for community clients, who can call or e-mail for an appointment. Clients are greeted and guide by the HSM students of École du Sacré-Coeur, who are also responsible for completing and updating client records.

The opening of the clinic was made following a partnership agreement with Sudbury's Bradley Pharmacy, which also occupies the building. The agreement provides for the rental of the Clinic's space and the sharing of basic expenses, such as security, maintenance, electricity, etc.

5.1.3 Strengths

- The Clinic is in high demand and successful since its opening in January 2015.
- To date, demand exceeds the availability of services.
- Four programs at Collège Boréal are involved in providing services in the form of training for their students, thereby helping to address the shortage of internship places.

• It is an excellent experience for students, with professional workplace learning in French, and an offer a bilingual service as required. The project helps relieve the health system at very little costs – close to zero – for the institution, other than already budgeted teacher salaries.

5.1.4 Challenges

- Planning for the management of demand that exceeds supply.
- The rotation schedule being more constraining to include a time slot for each of the participating students, subject to the availability of teachers and technologists.
- Planning to cover all needs and possibly to include further services in order to meet demand.

5.1.5 Resource requirements

An overview of funds and budgets required for clinics mentioned in the Related projects section could be provided as part of this case study.

Human resources

- A technologist.
- Team of teachers from the targeted programs, representing about 7 teachers per week on site.
- Approximately sixty students for the duration of their internship or clinic hours
 (12 in Massage Therapy, 12 in Physiotherapy, 30 in Practical Nursing, 5 to 7 in Dental
 Hygiene, and twenty from École Sacré-Coeur).
- A dean to remotely oversee operations, team performance and customer satisfaction.

Infrastructure and equipment

- Lease of premises for the supply of dental hygiene care, massage therapy, physiotherapy and practical nursing.
- Massage tables, dental chairs, primary care nursing equipment, etc. This equipment is provided by Collège Boréal programs.
- Telephone sets, administrative and communications equipment are also supplied by Collège Boréal.
- A billing system for care requiring a basic charge and not covered by the Ontario Health Insurance Plan (OHIP).

5.1.6 Time and skills requirements

• It took one or two semesters to get the project underway, first to ensure its feasibility, and then to confirm the involvement of partners, prepare the move and actually make the transfer to the new facilities.

- Specialized skills required in the clinic depend on the type of care that is being offered
 and are also based on the needs of the region. In this case, priority areas are dental
 care, physiotherapy and massage therapy, and practical nursing.
- The project requires the participation of professional staff with these particular skills.
- Clinic hours are based on the availability of teachers and professional staff, more specifically based on lab and internship hours.
- Clinic hours are also determined according to appointments scheduled with people from community.

5.1.7 Funding

This project can be funded by postsecondary institutions who are prepared to develop the model and who offer these types of health programs, as well as ministries, LHINs, businesses working in the field of health, hospitals, pharmacies, community organizations, etc.

5.1.8 Impacts

It is too early to concretely and realistically assess the impact of the Boréal Health Clinic. For now, the only certainty is that demand exceeds supply. In a few years, it may be possible to draw conclusions regarding long-term benefits on the determinants of health of the Francophone population, positive impacts on other settings, centers or organizations working in health and provide primary health services in the Greater Sudbury area.

From the institution's perspective, the model is exemplary in regard to community collaboration and partnership. So far, the experience has been very positive for faculty, who go to the clinic to manage and supervise students in an out-of-classroom learning context, in a professional environment. As for the students, they feel they are actually working in a professional environment with direct contact with the Francophone clientele.

Visibility is ensured by having a well-chosen location: a storefront in the heart of a neighborhood, the Flour Mill, which requires this type of clinic where care is accessible, free or at very little cost. This strategic location allows to cater to part of the low-income population, sometimes with no transportation, and likely to be in a poorer state of health.

5.1.9 Rationale

The idea is to take the clinic out of its academic setting, and root it in the community to make it more accessible. This is what makes this model different from those at La Cité (Clinique médicale CSanté) and the University of Ottawa (Walk-in Clinic), where the clinics are located on campus, with some satellite sites in the case of the University clinic. Services remain basic, mainly advice, assessment and treatment of illnesses and minor injuries such as cuts, bruises, minor infections, sprains and skin diseases. Influenza vaccination is also offered. Fees may apply for some services not covered by OHIP.

The University of Ottawa clinic's website has a list of resources and a directory of health professionals, including Francophones (http://www.uottawa.ca/health/providers-and-locations)
This is another useful practice to consider in the region, as it could fill the need for a directory of French-speaking resources and professionals.

Finally, it is likely that the model could be applied in French in the service area given the presence of post-secondary institutions and campuses in the major urban centers (Windsor, London, etc.). As an example, the Personal Support Worker program offered by Collège Boréal can be a starting point for a French-language services pilot project in Windsor. It is best to identify neighborhoods where needs are more apparent and where a portion of the Francophone population have lower average incomes compared to the rest of the population.

5.1.10 Contact information

Kim Morris, Dean, School of Health Sciences, Collège Boréal, Sudbury

Telephone: (705) 560-6673, ext. 4670

Toll-free: (800) 361-6673

E-mail: kim.morris@collegeboreal.ca

Boréal Health Clinic: sante@collegeboreal.ca

Telephone: (705) 521-6021 or (705) 560-6673, ext. 3490

5.1.11 References

 http://www.collegeboreal.ca/news/details/free-health-care-services-offered-at-theboreal-health-clinic/

5.1.12 Related projects

University of Ottawa Walk-in Clinic

100 Marie Curie (suite 100), Ottawa ON K1N 6N5

Telephone: (613) 564-3950

http://www.uottawa.ca/health/services/walk-in-clinic

Monday to Friday: 8 AM - 8 PM / Saturday and Sunday: 10 AM - 2 PM

Clinique médicale CSanté de La Cité, Ottawa: http://www.csante.info/

5.2 Saskatoon Primary Health Bus

5.2.1 Description

The Primary Health Bus initiative is the result of a partnership between the Saskatoon Health Region, M.D. Ambulance and the Ministry of Health in Saskatchewan. The bus serves different areas of Saskatoon where the population often has to overcome geographical, social, economic and cultural barriers. The goal is to provide high-quality care directly to the people who are not served, and provide an alternative to getting care for minor illnesses in the hospital emergency room. The target populations are Aboriginals, newcomers, children, the elderly and transient populations. This initiative facilitates access to health services and care, and can reduce or eliminate disparities in service provision.

The Health Bus, which is staffed by nurse practitioners and paramedics, operates daily to provide primary care services to patients at various locations that are convenient to the residents. Services include blood pressure and blood sugar checks, diagnosis and treatment of common illness and injuries, testing for sexually transmitted infections, provision of free condoms, pregnancy testing, suturing and suture removal, wound care, management of chronic conditions, disease prevention, health education, advocacy, and referral.

5.2.2 Stages of implementation / critical service elements

A 2006 study examining health disparities by neighbourhood in Saskatoon showed that low-income neighbourhoods have a higher than average use of health care, higher burdens of illness (including mental disorders, diabetes, chronic obstructive pulmonary disease, coronary artery disease, chlamydia, gonorrhea, hepatitis C), higher rates of teen births, and greater likelihood of low birth weights. Primary health care managers in Saskatoon Health Region recognized that residents of these neighbourhoods (primarily First Nations people, Métis, immigrants, and refugees) could not access primary care easily. To address this concern, they converted a recreational vehicle to serve as a mobile clinic with a fully equipped examination room.

In the spring of 2007 MD Ambulance sent 2 representatives to a UK trade mission as part of a Canadian delegation. One of the programs running successfully in the UK was "Mobile Community Medicine" which involved nurse practitioners and paramedics working side by side delivering patient care in communities. MD Ambulance paramedics brought this idea back to Saskatchewan and shared it with the Saskatoon Health Region. In June 2008, the Saskatoon Health Region and MD Ambulance Care Ltd. Made a proposal to the provincial Ministry of Health to establish a mobile primary health center, the "Health Bus", following the example of the UK initiative. After several months of research and fact-finding, the program was set up as a pilot project in the summer of 2008, bringing together the Saskatoon Health Region, MD Ambulance and the Ministry of Health.

Aboard the bus, paramedics and nurse practitioners work in partnership to care for vulnerable populations in Saskatoon seven days a week, from 12 a.m. to 7:45 p.m. They raise awareness and promote prevention, offer basic and intermediate care (care for chronic diseases, wounds, vaccination) and provide the necessary liaison with other local health and social services. An advisory committee made up of community representatives and other partners supports the program's activities, particularly for the selection of locations and opening hours.

5.2.3 Strengths

- Access to care
- Welcoming team of caregivers
- Sense of security for patients
- Complementarity to community care
- Equity in health care provision
- Free care
- Walk-in Clinic
- Improvement in the offer and quality of care
- Contact between professionals and the population
- Meets the needs of communities
- Relief of emergency rooms
- Better support for remote communities

- Health promotion
- Disease prevention
- Education of vulnerable communities
- Interdisciplinary collaboration
- Community involvement
- Partnership between the private and public sectors
- Easily adaptable

5.2.4 Challenges

- Common challenges of walk-in clinics
- Professionals cannot consider cases requiring daily care
- Challenges of caring for a vulnerable population

5.2.5 Resource requirements

Human resources

- Nurses and nurse practitioners
- Paramedics

Infrastructure and equipment

- Bus
- Supplies and equipment
- Accessibility equipment for wheelchairs (lift)
- Maintenance service for the equipment, and for the bus.

5.2.6 Time and skills requirements

It took over a year to initiate the project, which is successful thanks to a solid and strong partnership. First, MD Ambulance Care needed to ensure the feasibility, obtain the collaboration of the Saskatoon Health Region and the provincial ministry's support. Secondly, there was talk of converting a bus into a mobile clinic with a fully equipped consultation room.

The required expertise must be readily available. The project requires the participation of staff with advanced skills (nurse practitioners, paramedics), and who are easily accessible in the context of the intervention. The project team must be highly competent and have a very high capacity for collaboration.

The mobile clinic's hours of operation were established based on the needs of the population, as indicated by studies conducted as part of the project. The bus runs daily and programming is available online on the Saskatoon Health Region site. There are no appointments.

The program's success depends on the commitment of unique interprofessional primary health care teams; on the investment of resources for primary health care services to a small number

of people; and on community members' participation in discussions on the scope of services and the location of the bus.

5.2.7 Funding

Literature from 2011 indicates the project receives funding of \$350,000 from the provincial government annually, and the cost of annual operation amounted to approximately \$487,000. Funding sources for the additional \$140,000 were not mentioned.

The Community group Synergy 8 initiated a fundraiser to replace the first bus, which was almost out of use. An amount of \$180,000 was raised through this campaign. The Saskatoon Health Region and the Ministry of Health provided additional support, and a total amount of \$360,000 was put together to get the new bus up and running. This second bus offers more space (an additional consultation room) and greater accessibility for patients with reduced mobility. The skills and experience of frontline staff were put to use to ensure a convenient interior design.

In Manitoba, in a similar project, financial forecasts are in the range of \$1.1 million per year for each bus. This amount comes from the provincial Ministry of Health and includes operation costs and professionals' salaries.

5.2.8 Impacts

The most recent literature indicates that the evaluation of costs and savings of this practice have not been completed (as of 2011). While the practice has not been formally evaluated, personal testimonials, observations, and early results suggest that the practice can lead to improved performance metrics and has the potential to produce positive outcomes on health. Early evidence suggests mobile clinics improve screening for chronic conditions (diabetes and hypertension) and coordination of care (Conference Board of Canada, 2012). In addition, the Saskatoon Health Region has tracked program utilization and demographic information of users. The information collected on the Accreditation Canada website shows that:

- Patients can get medical advice and care close to home instead of calling 911, which
 directly reduces the volume of calls to 911, eases pressure on the service and allows its
 attendants to concentrate on priority emergency calls.
- In 2010, the distribution of 2,848 visits (excluding vaccination) was 48% Aboriginals, 9% newcomers, 25% children under 16, and 7% elderly (65 years or more). During the H1N1 flu pandemic in 2009, the bus was used to administer vaccines against H1N1 in central neighborhoods.
- During the 2011-12 calendar year, 2,777 patients visited the bus (Saskatoon Health Region, 2012). The majority of visits were for integumentary or ENT conditions. The service was most heavily used by women and by people in the 0–9 and 20–59 age groups.
- 5,717 patients visited the bus in 2012-13; 57% were adults aged 20-60 years and 35% were children and adolescents.

This type of initiative can be found elsewhere in Canada (e.g., mobile clinics in Manitoba), but the nature and set-up of the Saskatoon project seem to be unique. According to information available on the Accreditation Canada website, three primary care mobile clinics designed to

serve patients in rural and northern Manitoba, without a family doctor, were planned to be implemented in 2013 (http://www.gov.mb.ca/health/primarycare/public/access/mobile.html).

5.2.9 Rationale

In Ontario and elsewhere in Canada there are great inequalities in access to health care. People with unfavorable socioeconomic conditions face a greater burden of disease, greater disability, and even a shorter life expectancy. According to the latest Statistics Canada census (2011), Francophones generally have a less favorable profile than the rest of Ontario's population, including in the Entities' geographical area. These inequalities in the health system are caused by differences in socioeconomic factors such as income and education, called the "social determinants of health."

Many needs assessments in Ontario and across Canada indicate that people from disadvantaged groups are less likely to receive adequate health care, even if they have access to the system. They are also more likely to report having difficulty in getting appointments, undergoing fewer tests and having less chronic disease monitoring. As indicated by studies conducted in Saskatoon as part of the health bus project, people belonging to disadvantaged groups are also hospitalized more often and these hospitalizations could be prevented if they received appropriate front-line care.

While many of these factors are outside the direct control of the health system, ensuring equitable access to effective and appropriate health services can help alleviate some of these disparities. Indeed, health buses can favor reliable access to primary health care for people living in places that are not adequately served. The ability to have access to a dedicated health care provider would help these groups to receive the health care, support and monitoring they need close to home. Ensuring equitable access to effective and appropriate health care services is a strategic approach that can reduce health inequalities that result from differences in the socioeconomic status of Canadians. Such an initiative will also save time and costs for patients and for the health care system.

Disparities in equitable care induces costs for both patients and the health system. By reducing the access gap, the system could save money and time, avoid some hospitalizations and free up emergency rooms, etc. To reduce patient- and system-related barriers, there needs to be an increase in access to care. Removing these barriers, by setting up health buses like the one in Saskatoon, will hopefully provide better access to appropriate care.

5.2.10 Contact information

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5.2.11 References

- https://www.accreditation.ca/saskatoon-primary-health-bus
- https://www.saskatoonhealthregion.ca/locations services/Services/Primary-Health/Pages/HealthBus.aspx
- http://www.macleans.ca/society/health/where-the-clinic-hits-the-road/
- http://www.gov.sk.ca/adx/aspx/adxGetMedia.aspx?mediaId=728&PN=Shared
- http://www.mdambulance.com/paramedicine/health-bus/

5.2.12 Related projects

Manitoba has a model similar to that of Saskatoon, but mobile clinics in Manitoba do not have the partnership with paramedics, and services seem to be offered by appointment.

http://www.southernhealth.ca/service.php?lang=en&id=234

The mobile primary care clinics in Manitoba:

- http://www.gov.mb.ca/health/primarycare/public/access/mobile.html
- http://www.prairiemountainhealth.ca/index.php/mobile-clinic

5.3 Bridging General and Specialist Care (BGSC) Project

5.3.1 Description

This is the first system to use electronic referrals by family doctors, nurses and specialists in Manitoba. Doctors who recommend patients can follow the progress of primary care and requests for information, then transmit recommendations and submit consultation requests, and receive information from consultants electronically. BGSC facilitates timelier and more appropriate coordination between family physicians and specialists.

Patients often need several appointments with various care providers and diagnostic services before they can have a consultation with a specialist. Each visit produces information that are needed by the specialist. The BGSC project improves the electronic health records system's ability to track these multiple visits and critical patient information they produce.

The goal of this initiative was to streamline the consultation and referral process while also ensuring that patients get referred to the right specialist at the appropriate time. BGSC is a novel approach to clinical referral pathways in that it uses electronic record technology as a platform for sharing clinical information, medical history, and medication history with a target specialty.

The initiative, funded under a two-year pilot project, has set the following guidelines:

- Identification of referral criteria and timelines as essential or basic elements in determining the waiting time.
- Development of a list of specific information and tests needed by specialists to decide on a treatment plan during the first visit.
- Implementation of a computer system as the basis for communication between primary care providers and specialized providers, to facilitate the referral process and the twoway communication between primary care providers and specialists.
- Setting up the computer system allows the following:
 - Confirm immediately whether all information to meet the established criteria has been uploaded, and that the referral is thus accepted; or
 - o Request additional and/or relevant information; or
 - Advise that the referral information does not meet the established criteria and make suggestions as to how to proceed.
- The establishment of a system-wide patient referral monitoring strategy that allows to intervene when patients could not have a consultation within the guaranteed time.

5.3.2 Stages of implementation / critical service elements

The Bridging General and Specialist Care Project (BGSC) was launched as an information technology (IT) consultation and referral system in May, 2008. This two-year initiative was delivered in two parts. The first part took place from May to December 2008 in six specialty areas and included 8 courses of care. The first wave (May to December 2008) focused on developing the IT software and finalizing the criteria for referral, the required tests, and the clinical data to be entered into the software. Enough information needed to be uploaded for the physician and the specialist to agree on the appropriate treatment option. The software confirms whether all information to meet the established criteria has been uploaded, and suggests what additional information to include if the criteria are not met. These criteria were disseminated to other health care interest groups for feedback. The IT system also monitors wait times to ensure that patients who do not get access to care within the guaranteed time are referred to another specialist immediately. Six specialty areas were included in the first wave, and seven more were added in the second wave (January and February 2010).

5.3.3 Strengths

- Ensure timely access to quality health care
- Coordination and collaboration between health professionals
- Provision of effective communication tools that can be easily used by clinics on a daily basis
- Improved quality of care
- Improved quality of communication between the different levels of care
- Reduce unnecessary referrals

- Improve the quality of communication between family physicians and patients
- Eliminate repeated visits to specialists
- Eliminate unnecessary laboratory and radiography testing
- Reduce costs through the efficient use of resources
- Reduced stress in patients
- Reduced waiting time between consultation and treatment decision
- Multiple stakeholders
- Simplify the referral process
- Value and vision common to all professionals within system

5.3.4 Challenges

- Challenges in integrating other computer systems (e.g., EMRs, appointment scheduling software, clinic management software, imaging systems, etc.).
- Technological hurdles like slow processing time, system interruptions and multiple clicking.
- Frequency of use of the system with a limited number of specialties.
- Changes in the work environment, including changes in the roles of doctors and shared responsibilities between office staff and professionals.
- Impossibility to apply the system with every service provider because of independent practices.
- Difficulty in meeting deadlines.

5.3.5 Resource requirements

Human resources

- Project director or manager
- Project coordinators (four staff, one administrator)
- Computer systems director and/or manager
- Software development team
- Family physicians, specialists and administrative clinical staff
- Provincial director, patient access

Infrastructure and equipment

- Premises / offices
- Computer system and software
- Forms

5.3.6 Time and skills requirements

The initiative was a pilot project for a period of two years and was carried out in two waves. The first wave took place from May to December 2008 and the second from January to February 2010. The required expertise should be readily available. The intervention requires the participation of staff with advanced skills (computer, medical specialists, other health professionals, clinical administrative staff), who are easily accessible in the context of the project. Six specialty areas were included in the first wave, and seven more were added in the second wave. The literature does not specify which specialties were included.

Physician leadership was instrumental in the clinical development and in securing the commitment of other clinicians. The involvement of office staff in the referral process was also key. The system must be user-friendly for everyone, especially for users who are not comfortable with computer technology. The collaboration of multidisciplinary clinicians to develop clinical referral paths promoted further interest to continue the development of several other paths. However, the lack of integration of the interface with other systems was a barrier to participation.

5.3.7 Funding

BGSC was funded by Health Canada, Manitoba Health, and Healthy Living; stakeholders included physicians, specialists, IT staff, and clinical office staff. The literature does not provide detailed budget information, but indicates that Health Canada invested one million dollars in the project.

5.3.8 Impacts

The Government of Manitoba reported on the progress and effectiveness of the initiative in its reports and presentations. Data were taken from surveys given to health care professionals before and after the intervention period as well as more informal interviews with family physicians. From 2009 to 2010, 78% of the 1,002 referrals were accepted and only 19% of appointment dates were set later than the target deadline. In the following year, 902 more referrals were made.

A total of 177 family physicians and nurses were involved as well as 55 specialists. The physicians said they liked the recommendations provided by the IT system and were pleased that the system reflected their local needs rather than adopting a "one size fits all" policy.

The specialists also preferred to use the BGSC system rather than traditional methods. The system would benefit from including a wider variety of specialties and from better integration with other electronic medical devices.

The transition from wave 1 to wave 2 increased the spread of utilization and the variety of specialties included. Health care professionals reported better coordination and communication with a wider variety of specialists, and all sites had overall positive results with the software.

5.3.9 Rationale

Patients often need several appointments with various care providers and diagnostic services before they can have a consultation with a specialist. Each visit produces information that are needed by the specialist. The variety and complexity of factors that influence health and well-being and the progress of a disease require professionals from various health disciplines to work

together closely. When they are brought together, the knowledge and skills of health professionals become a powerful mechanism to improve the health of the target population.

The BGSC initiative is seen as one condition or strategy that enables health care providers to work together in the most effective and efficient way so they can achieve the best possible results for patients and their families. What is needed is an improvement in the electronic health records system, in the ability to follow-up on multiple visits with doctors, and in gathering and accessing essential patient information.

The electronic referral tool aims to help primary care providers to refer patients to the appropriate specialist and share the necessary information through electronic medical records. This project is the next step in bringing general practitioners and specialists to work together; the innovative electronic tools enable a better functioning of the health care system for patients and health care providers. It is one way to meet the growing expectations of patients.

By making the best technological tools available to health care providers, the system offers another way to help patients more quickly and efficiently. The electronic referral program helps direct patients immediately to the appropriate specialist, complete the uploading of all the necessary information about patients and the diagnostic investigations if needed, and document every step of patient referral in their own electronic medical record. The project ensures that patients are consulted by the right specialist at the right time and in a reasonable time. It ensures that the first meeting between the patient and the specialist is the most productive in terms of care and treatment.

It is also the only initiative of its kind in Canada. The BGSC project could be implemented in other provinces and territories, but only for high-volume, routine referrals that meet its specific information and testing requirements.

5.3.10 Contact information

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5.3.11 References

- http://www.waittimealliance.ca/wp-content/uploads/2014/05/Referral-and-Consultation-Processes.pdf
- https://accreditation.ca/bridging-general-and-specialist-care-bgsc-project
- http://www.cprn.org/documents/51263 FR.pdf

- Canadian Medical Association. (December 5, 2011). A collection of referral and consultation process improvement projects.
 http://www.cma.ca/multimedia/CMA/Content_Images/Inside_cma/Advocacy/Referrals/ReferralProjectCollection.pdf
- DeMone, B. and Oppenheimer, L. (April 19, 2011). Adventures in electronic referral & consultation: Lessons learned over 3 years of bridging general & specialist care.
 http://umanitoba.ca/faculties/medicine/units/chi/media/DeMone Apr.19.11.pdf
- Health Manitoba. (n.d.). *Bridging general and specialist care* [project website]. http://www.gov.mb.ca/health/bgsc/index.html

5.3.12 Related projects

Bridging the gap between primary care and the cancer system - The UPCON Network of CancerCare Manitoba: http://www.cfp.ca/content/55/3/273.full

The literature indicates that somewhat similar practices exist in the United States and the United Kingdom; however, the BGSC project has an innovative set of inputs and established criteria that provide patient-centred treatment options.

The following projects and practices were identified and developed during the initial phase of the literature review. They are similar to models that already exist in Ontario, or are in fields of activity outside the mandate of the French Language Health Planning Entities or LHINs.

Summaries are included for general information only.

5.4 Patient and Family Engagement: Putting patients at the centre of their care

5.4.1 Description

This project involves patients, families and staff to improve care; it was launched in spring 2010 by the Canadian Foundation for Healthcare Improvement (CFHI). Through this initiative, the Foundation supports initiatives that engage patients and families in designing, delivering and evaluating health services, with the goal of improving the quality of care. The initiative provides funding, mentoring and other support to 22 teams from healthcare organizations across Canada in projects developed by 17 organizations (the list of projects is provided below). Projects have led to improvements in access, patient safety, efficiency and many other areas.

The concept of patient- and family-centered health care is an innovative approach to planning, delivery and evaluation of health care based on mutually beneficial partnerships for patients, families and health care professionals. The patient- and family-centered health care approach applies to patients of all ages and can be put into practice in all care environments.

The concept of family-centered care differs from other approaches that cater to families through its collaborative approach to caregiving and decision making. Each party respects the knowledge, skills and experience that others bring to health care. As part of this initiative, the family and the caregiving team work together to assess needs and develop a treatment plan for the patient.

CFHI has worked with many organizations that are engaging patients and families to help improve healthcare. As a result, it has a high level of knowledge about resources available for involving patients, families and caregivers in the design, delivery and evaluation of healthcare services. CFHI has compiled a collection of resources that will provide easy access to patient engagement tools proven useful in Canada and internationally.

5.4.2 Stages of implementation / critical service elements

- Thorough environmental analysis and assessment in order to develop a genuine engagement process, advocate for adequate allocation of resources, develop specific strategies and propose an implementation process.
- Identification of system- and practice-related factors that may affect the implementation of a strategy.
- Identification of key stakeholders that need to be engaged.
- Effective planning of patient engagement in various aspects of the project.
- Provision to all participants of resources, knowledge and skills necessary to build confidence and capacity.
- Integration of involvement initiatives with existing structures and processes to ensure their sustainability.
- Offer of training to a diverse group of patients and providers so that they become effective partners in the restructuring of the health system.
- Development of mechanisms needed to support the expression of a diversity of opinions in a spirit of collaboration.

5.4.3 Strengths

- Dignity and Respect. Health care practitioners listen to and honor patient and family perspectives and choices. Patient and family knowledge, values, beliefs and cultural backgrounds are incorporated into the planning and delivery of care.
- Information Sharing. Health care practitioners communicate and share complete and unbiased information with patients and families in ways that are affirming and useful. Patients and families receive timely, complete, and accurate information in order to effectively participate in care and decision-making.
- **Participation.** Patients and families are encouraged and supported in participating in care and decision-making at the level they choose.
- **Collaboration.** Patients and families are also included on an institution-wide basis. Health care leaders collaborate with patients and families in policy and program development, implementation, and evaluation; in health care facility design; and in professional education, as well as in the delivery of care.

5.4.4 Challenges

- Required change of attitude and approach throughout the institution.
- Risk of patients becoming less engaged when there are shortcomings in the consideration of patient views during strategy development, hence the importance of proper preparation for implementing patient engagement strategies.
- Identification of key stakeholders to make contributions; this task is not nearly as obvious as it seems.
- Difficulty in ensuring sustained patient engagement in an environment where resources are stretched to the limit.
- Financial pressures, perceived power asymmetries, multiple levels of knowledge, and the diversity and divergence of views can present challenges in the preparation of patients, staff and leaders.

5.4.5 Resource requirements

Human resources

Caregiving staff, health center leaders, patients, families and planning officers.

Other resources

Online training and planning resources developed by CFHI.

5.4.6 Time and skills requirements

- The literature does not provide information on the time required for preparing the initiative.
- The intervention does not require highly specialized training of staff or groups, but training will be offered to staff or groups as part of the initiative's implementation.
- The required expertise must be readily available. The initiative requires the participation of staff with advanced skills, who are easily accessible within the context of the project.

5.4.7 Funding

The 22 Patient Engagement Projects (PEP) were funded by CFHI and other partners. Participating organizations or health centers also provided a counterpart contribution as cosponsors.

In 2010, CFHI, the Canadian Council for Health and the Max Bell Foundation jointly funded ten intervention projects and a related research project that required a total investment of 1.45 million dollars from the three partners and an additional \$100,000 in cash or in kind from the selected teams.

In 2011, CFHI funded seven more intervention projects. In addition to providing support and mentoring, CFHI provided these projects with a total investment of \$700,000, with an additional \$700,000 in cash or in kind from the selected teams.

Generally, CFHI contributes \$50,000 per team, to up to 15 Canadian teams, to cover the direct costs related to participation in the collaborative project. The Foundation also provides its expertise in quality improvement through its teaching staff, its trainers and leading experts to help teams improve quality of care, enhance health outcomes and optimize efficiency, in partnership with patients and their families.

5.4.8 Program impacts

Results show that the collaboration of patients and families in the design of improvements opens up new opportunities and gives better results than would come out of leaders and health service providers working in silos. By exploiting the potential of involving patients and families in quality improvement initiatives, CFHI helps organizations understand and create winning conditions for accelerating the improvement of health services.

At the McGill University Health Centre in Montreal, results also show an increase of 8% in direct intervention time, a 20% improvement in the patients' assessment of their experience, and a 60% reduction in medication transcription errors.

Also noted was the support for the process that provides patients and their families the means to participate in the Huron Perth Healthcare Alliance's health services improvement project. A clinical initiative significantly reduced the time for the transmission of blood test results in a chemotherapy unit from 2-3 hours on average to 15-20 minutes, with the immediate benefit that cancer patients can be treated more quickly.

In summary, the program improves access, equity, coordination, efficiency and relevance, quality of care, safety, and population health.

5.4.9 Rationale

The CFHI's support of 17 organizations through the Patient Engagement Projects (PEP) initiative (2010-2013) established proof that collaboration between managers, providers and patients leads to an improvement in care, systems and results. The effective partnership between patients, providers and managers is the most promising solution for meeting the challenges of an aging population, the upsurge of chronic diseases and limited budgets.

Throughout all funded projects, the most important occurrence was cultural change. Front-line employees have become champions of change and are taking initiative to improve quality indicators. Patients are no longer mere spectators; they become active collaborators in staff-patient groups. Patients' families feel that their contribution is valued.

The literature indicates that this collaborative project improves the capacity of organizations to:

- Enhance engagement of clinicians, staff, patients, families and leaders to accelerate an identified organizational quality improvement priority.
- Assess the current state of readiness to meaningfully partner with patients and families on quality improvement initiatives.
- Strategically focus on infrastructures, processes and behaviours that enable meaningful and effective engagement for improvement.

- Improve skills and build capacity in patient and family engagement, performance measurement, quality improvement, leadership, change management and sustainability.
- Align quality improvement goals and activities with what's important to patients and families.
- Recognize the benefits of combining patient stories and survey data to understand and measure the patient experience.
- Build an effective leadership strategy to foster and embed patient and family engagement at all levels.
- Network and exchange approaches, tools, resources, measures and lessons learned with other leading organizations and teams who are partnering with patients and families for quality improvement.

The Huron Perth Healthcare Alliance has received funding under this project. Local Health Integration Networks (LHINs) are among eligible organizations for funding. The LHINs could work at extending the practice to other health facilities in collaboration with other stakeholders.

5.4.10 Contact information

Canadian Foundation for Healthcare Improvement and other organizations that received funding or implementing the program.

- François Champagne, Institut de recherche en santé publique (IRSPUM) / Unité de santé international, School of Public Health, Université de Montréal
- Maria Judd, Senior Director, Patient Engagement and Improvement, CFHI
- Roger McAdam, Co-Chair, Patient/Family Advisory Group, Alberta Health Services
- Angela Morin, Patient and Family Experience Advisor, Kingston General Hospital
- Patricia O'Connor, Director of Nursing and Chief Nursing Officer of the McGill University Health Centre (MUHC), and an assistant professor in the Ingram School of Nursing at McGill
- Kaye Phillips, Director of Evaluation and Performance Improvement, CFHI
- Melanie Rathgeber, Founder and Lead Consultant, MERGE Consulting
- Jennifer Rees, Executive Director of Engagement and Patient Experience, Alberta Health Services
- Eleanor Rivoire, Executive Vice President and Chief Nursing Executive, Kingston General Hospital

5.4.11 References

- http://www.fcass-cfhi.ca/WhatWeDo/PatientEngagement
- http://www.fcass-cfhi.ca/sf-docs/default-source/collaborations/PEP Brief Readiness EN.pdf?sfvrsn=0

• http://www.fcass-cfhi.ca/sf-docs/default-source/collaborations/PEP Brief Clarity EN.pdf?sfvrsn=0

5.4.12 Projects implemented under this initiative

- Involving diabetic patients in the improvement of primary care services Agence de la santé et des services sociaux de la Montérégie
- Engaging patients in evaluating patient experience in addiction and mental health -Alberta Health Services
- Patients Matter: Engaging patients as collaborators to improve osteoarthritis (OA) care in Alberta - Alberta Health Services
- The Nova Scotia Cancer Patient Family Network: Innovation, development, evaluation -Cancer Care Nova Scotia
- Advancing women's equity through a strategy of meaningful engagement Fraser Health
- Engagement of patients/families on hospital unit action councils Huron Perth Healthcare Alliance
- Responsiveness of care: Patient experiences to shape clinical services McMaster Family Practice
- All aboard for patient engagement: A readiness toolkit for patients, providers and leaders - Alberta Health Services
- Simulating, studying and sustaining patient engagement in a forensic psychiatric hospital
 BC Forensic Psychiatric Hospital
- Your Voice Counts: Training patients to be effective in designing the system BC Ministry of Health Services
- Engaging survivors to improve patient experiences throughout the cancer journey -Cancer Care Ontario
- Bringing a recovery focus to schizophrenia services through client narratives Centre for Addiction and Mental Health
- Multifaceted parent-to-parent support program within a Family Support Network -Glenrose Rehabilitation Hospital, Alberta Health Services
- Patient input on developing early intervention mental health services St. Joseph's Healthcare / McMaster University
- Patients are partners in improving experiences and outcomes of care at SMHC St. Mary's Hospital Centre
- Engaging patients and families to develop safety indicators Toronto Rehabilitation Institute

5.5 Alberta Project Promoting active Living and healthy Eating in Schools (APPLE Schools)

5.5.1 Description

The program is particularly aimed at schools in socioeconomically disadvantaged neighbourhoods. The program engages all stakeholders, including parents, staff and community members. The primary goals of the project are to improve health behaviours among children and to increase the capacity to promote health-related behaviours in schools, with the long term goal of preventing overweight and reducing the risk for chronic disease.

The main program activities include:

- Supplementing the health curriculum, (e.g. taste-testing, cooking clubs);
- Facilitating professional development;
- Organizing parent information nights;
- Increase daily physical activity (example recess and after-school programs, DPA bins);
- Implementing monthly campaigns on a variety of topics from "Be a Sleep Star" to
 "Create a Rainbow Lunch". Monthly campaigns include newsletters for parents, bulletin
 board displays in the school and morning announcements to all students and staff.
 Facilitators engage staff, students, parents and community members to develop action
 plans. Each school develops unique and targeted strategies based on their individual
 needs.

5.5.2 Impacts

Participating students had higher intakes of fruits and vegetables, lower caloric intakes, were more active and were less likely to be obese. These positive changes in health behaviours were also seen when compared to students elsewhere in the province. Nine of 10 schools implemented nutrition policies, and all 10 schools adopted daily physical activity policies. As of September 2011, APPLE Schools projects have expanded to 40 schools, with another 17 schools implementing a modified version of APPLE using the same research tools for measurement (Healthy Schools-Healthy Future).

5.5.3 References and additional resources

- http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=3026&lang=en
- http://appleschools.ca/Resources-to-Support-CSH
- Parent and student support for school policies that promote healthy eating and active living
- APPLE Schools June 2011 Progress Report
- KE Storey et al. (2011) <u>Implementing Comprehensive School Health: Teachers'</u>
 <u>Perceptions of the Alberta Project Promoting active Living and healthy Eating in Schools</u>
 <u>- APPLE Schools</u>

• <u>Comprehensive School Health in Canada</u>. CJPH 102(S2) 2010.

5.5.4 Related projects

- Annapolis Valley Health Promoting Schools: http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2544&lang=en
- Be Active Eat Well (BAEW): http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2623&lang=en
- Chaque jour, moi j'croque 5 fruits et légumes: http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=3031&lang=en
- CookShop Program: http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2342&lang=en
- Integrated Nutrition Program (INP): http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2341&lang=en

5.6 First Nations and Inuit Home and Community Care

5.6.1 Description

Developed in 1999, the Home and Community Care program is a Health Canada initiative whose goal is to work with First Nations and Inuit communities in developing comprehensive home and community care services that respect traditional, holistic and contemporary approaches to healing and wellness. The program does not duplicate services already offered in the communities; rather, it ensures the coordination and liaison with existing programs and services at the community and provincial levels in order to meet the growing demand for home care for members of First Nations and Inuit communities living with chronic and acute illnesses.

The program enables First Nations and Inuit people of all ages with disabilities, chronic or acute illnesses and the elderly to receive the care they need in their homes and communities. The program is primarily provided through contribution agreements with First Nation and Inuit communities and territorial governments and strives to be comparable to home and community care services offered to other Canadian residents in similar geographical areas.

Home and community care may include nursing care, personal care such as bathing and foot care, home support such as meal preparation, and in-home respite care, that is, caring for someone while family members have a rest. Care is based on assessed need and provided in the individual's home or community, allowing First Nations and Inuit to be independent and close to their loved ones.

5.6.2 Stages of implementation / critical service elements

Implementation of the program involved capacity building requirements from a capital, human resource and management infrastructure perspective; it entailed a process which required communities to undertake a local community home care needs assessment; develop an operational plan; and establish a service delivery plan. Community plans were assessed through

a Regional peer-review process prior to approval and implementation. The program is comprised of essential service elements delivered by trained and certified personal care and home health workers at the community level, supervised by registered nurses. The program is intended to coordinate with existing programs and services at the community and/or provincial/territorial levels. Essential service elements include:

- A client assessment process that includes on-going reassessments and determines client needs and service allocation;
- A managed care process that incorporates case management, referrals and service linkages to existing services provided both on and off reserve/settlement;
- Home care nursing services that include direct service delivery as well as supervision and teaching of personnel providing personal care services;
- Delivery of home support personal care services;
- Provision of in-home respite care;
- Established linkages with other professional and social services;
- Provision of and access to specialized medical equipment, supplies and specialized pharmaceuticals;
- The capacity to manage the delivery of the home and community care program;
- A system of record keeping and data collection to carry out program monitoring, ongoing planning, reporting and evaluation activities.
- An evaluation strategy consisting of three focused studies and an overall evaluation of outcomes achievement and cost-effectiveness.

Communities can also provide support elements, as long as essential service elements are provided. These support elements may include:

- Facilitation and linkages for rehabilitation and therapy services;
- Residential respite care;
- Adult day care;
- Meal programs;
- Home-based mental health services for long-term psychiatric clients and clients experiencing mental emotional illness;
- Support services to maintain independent living which may include assistance with special transportation needs, grocery shopping, accessing specialized services and interpretive services;
- Home-based palliative care;
- Social services directly related to continuing care issues;
- Specialized health promotion, wellness and fitness.

5.6.3 Strengths

- Improving the delivery of services;
- Capacity building;
- Collaboration and engagement of stakeholders;
- Collecting data on communities;
- Research and monitoring;
- Development of policies and sharing of knowledge;
- Communication and education;
- Quality development and preservation.

5.6.4 Challenges

Some communities, especially small and remote communities, experienced challenges that led to the loss of funding. The program was based on the idea that local people would be trained to deliver services in their own communities. Some regions struggled to complete the planning process and others completed after a long delay, and could not access training funds.

The budget for the program could not meet the identified needs. In addition, many communities had difficulty recruiting and retaining staff. They also experienced difficulty in hiring support staff because of low wage rates, the need for interns to live outside their communities for long periods of time to undergo training, and in some cases, the small number of people who had sufficient levels of education.

Hiring nursing staff was also hard, particularly for remote, isolated and northern communities. Many communities had difficulties with keeping staff, due mainly to a lack of wage parity with provincial home care or other services

In summary, the development and implementation of the program experienced challenges related to:

- The short time frame for planning and implementation;
- Difficulties with the reporting system;
- A funding formula that is not needs-based and therefore provides inadequate funds to small and/or remote communities.

5.6.5 Resource requirements

Human resources

• The program is delivered primarily by home care registered nurses, licensed practical nurses and trained and certified personal care workers.

Other resources

The program uses a Quality Resource Kit comprised of five handbooks, a Planning Resource Kit, a Standards Template Manual and a Policies Template Manual.

The TRAQ helps communities with no quality improvement (QI) and risk management (RM) processes in place to recognize problems and to draw up a plan for monitoring, evaluation and problem solving. They can learn to use the Plan-Do-Study-Act (PDSA) Cycle to resolve issues or problems related to the program, and learn to use risk management tools and processes.

Communities that already have QI and RM processes in place can use the kit to make these processes more effective and to link QI and RM indicators to regional health indicators. The kit also helps the community in obtaining and maintaining accreditation.

The program also provided funds for capital development in the first two years to help communities meet their basic start-up needs for equipment, supplies and infrastructure. Detailed information about this component was not found in the literature.

5.6.6 Time and skills requirements

A three-year start-up period was planned for the program. By the end of Phase 3 and the beginning of the 2002-2003 fiscal year, it was expected that the program would have been developed and implemented in all communities where there was an identified need for service. National office information shows that this goal had not been fully achieved, although much progress had been made. As of September 2003, most eligible communities (96%) were being funded by the program, while 78% of the eligible communities and 88% of the eligible population had access to full service delivery. The Northwest Territories, the Prairie provinces, Quebec and Nunavut had achieved the most extensive coverage, while Ontario, British Columbia, the Atlantic region and Yukon required additional time to fully implement the program.

The intervention does not require highly specialized training for individuals, but training is provided to communities as part of its implementation. An emphasis should be put on training to ensure that service delivery is safe and effective.

Regions were expected to develop comprehensive training plans outlining how they intended to use their training funding to assist communities to meet their needs for trained or certified staff. The project also requires the involvement of an interdisciplinary team that should be easily accessible in the context of the intervention.

5.6.7 Funding

The Program's average expenditures for the four-year period under evaluation (2008-2012) were approximately \$110 million annually. The Program is delivered in 657 First Nations and Inuit communities primarily by home care registered nurses, licensed practical nurses and trained and certified personal care workers.

The FNIHCC program has an overall budget of \$107 million (excluding other funding sources) and services are available in all parts of the country (i.e., in 98% of First Nation communities and 100% of Inuit communities).

At the program's inception, \$90 million dollars per year was allocated for the FNIHCC. Funding has increased over time to include additional allocations for nursing salary resources and annual operating increases. In 2010-2011, the program received \$107.1 million. It also occasionally

receives funding from other sources to supplement its existing work. All sources are not mentioned in the literature, but some have been identified:

- Between 2009 and 2011, the program received approximately \$612,000 from the timelimited Nursing Innovation Strategy to undertake activities to enhance collaboration and to enhance the wound-care knowledge and skills of FNIHCC nurses.
- In 2010-2011, the program received a little more than \$4.4 million per year for five years from the Aboriginal Diabetes Initiative to provide nursing training.

5.6.8 Impacts

The program has many benefits, including:

- Increased community autonomy, empowerment and responsibility;
- Improved responsiveness to community needs due to input from community members;
- Greater cultural relevance;
- Greater legitimacy for and use of the program among community members;
- Improved support from the political leadership;
- Familiarity with local culture and language;
- Ability to understand and meet the cultural needs of the community;
- Improved trust on the part of clients;
- Greater credibility for the program;
- Economic benefits for communities due to the employment of local people;
- Lower costs;
- Greater self-sufficiency and independence for communities.

5.6.9 Contact information

Kaniatarak'ta Riverside Elder's Home 518 Ste-Philomene, Kanesatake QC JON 1E0

Telephone: (450) 479-1115

Fax: (450) 479-1711

Centre Jeunesse des Laurentides in Kanesatake 118 Notre-Dame, Kanesatake QC JON 1E0

Telephone: (450) 479-8309

Fax: (450) 479-6497

5.6.10 References

- http://www.hc-sc.gc.ca/fniah-spnia/services/home-domicile/index-eng.php
- http://www.hc-sc.gc.ca/fniah-spnia/pubs/services/qualit-kit-trousse/index-eng.php

- http://www.hc-sc.gc.ca/fniah-spnia/pubs/services/index-eng.php#home-domicile handbook-guide
- http://publications.gc.ca/collections/Collection/H34-114-1-2004-2E.pdf
- http://www.hc-sc.gc.ca/fniah-spnia/pubs/services/fnihcc-psdmcpni/indexeng.php#sum_som
- http://publications.gc.ca/collections/Collection/H34-114-1-2004-1E.pdf

5.7 Network Mapping and Development

5.7.1 Description

Based on the Nexus Health "Connecting the dots" model (2008), mapping allows organizations to better see established connections and collaborations in their community of practice. The objective is to develop, expand and improve the network of professionals, institutions and strategic relationships contributing to a better supply of services in the targeted geographical area.

A mapping project takes several months to carry out and is similar to drawing up an inventory of resources and connections used by, or accessible to, the organization. Such an undertaking can be particularly useful and relevant to minority communities.

5.7.2 Impacts

The process leads to a better understanding of the needs for prevention and intervention in the community, and allows to seek alliances in order to change social structures of a community in the long term. In other words, mapping allows to explore solutions to identified shortcomings on the map of relationships within the community. Once the strengths and weaknesses of the network have emerged, the organization can undertake further steps to strengthen ties and collaborations, and increase services in the community:

- Where are the providers working in French, and where do we need them?
- Are the right connections in place? Are any key connections missing?
- Which links, providers or organizations can serve as a springboard to expand the service offering?
- Who are the people playing leadership roles in the community?
- Who are not, but could be?
- Who are the experts in process, planning and practice?
- Who are the mentors others seek out for advice?
- Who are the innovators? Are ideas shared and acted upon?

5.7.3 Contact information

Telephone: (416) 408-2249

Nexus Health 180 Dundas Street West, Suite 301 Toronto ON M5G 1Z8

5.7.4 References

- http://en.healthnexus.ca/topics-tools/community-engagement/network-mapping-network-development
- Connecting the Dots: A Handbook for Chronic Disease Prevention through Community Engagement.
 http://en.healthnexus.ca/sites/en.healthnexus.ca/files/resources/ctd_handbook.pdf
- Penelope Hawe et Laura Ghali. "Use of social network analysis to map the social relationships of staff and teachers at school", Health Education Research, vol. 23, n°1, 2008, p. 62-69. doi:10.1093/her/cyl162.

5.7.5 Related project

How Social Networks Predict Epidemics (video)
http://www.ted.com/talks/nicholas christakis how social networks predict epidemics

5.8 California Prevention & Education Project: HealthSpace Community

5.8.1 Description

The non-profit California Prevention & Education Project (CAL-PEP) based in Oakland and dedicated to prevention through education received \$248,000 from the US Department of Health and Human Services - Office of Minority Health for a project in San Francisco aimed at developing an online community to support the detection and prevention of drug use, risk behaviors, and contraction of AIDS. The project began in 2009 and was set to run for a period of three years.

The www.hypechat.org website was created, with links to Facebook and Twitter, a text messaging function and online blogging to promote and initiate discussions with targeted communities: people affected by AIDS, those at risk and those who are culturally isolated or in minority situations. The objective is both preventive and promotional, and provides for timely interventions.

5.8.2 Project impacts

The site received 46,088 unique visits over the three-year grant period. Testing occurred among 2,248 youth at 112 alternative educational sites. An additional 1,023 youth were tested and given results through additional educational workshops. Out of a total of 15 individuals who tested positive for HIV, all were linked to a primary care provider. The project also achieved a reduction in risk behavior: Of the 920 youth who participated in an HIV educational session and completed the survey, 62 percent wrote on the pre-post test quiz that they would modify at

least one key HIV risk behavior following their consultation of the site. The use of social media in this case was a highly effective method.

5.8.3 Contact information

Gloria Lockett Director 2811 Adeline, Oakland, CA 94608 Telephone: (510) 874-7850 http://www.calpep.org/

5.8.4 Reference

http://minorityhealth.hhs.gov/omh/content.aspx?lvl=3&lvlID=23&ID=9689

5.8.5 Related projects

http://minorityhealth.hhs.gov/omh/browse.aspx?lvl=3&lvlID=23

5.9 Alternatives for Girls: Love Chat

5.9.1 Description

Alternatives for Girls (AFG) is a Detroit community-based non-profit organization that has a proven track record of providing high-risk girls and women with pathways out of poverty and opportunities to transform their lives. Established over three years with funding of \$250,000, the Love Chat project addresses both primary health and chronic diseases by using technology to prevent infectious diseases, pregnancy and other risks among disadvantaged or minority girls and young women specifically.

The project focused specifically on African-American female youth Love Chat used traditional channels, as well as new technologies to engage the target population. The program researched existing internet outreach interventions and developed a curriculum for HIV-related education and outreach, and coordinated with partners to disseminate information. Peer educators were recruited and participated in weekly trainings to learn HIV prevention and intervention techniques. Peer educators would then conduct web-based outreach and workshops. Specific targets included reducing risky behaviors by 70 percent from baseline to follow-up.

5.9.2 Project impacts

A total of 118 youth were screened for HIV throughout the duration of this project. No one tested positive. Of the 530 workshop attendees, 85 percent indicated increasing general knowledge about HIV and AIDS. In addition, of the 22 individuals who served as Youth Peer Educators, 80 percent indicated modifying behaviors to decrease their own risk of HIV infection.

5.9.3 Contact information

Deena L. Policicchio
Project Director
http://www.alternativesforgirls.org/

5.9.4 Reference

• http://minorityhealth.hhs.gov/omh/content.aspx?lvl=3&lvlID=23&ID=9720

5.10 Integrated Care for Complex Populations

5.10.1 Description

Integrated Care for Complex Populations is a highly innovative practice within the Toronto Central (TC) Local Health Integration Network (LHIN). The practice involved creating a unique cross-sectorial group of organizations including primary care, specialty care, acute care, complex continuing care and rehabilitation hospitals, TC Community Care Access Centre (CCAC) emergency medical services, social services and others.

The program focuses on the 1-5% of frail seniors who account for 30-60% of healthcare costs. It aims to allow more clients to remain at home longer, in safety and comfort. In order to improve the quality of services provided the group started the process by asking the question "where are we failing older adults and their families?" The current program now focuses on integrating the services provided to clients on an individual basis.

A care team is now created around each client. The care teams include key partners in primary care, specialty care, and acute care, complex continuing care, rehabilitation, Toronto Central Community Care Access Centre (CCAC), emergency medical services, social services and others. Each team is quarterbacked by a Toronto Central CCAC care coordinator, who works with primary care to develop a coordinated care plan based on the priorities of the client and caregivers. The program is notable because it uses existing resources, and integrates many partners.

5.10.2 Impacts

The program has successfully reduced demand Alternate Level of Care beds, long-term care beds, Emergency Medical Services and acute care. The program has been successful in:

- Allowing individuals to live at home while increasing client satisfaction;
- Reducing the stress of family caregivers;
- Reducing the number of Alternate Level of Care beds by 50%;
- Reducing in hospital-to-Long-term care facility demand by 20%;
- Increasing the number of clients with high and very high Method for Assigning Priority Levels (MAPLe) scores being cared for in the community (over target);

The program is now on its 3rd generation, reaching more people, including children with complex care needs and end-of-life clients.

5.10.3 Contact information

E-mail: jodeme.goldhar@toronto.ccac-ont.ca

Promoter: Toronto Central Community Care Access Centre – Toronto Central Local Health Integration Network (LHIN)

5.10.4 References

- https://accreditation.ca/node/7438
- http://www.health.gov.on.ca/en/pro/programs/transformation/docs/medal/ministers
 medal team 2014.pdf
- http://www.health.gov.on.ca/en/pro/programs/transformation/docs/medal/ministers medal Integrated Client Care.pdf

5.10.5 Related projects

IHI Triple Aim: Alberta Health Services – Edmonton Zone: http://www.cfhi-fcass.ca/OurImpact/ImpactStories/ImpactStory/2015/03/12/ihi-triple-aim-alberta-health-services---edmonton-zone

IHI Triple Aim: Women's College Hospital: http://www.cfhi-fcass.ca/OurImpactStories/ImpactStory/2015/03/12/ihi-triple-aim-women-s-college-hospital

6 SENIOR CARE

6.1 More *Humanitude* in End-of-Life Program

6.1.1 Description

This end-of-life program is an innovative program designed and adopted by many seniors' homes (in Canada and elsewhere) in collaboration with residents, families and staff. It aims to offer attentive care to the slightest needs of the resident and the family throughout the end-of-life phase. Its design is based on best practices in end-of-life care and requires the involvement of the entire interdisciplinary team. According to their wishes, patients can remain in their room where they are surrounded by employees and roommates. To prepare the residents and their relatives, an annual meeting is organized to give information about the program.

The concept of "humanitude" was first used in 1980 in the United States by Freddy Klopfenstein. In 1989 a French geriatrician, Lucien Mias, was the first to introduce the term in care. Rosette Marescotti and Yves Gineste decided in 1995 to develop a new philosophy of care which they called the "philosophy of humanitude."

The methodology of "humanitude" is based on a number of principles of well-treatment:

- The tenderness of the visual exchange;
- The explanation of care to be performed on the patient even if the latter is not able to understand or respond;
- Touch is also a call for humanitude as "confirmation of our presence in the world", especially important when speech is no longer there;
- Verticality: standing position is what distinguishes the human. It has many benefits for the person, both psychological and physical, and at any age. An elderly person can and must live "standing".

In 2010, a team of the Centre de santé et de services sociaux de la Pointe-de-l'Île, guided by a "living environment" committee, endeavoured to improve the end-of-life accompaniment program using the "more humanitude" approach. The practice focuses on patients and families and promotes quality of life in nursing homes; all service elements make the end-of-life program original and creative. Since its implementation, over 150 residents have benefited from the accompaniment service. The staff is proud and engaged to use tact, sensitivity and ethics through these sensitive and important moments.

6.1.2 Stages of implementation / critical service elements

Residents remain in their room. The care team remains the same; it can adapt as it knows the particular circumstances and preferences of users.

The team of the living unit and the family are supported by an interdisciplinary team (occupational therapist, recreational technician, physical therapist, social worker, spiritual advisor, nutrition worker) during accompaniment.

A medical duty service provides pain relief without delay at all times. The team of spiritual care are also available at all times to support the resident and his family.

Accompanying volunteers receive annual training on supporting end of life. With this training, they can accompany lonely residents or offer respite to families. Coffee meetings are also organized to allow them to have a close monitoring.

An end-of-life kit is designed to provide more comfort to residents and their families. This kit is installed directly in the resident's room and contains softer linens and clothes, a radio for soothing music, bed throw for the family, a sleeper chair for relatives and an aromatic diffuser.

During the end-of-life period of residents, relatives periodically receive coffee and pastry rolls, packaged with particular care. In addition, talks are organized by seniors' homes to regularly collect the views of residents on the improvement of their living environment.

Three booklets are placed in the resident's room. The first is for the family and explains the symptoms related to end of life in simple terms. The second is a log where caregivers can write thoughts and the third is prepared for volunteers.

At the request of residents, the disposition of the body following death has been improved and made more respectful. The remains now leave the home through the main entrance, accompanied by an employee to the hearse and is covered with a funeral pall.

Following the death, a sympathy card is sent to the family, and professionals remain available for relatives. A commemorative monthly mass is held in the seniors home in memory of deceased residents.

6.1.3 Strengths

Residents and families contribute to the development of the practice. In addition, they regularly provide information on their needs. This allows stakeholders to better identify the needs and respond effectively.

The practice helps to empower residents and their families about their role in the delivery of health services. Encouraging the involvement of patients and families is increasingly promoted among healthcare and service providers because of its positive impact on outcomes for patients. The concept meets the five essential principles of humanitude:

- Zero forced care, no discontinuation of care
- Respect the uniqueness and intimacy
- Live and die standing
- Opening up the structure
- Living places, places of wish

6.1.4 Challenges

The challenges of the program can be summarized in the difficulty of residential facilities for dependent seniors to:

- Promote and affirm the quality of work and commitment toward well-treatment of health facilities and of social and medical services;
- Support an effort to improve the quality of life of people in compliance with regulations and best practice recommendations.
- Provide a solid reference point for the elderly, families, professionals and to guardianships and standards and pricing authorities.

6.1.5 Resource requirements

Human resources

- Volunteers trained for accompaniment;
- A team from the living unit and family;
- An interdisciplinary team: occupational therapists, recreational technicians, physical therapists, social workers, spiritual care providers and nutrition technicians.

Infrastructure and equipment

 In addition to the resident's room offering the degree of comfort required in the program, families and love ones must have access to a family room to rest, and a sleeper chair.

Other tools associated with the program

- Professionally-designed condolence cards, printed and in stock for a period of 3 years;
- The three booklets mentioned above are always available at the home's store.

6.1.6 Time and skills requirements

- The delivery of the program begins as soon as the need arises and lasts until the patient has deceased.
- The intervention does not require highly specialized training from individuals; however, training is available to all stakeholders as part of the implementation of the intervention.
- The required expertise is readily available in the context of seniors' care homes. The
 intervention requires the participation of an interdisciplinary team (occupational
 therapist, recreational technician, physical therapist, social worker, spiritual care
 provider, nutrition technician) that are easily accessible in the context of the
 intervention.

6.1.7 Funding

At the CSSS de la Pointe-de-l'Île, the program receives annual funding from its Foundation, which awarded \$160,000 for the development of the living environment over 5 years, including \$15,000 for the development of the end-of-life accompaniment program.

The annual costs associated with the end-of-life kit are in the range of \$2,000 to \$3,000 per year. Its use does not require additional human resources.

6.1.8 Impacts

Homes for the elderly that have chosen to train their staff in this practice affirm that it is possible to care for and accompany residents differently, including disoriented people with difficult behaviors.

Homes that act as pilots for deploying "humanitude" have measured the impact of the method and found a remarkable reduction in agitated behaviors before and after training with patients, a seven-fold decrease in neuroleptic medication intake, and a 200% improvement in residents' and caregivers' perception of well-being.

6.1.9 Rationale

Given the rate at which Ontario's population is aging, it is important to keep in mind that life in a nursing home is an important step in the lives of many seniors. An and-of-life program would be innovative in many ways for people who accompany family members during the last moments. When their life is about to end, seniors will live this last stage of their lives with their families and the team of their living unit. These moments are very emotional and patients need to receive special attention and specialized care, with sensitivity and "humanitude".

Indeed, the video series "My Health, My Language" (Quand la santé c'est aussi la langue!) - available on the website of the Consortium national de formation en santé (CNFS) at cnfs.net/video – shows that it was during the last moments of life that patients especially feel the overwhelming need to return to their own identity. They think and speak in their mother tongue, hence the need for them and their families to have access to quality support services in their language during these moments of great emotion.

Homes that act as pilots for deploying "humanitude" reported in the literature that the program shows great adaptability. Institutions wishing to implement it can learn from the experience of the CSSS de la Pointe-de-l'Île, as there is a very specific framework on which they could build.

The CSSS de la Pointe-de-l'Île is also available to share all of its tools – procedure for the disposal of remains, booklets, sympathy cards, contents of the kit, annual costs associated with this kit, training programs for nurses, professionals, personal care workers and volunteers – to interested institutions and provide communications support for the deployment and implementation of the program's measures in the living units.

6.1.10 Contact information

E-mail: claude.riendeau.pdi@ssss.gouv.qc.ca

6.1.11 References

- http://www.accreditation.ca/fr/l%E2%80%99accompagnement-en-fin-de-vie-plus-d%E2%80%99-%C2%AB-humanitude-%C2%BB (in French only)
- http://www.igm-formation.net/index.php?option=com_content&task=view&id=21&Itemid=40 (in French only)

6.2 Group Exercise Programs for Long-Term Care Homes

6.2.1 Description

The project consists of an exercise program offered to groups of four to ten residents by trained employees of the institution. These exercise sessions last about 45 minutes and are offered three times a week. The program was designed to maintain range of motion, improve strength, balance, flexibility, mobility and function of older adults. It is tailored to meet the needs of both high and low mobility residents. Classes are conducted in groups of 4-10 residents by trained facility staff for 45 minutes, three times per week. Four months of exercise led to significant improvements in mobility, balance, flexibility, knee and hip strength. With minimal training the program can be safely delivered at low cost by institutional staff and volunteers.

6.2.2 Stages of implementation / critical service elements

The feasibility and effectiveness of the program were evaluated on a group of 68 residents who were aged 80 years on average, in five institutions. Participants were classified into either high or low mobility, based on their score for the Timed Up and Go (TUG) test. People who take less than 20 seconds to complete the TUG are classified as participants with high mobility and those who take 20 seconds or more are participants with low mobility.

Exclusion criteria included recent cardiovascular event of vestibular disorder; uncontrolled hypertension or epilepsy; recent fracture; total blindness or deafness; recent admission to facility; scheduled surgeries or holidays in next four months. Participants must have the ability to stand with minimal assistance and to follow simple instructions/demonstrations. The use of walking devices or wheelchairs, dementia and incontinence are not considered grounds for exclusion.

Inexpensive and easily transportable exercise equipment such as weights and elastic resistance exercise bands were used. Their use requires less supervision and assistance, and are easily manipulated by participants. Courses are offered to groups of four to ten residents by trained employees of the institution, and last 45 minutes, three times a week. The exercises are structured and repetitive. Constant monitoring (both verbal and visual) is required on the part of the trainers, regardless of an individual participant's mobility category.

The leisure and recreation staff in each institution participated in a training workshop on physical activities for seniors. However, the removal of barriers inherent in this kind of project requires the commitment and continuous support of frontline staff, administrators and medical directors as well.

6.2.3 Strengths

- Promotion of mobility among seniors
- Socialization
- Group exercises
- Chronic disease prevention
- Prevention of depression and stress
- Elimination of isolation
- Increased self-esteem
- Input and collaboration between leisure/recreation staff, nurses, assistants and volunteers to meet the mobility needs of residents
- Elimination of stereotypes
- Promoting a healthy lifestyle
- Increasing adaptability
- Education and skills development

6.2.4 Challenges

- Limited funds for the purchase of exercise equipment, and the hiring a project delivery agent
- Interruption of outdoor exercises due to inclement weather
- Lack of exercise training to care providers
- Safety/security issues (the activity also includes close observation for seniors with cognitive impairment)
- Differences in physical and cognitive abilities among residents
- Difficulty in motivating participants

6.2.5 Resource requirements

Human resources

• Leisure/recreation staff, nurses, nursing assistants, a delivery agent, a trainer of trainers, and volunteers.

Infrastructure and equipment

• An exercise room and portable, inexpensive exercise equipment (weights, elastic exercise bands, etc.)

6.2.6 Time and skills requirements

Classes are conducted in groups of 4-10 residents by trained facility staff for 45 minutes, three times per week. The exercises are structured and repetitive. The activity must be carried out on an ongoing basis. Information on the time required to develop the program is not available.

The commitment and ongoing support from frontline staff, administrators and medical directors seem necessary. However, with a minimum of training the program can be delivered safely and inexpensively by staff and volunteers.

6.2.7 Funding

Information on the budget required to implement the program is not available. However, it is stated that governments and the private sector could fund the program.

6.2.8 Impacts

The results show that residents had greatly improved their mobility, balance, flexibility, and knee and hip strength after four months of exercising. The authors concluded that the residents, even those who are physically frail or suffer from incontinence and/or mild dementia may respond positively to this exercise program.

6.2.9 Rationale

Aging is a natural process of declining physical capabilities. However, physical inactivity among seniors can have serious pathophysiological consequences, such as muscle atrophy, balance disorders, orthostatic hypotension, cardiorespiratory and gastrointestinal problems, susceptibility to pressure sores and urinary tract infections. It can also cause psychological problems such as apathy, stress, depression and cognitive decline. Immobility may precipitate admission of some seniors in homes or long term care facilities. In the absence of lifestyle changes, this inactivity can continue to cause a decline in health following admission.

Many residents become dependent on wheelchairs or restrain from physical activities because of their fear of falling. These seniors no longer have the chance to get dressed independently, to walk alone to the dining room or make their bed. Adapted physical activity is one of the best ways to improve several aspects of an elderly person's quality of life. In addition, rehabilitation therapists recognize the importance and the need for mobility and exercise in the daily lives of residents.

Flexibility and muscle strength are essential to mobility. They enable a person to accomplish the majority of the basic tasks of daily living. A person who strives to maintain or develop both components of physical fitness can remain independent for a longer period. In order to improve cardiorespiratory and muscular fitness, bone and functional health, reduce the risk of NCDs, depression and cognitive decline, the WHO¹ has made the following recommendations for people aged 65 and above:

¹ http://www.who.int/dietphysicalactivity/factsheet_olderadults/en/

- Older adults should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate- and vigorous-intensity activity.
- Aerobic activity should be performed in bouts of at least 10 minutes' duration.
- For additional health benefits, older adults should increase their moderate-intensity aerobic physical activity to 300 minutes per week, or engage in 150 minutes of vigorousintensity aerobic physical activity per week, or an equivalent combination of moderateand vigorous-intensity activity.
- Older adults, with poor mobility, should perform physical activity to enhance balance and prevent falls on 3 or more days per week.
- Muscle-strengthening activities, involving major muscle groups, should be done on 2 or more days a week.
- When older adults cannot do the recommended amounts of physical activity due to health conditions, they should be as physically active as their abilities and conditions allow.

6.2.10 Contact information

Information not available.

6.2.11 References

- http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2947&lang=en
- http://biomedgerontology.oxfordjournals.org/content/54/12/M621.full.pdf+html
- Effect of home-based well-rounded exercise in community-dwelling older adults. Journal of Sports Science and Medicine. 2005; 4:563-571

6.2.12 Related projects

 Home-Based Well-Rounded Exercise Program (WREP) for Community-Dwelling Older Adults: http://cbpp-pcpe.phac-aspc.gc.ca/~cbpp/public/wp-content/themes/wet-boew306/print-interventions.php?pID=2957&lang=en

6.3 West Prince Telehospice

6.3.1 Description

In addition to the Rural Palliative Home Care Model project, Prince Edward Island has implemented the West Prince Telehospice pilot project to provide support to a dying person at home 24 hours per day. West Prince TeleHomeCare program began in 1999 as a pilot project in TeleHospice. The Telehospice is the use of telemedicine technology to provide services to patients in palliative care. It offers an innovative solution to the challenges of delivering cost-effective and high quality services for end-of-life patients. Through the use of an innovative video-conferencing system, nurses can provide care, instruction and education to patients

through a telephone line and two-way video screen. This technology allows caregivers to transmit video images of patients to professionals who work off-site and thus provides them with the information they need to help care providers.

Using a telephone line and fully interactive audio visual equipment, nurses and other health professionals can monitor and assess the health/vital signs of clients and provide education to clients living at home. Blood pressure, heart rate, weight and blood oxygen levels can be monitored through attachments. The pilot project was created to compensate for a shortage of nurses in the area, increasing the ability of existing staff to monitor terminally ill patients living in rural and isolated areas of the community who wish to stay at home. Due to its success, the program has been expanded to include patients with complex health needs such as mental health, diabetes, congestive heart failure, and chronic obstructive pulmonary disease. Although Telehospice shares many similarities with TeleHomeCare, it is different in many ways.

6.3.2 Stages of implementation / critical service elements

Following the announcement of Canada's first palliative home care network by Digital Telehealth Inc. (based in Dartmouth, Nova Scotia), the company was approached by the West Prince Health authorities for the implementation of the initiative. Digital Telehealth Inc., West Prince Health, the Canadian Palliative Care Association, Island Tel and Island Hospice partnered to implement a system that promotes the efficient use of technology to meet the palliative care needs to end-of-life patients.

The technology uses a bandwidth system (low-bandwidth POTS: Plain Old Telephone Service) which promotes two-way viewing and allows care providers to regularly monitor, via the system's interactive devices, the patient's temperature, blood pressure, pulse, heart and lung rhythms, blood sugar, level of blood oxygenation and electrocardiograms. The following service elements are essential:

- Backlight digital phone with an automatic dialing system that can make it easier for patients to use.
- Equipment for the frequent taking of vital signs (blood pressure, blood sugar, pulse, temperature) with telecommunications capacity.
- Fully equipped Telehealth workstation that can measure the range of physiological parameters and transmit these readings to a central nursing station, which allows effective monitoring of the condition of patients. The live video system is on during faceto-face consultations, and shut off during the collection and transmission of physiological data. A digital camera can be used to send images through the system.
- Videophones phones with video capacity which allow clinicians / care providers and patients to see each other and talk directly. Clinicians can also use these phones to demonstrate care activities and give instructions.
- Pre-programmed devices for clinical care, such as ambulatory infusion pumps.
- Other educational or comfort measurement tools such as audio and video cassettes.

The range of potential service elements for home telehospice delivery continues to grow and to benefit from technological advances. When an institution chooses to use all or part of these

tools in palliative care, it must aim to constantly improve its ability to meet the expectations of users of the program. Realistic expectations usually include the ability to produce rapid assessments and interventions on patients, and a growing ability to provide instructions to caregivers.

6.3.3 Strengths

- Improved health outcomes
- Increased satisfaction
- Sustainability
- Improved home care
- Development of a sense of security among patients and families
- Increased autonomy of caregivers
- Reduced number of avoidable visits to the emergency department.
- Promotion of healthy lifestyles
- Improvements with regard to the fragility of aging or end-of-life populations
- Improved home access to drugs for palliative care
- Decreased stress of caregivers
- Establishment of a real, warm human relationship between patients and healthcare professionals
- Reduction of family separations, by enabling the patient to remain at home

6.3.4 Challenges

- Remote management of patient's and caregiver's stress
- Ensuring that the equipment is used properly and safely
- Constantly ensuring that the program provides an adequate level of comfort for patients and family caregivers
- Equipment failures
- Perception that telehospice services are a kind of mechanization of palliative home care
- Balance between the level of technical skills of caregivers and the level of skills required for the use of telehopice equipment
- Need to minimize the physical, mental and financial costs for caregivers

6.3.5 Resource requirements

Human resources

Nurses are the primary providers of Telehospice. Depending on the needs, other professionals could contribute, such as specialists and IT professionals which provide technical support.

Infrastructure and equipment

- Videoconferencing system (a phone line and two-way video capability)
- Equipment for the frequent taking of vital signs
- Telehealth workstation
- Pre-programmed devices for clinical care

6.3.6 Time and skills requirements

The literature does not provide information on the time required to implement the intervention. A partnership with the Ontario Telemedicine Network could provide further information. Literature indicates that patients generally pass away after a few weeks the service. Telehospice does not prolong life expectancy of patients; the service is designed to give end-of-life patients and their families the needed comfort and support when the decision to die at home has been made.

The required expertise must be readily available in the context of healthcare and services for the elderly and other end-of-life patients. The intervention primarily requires the participation of a nursing team, volunteers and possibly other health professionals (specialists) that are easily accessible in the context of the intervention.

6.3.7 Funding

The project required an initial investment of \$126,000, partly funded by Health Canada.

6.3.8 Impacts

The results indicate that patients like the service because they stay at home, with little disruption to their lives, but can consult with medical staff as required. Though care is facilitated through technology, patients like the interactive component and feel personally connected to providers that they can see and hear in real time during their daily exchanges. Caregivers also appreciate the ability to consult with nursing staff, as this gives them much comfort in this emotional moment.

Since launching the tele-hospice service, the West Prince Health region has seen a 73% reduction in days of hospitalization, 15% fewer emergency room visits, 46% fewer hospital admissions and a 20% drop in doctor's office appointments among clients. Model elements that appear to contribute to cost-effective, accessible, quality care with greater client satisfaction include 24-hour access to multidisciplinary provider teams, integration across the continuum of health, and access to all home care services including full coverage for drugs, supplies, and equipment.

The project has also garnered national and international recognition as a model for the cost-effective use of technology to address the health-care needs of persons living in rural and remote locations. In 2000, the project won a gold medal in the category of innovative services of the "Distinction Awards". The results indicate that the Telehospice system allows a nurse to make 15-20 visits per day for an estimated cost of \$35 per visit, whereas with the traditional system (in-person visits at home), it can carry a maximum of eight to ten visits with a cost estimated at \$54 per visit.

In Michigan, studies estimated the costs for traditional palliative care as well as those associated with the launch and operation of a telehospice service. The costs were recorded on two separate three-month periods. For the first study period, costs were measured for traditional home visits in palliative care. During the second period, expenses were followed during traditional visits (in person) and telehospice visits. For traditional care, costs per visit were respectively \$126 and \$141, while costs for telehospice visits averaged \$29 per visit.

6.3.9 Rationale

Many developed countries are undergoing a major revolution in terms of home care and telemedicine. In Canada, this revolution is due to the aging population and the financial pressure it exerts on the health system, among others. Based on statistics, it is reasonable to expect that the percentage of seniors in the population will increase, but forecasting healthcare needs of this aging population is not simple. Recent studies show that older people are over-represented in the use of healthcare, especially home care. The increase in the number and proportion of seniors in the population suggests that future home care demand will increase, which will inevitably affect family caregivers, and thus the workforce.

The increase in home care supported by technological advances (including the telehospice service) promotes deinstitutionalization, a reduction in costs and hospital stay, the improvement of quality of care, and an increase in user satisfaction. The home telehospice service eases the lives of four main groups of people, namely recipients of care, health professionals, support workers and family caregivers. The impact of these services on caregivers can be direct or indirect. For example, a direct impact would be the results obtained by offering a support service to caregivers. An indirect impact on caregivers would come through beneficiaries of care or formal home care providers, i.e. anything that may influence the nature and extent of the burden of care.

As with TeleHomeCare, studies on telehospice services show that they can be seen as another technological advance that could be used to support home care because it offers more frequent contact with patients and the ability to provide care in a timely manner.

6.3.10 Contact information

West Prince Health Region

Digital Telehealth Inc.

6.3.11 References

- https://accreditation.ca/west-prince-telehospice
- http://www.phac-aspc.gc.ca/cphorsphc-respcacsp/2008/fr-rc/cphorsphc-respcacsp07i-eng.php
- http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2001.tb00128.x/full
- http://www.epistemonikos.org/en/documents/d7d989008a8d915bbe09a60751620897
 26f5ce8b
- http://www.epistemonikos.org/en/documents/b54154b4373054c03d934bacbe045358
 http://www.epistemonikos.org/en/documents/b54154b4373054c03d934bacbe045358
 http://www.epistemonikos.org/en/documents/b54154b4373054c03d934bacbe045358
 http://www.epistemonikos.org/en/documents/b54154b4373054c03d934bacbe045358
- http://www.canhealth.com/apr00.html#anchor23451

6.3.12 Related projects

Telehospice in Michigan: http://www.ncbi.nlm.nih.gov/pubmed/15188918

6.4 Seniors Awareness Program

6.4.1 Description

The program consists of educational sessions offered on a monthly basis to seniors living in a local housing complex for the elderly. Subjects are varied and include sessions on safety related to medication and treatment compliance, Alzheimer's disease, the prevention of falls in the home, safety devices (hip protectors, bed alarms, etc.) and osteoporosis. Before the flu season, the focus is on the importance of proper hand hygiene techniques, recommendations for influenza and pneumococcal vaccination, norovirus and proper manners when coughing and sneezing. A hand sanitizer is distributed to each participant, along with a demonstration for proper use.

During the sessions, a registered nurse and licensed practical nurse check the blood pressure and glucose levels of participants. They distribute information on recommended blood pressure and blood sugar levels. Information on the prevention and management of hypertension and diabetes is also offered.

6.4.2 Stages of implementation / critical service elements

- Educational sessions on a monthly basis addressing various issues and practices to improve seniors' health.
- Measurement of blood pressure and glucose level of the participants.
- Distribution of information on recommended blood pressure and blood sugar levels.
- Information on the prevention and management of hypertension and diabetes.
- Education about the importance of good hygiene techniques and vaccination recommendations.
- Distribution of disinfectants for hands and demonstration of techniques to use.

- Organizing a brunch for seniors.
- Offering a snack and transportation for participants.
- Evaluation of the program after a series of sessions.

6.4.3 Strengths

- Innovative and original;
- Focusing on the user;
- Facilitates socialization among participants;
- Facilitates the creation of links between participants and health workers;
- Easy to evaluate;
- Visibly able to show the expected results;
- Sustainable;
- Adaptable to other agencies;
- Offers the partnerships opportunities between institutions.
- Offer healthcare providers the opportunity to share their knowledge and give back to the community.
- Optimizes community involvement.

6.4.4 Challenges

The literature does not provide information on the challenges associated with the intervention. An interview with the program developers could give an opportunity to further develop these parameters.

6.4.5 Resource requirements

Human resources

- Registered nurse
- Registered practical nurse

Other resources

• Transportation, community hall, fact sheets, hand sanitizers and a leisure/recreation service.

6.4.6 Time and skills requirements

The literature does not provide information on the time required.

The intervention does not require highly specialized training from individuals, but training must be provided to healthcare providers as part of the implementation of the intervention.

The required expertise must be readily available in the context of local housing complexes for the elderly and in communities. The program requires the involvement of a team of registered nurses and licensed practical nurses that are easily accessible in the context of the intervention.

6.4.7 Funding

The program was not funded directly.

6.4.8 Program impacts

The project evaluation reported a positive response from the participants. They enjoyed the educational aspect and snacks, as well as the social aspect of the event. In addition to added value to the lives of seniors in the community, the project gives care providers a sense of knowledge sharing and being useful to the community. Project strengths are that it creates a link with seniors which allows them to know they can contact the institution or project developer to get information and support.

6.4.9 Rationale

Ontario's population is aging at a faster rate than ever before and its age structure will undergo profound changes over the next two decades. It is estimated that in 2036, the senior population will reach about 4.2 million people, or 23.4% of the total population of the province². Although some studies report that, in general, Francophone seniors perceive themselves in good physical and mental health, the perception of good health can markedly decrease with age and many other factors (body mass index, eating habits, lifestyle, chronic diseases, etc.).

However, it is possible to help seniors maintain their good health. It is therefore reasonable to take steps to avoid situations where seniors end up confined to a bed or chair because of a bad fall, severe flu or other circumstances that may affect their wellness.

Seniors are the memory of the community. They should therefore be regarded as an asset and get all the consideration they deserve. In Ontario and Canada, many studies focus particularly on attitudes to preserve the dignity of seniors and value their wealth, provide them with independence and security, and enable them to thrive. The awareness and prevention program of the Mental Health Centre Penetanguishene is especially mindful of this well-being of the elderly.

There is no age for being cautious. Prevention remains the surest way to protect the elderly. Empowering seniors by providing information on various safety issues, proper lifestyle, compliance with medication, Alzheimer's disease, the prevention of falls in the home, safety devices and osteoporosis while increasing their knowledge of the programs and services offered in the community could help optimize their quality of life. These awareness-raising and prevention activities could also support the many initiatives aimed at improving healthcare services.

Presentations or educational sessions may be organized in community centers and retirement homes, among other venues. Information kiosks can also be set up in parallel to activities

Brynaert Brennan and Associates

² http://www.otf.ca/fr/knowledgeSharingCentre/resources/aging_population_FR.pdf

focusing on prevention. To this end, the program must provide a variety of informative documents and can even designate a professional who will be on site to answer questions from participants.

6.4.10 Contact information

E-mail: gscott@mhcp.on.ca

Mental Health Centre Penetanguishene

6.4.11 References

http://www.accreditation.ca/fr/node/6516 (in French only)

6.4.12 Related projects

Various projects of the Manitoba Seniors and Healthy Aging Secretariat: http://www.gov.mb.ca/shas/elder_abuse/provincial.html

« Bien manger pour rester en santé » healthy eating program: http://www.cssslaval.qc.ca/general/bien-manger-pour-rester-en-sante.html (in French only)

Répertoire des activités de prévention/promotion destinées aux personnes âgées sur le territoire du RUIS de l'Université de Montréal 2e édition:

http://www.ruis.umontreal.ca/sites/default/files/Comites/Vieillssement/Repertoire activites prevention promotion 3dec2012 FINAL.pdf (in French only)

7 CHRONIC DISEASES

7.1 Bringing chronic disease self-management to rural and remote regions in Rocher-Percé

7.1.1 Description

This innovative practice was established to improve the effectiveness and efficiency in the management and prevention of chronic diseases of the population of Rocher-Percé, a remote and underserved rural area in Quebec. Approximately 60% of clients are seniors, and chronic diseases are a significant problem given risk factors such as obesity, hypertension, high cholesterol levels, sedentary lifestyle, alcohol abuse, and smoking.

Accessing treatment—especially for cardiovascular disease, pulmonary disease, diabetes, and renal disease—is a problem. There is a small team at the health centre (the Centre de santé et des services sociaux du Rocher-Percé) with limited capacity and resources. Specialized resources are far away in Montreal, Quebec City, or Rimouski. The Chandler Hospital emergency department was overloaded, which was costly for the health centre. In addition, programs were not operating efficiently given that there were separate clinics and staff for diabetes, cardiac problems, lung, and renal problems; chronic diseases were not being addressed holistically and staff were not communicating.

The working partnership between Pfizer and the regional health center of Rocher-Percé resulted in funding by the Quebec government of a proposal to transform the outdated, siloed and reactive service delivery model, based on the internationally recognized Chronic Care Model (www.improvingchroniccare.org). The model that was put in place is a collaborative effort involving an interprofessional team (dietitian, registered nurse, and kinesiologist).

An intensive three-month holistic program was created. Instead of looking at a patient's conditions on an individual basis and developing a different treatment plan for each condition, the interprofessional team develops a single treatment plan to address all the conditions effectively. With a referral from the doctor and follow-up communication where the team reports information such as blood pressure and diabetes status, medication and other adjustments are made.

The program includes a healthy lifestyle focus (exercise, good nutrition) and patients are educated (in groups) to better understand their health situation. Patients are seen twice a week at a clinic or at a local gym in their community—similar to a mobile clinic. It's very intensive; for example, staff review daily eating habits with clients, who bring in their food products so labels can be read together. The goal is to make individuals proactive in their treatment so they understand why a particular food is or is not a good choice.

Exercise, nutrition, how chronic diseases affect the body, and medication management are all part of the teaching. Clients also receive written information to take away. After the three-month program is completed, the team is available for support but not regular care, making staff available to start up a new group.

7.1.2 Stages of implementation / critical service elements

- Indoor interventions: these activities require four service points (gyms); about 50 patients have been supported, 10 to 15 patients per gym;
- Self-management support (telecare);
- Service delivery model that takes the approach of a "mobile clinic";
- Decision support through the issuance of collective prescriptions;
- Information systems: Cortex and locally tailored tools.

The intervention includes three main phases: preparation, indoor activities and maintenance (monitored quarterly). The development and implementation process required partnerships with the public and private sectors.

7.1.3 Strengths

- Improves the efficiency of management of chronic diseases in remote rural areas;
- Promotes teamwork between an interprofessional group of nurses, dietitians and kinesiologists who work in collaboration with doctors;
- Improves access and delivery of services to rural and remote communities;
- Promotes proactive involvement of patients in the care and treatment of diseases;
- Adopts a mobile team approach as needed;
- Promotes physical activity and healthy eating to communities;
- Can be applied and transferred to other environments;
- Optimizes internal resources of the health center and utilizes community resources;
- Involves partnership with the private sector and existing partners;
- Creates productive interactions with the formation of a ready and proactive clinical team and the empowerment of patients who are informed, active and motivated.

7.1.4 Challenges

- Challenges of partnership, which is the main success factor;
- Ability to establish and maintain partnerships between various stakeholders;
- Challenges of interdisciplinarity in a rural context.

7.1.5 Resource requirements

Human resources

 An interdisciplinary team consisting of physicians, dietitians, nurses, nutritionists and kinesiologists.

Infrastructure and equipment

- Collective transportation;
- Community hall or gymnasium;
- Awareness tool;
- Telecare equipment.

7.1.6 Time and skills requirements

Preparation (approximately 1 month)	Indoor activities (13 weeks)	Quarterly monitoring (15 months)
Capacity: 50 patients (10-15 per gym). Referral / direct contact. Initial assessment. Preparation of tools and records.	Two sessions per week: 60 minutes of exercise 20-30 minutes of health clips 10-15 minutes of self- monitoring. Regular follow-up. Telecare. Individual intervention.	Post-program follow-up: quarterly assessments, one in-office consultation, one revision. Complementary activities: Grocery shopping and conversation.

The implementation of the practice requires collaboration involving an interprofessional team (dietitian, registered nurse, and kinesiologist) that develops a single treatment plan to address all the conditions effectively. As part of the implementation, training is provided to care providers, users, and to the extent possible, the family or relatives of the users. The required skills should be easily accessible in the context of the intervention.

7.1.7 Funding

The literature does not provide information on the project budget, but shows that its development and implementation was supported by the province's Ministry of Health and the private sector.

7.1.8 Impacts

Between 2011 and 2013, the program conducted experiments on three cohorts of patients. Each cohort included about fifty patients. The results indicate that patients' conditions are improving with reduced use of medication, reduced levels of hypertension, lower cholesterol levels, better-controlled diabetes, weight loss, and a change of lifestyle including less smoking. As a result, fewer specialized services are required including surgery. Feedback from physicians suggest this program is having positive results as patients are seen less frequently.

7.1.9 Rationale

The Rocher-Percé project is a program that aims to improve effectiveness and efficiency in the management and prevention of chronic diseases through the collaborative work of a multidisciplinary team that supports physicians in the management of people with multiple morbidities. The project also aims to optimize the internal resources of the health center and to leverage community resources. The intervention shows great adaptability as it has been implemented in different contexts and with diverse populations or different providers. Project values are summarized in the following points:

- Services that are closer to the community, the treatment sites are spread over the territory and are supported by a mobile team;
- Forming an interdisciplinary team (kinesiologist, nutritionist, nurse) that develops a common treatment plan;
- Forming a team specifically dedicated to the treatment of people with more than one chronic disease;
- Self-monitoring education and empowerment in the practice of physical activity;
- Involvement of the caregiver and the patient's social network;
- Education about lifestyle and risk factors;
- Health awareness-raising activities open to the public.

Rocher-Percé is a typical remote rural area that show similarities with parts of Erie St. Clair and the South West. The region's population is scattered over a vast territory, the workforce is small and some specialized resources and expertise are scarce or remote. In addition, approximately 60% of patients are elderly people and chronic diseases are a major problem given risk factors such as obesity, hypertension, high cholesterol, physical inactivity, alcohol abuse and smoking.

The literature indicates that chronic diseases are one of the biggest challenges facing the Ontario health system, especially with the rapid aging of the Ontario population. Nearly four million Ontarians aged over 45 years have a chronic illness or disorder and nearly 70% of them have at least two chronic conditions. The prevalence and magnitude of chronic diseases therefore threatens the future sustainability of the province's health system.

Helping patients to better self-manage their chronic diseases could help improve health results and quality of life while reducing the burden of these diseases on the entire health system. To achieve this, it is essential to transform a reactive system to a proactive system by well-planned interactions and monitoring to ensure effective and efficient care. To be effective, the intervention must be able to adapt the current delivery model to the characteristics of the service area and the needs of people with chronic health problems.

7.1.10 Contact information

Tim Sutton

Centre de santé et des services sociaux du Rocher-Percé

E-mail: tim.sutton.pabok@SSSS.gouv.qc.ca

Telephone: (418) 680-3307

7.1.11 References

- https://accreditation.ca/bringing-chronic-disease-self-management-rural-and-remote-regions-rocher-perc%C3%A9
- http://www.improvingchroniccare.org/

7.1.12 Related projects

Living Healthy Champlain – Patient self-management of chronic conditions

http://www.health.gov.on.ca/en/pro/programs/ecfa/action/primary/pri_champlain.aspx

http://www.livinghealthychamplain.ca/

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7.2 Improving the treatment of diabetic patients using telemedicine

7.2.1 Description

The DiabeTIC telemedicine platform provides a response to the challenges of improving treatment of diabetes and ensuring better control of health costs. DiabeTIC is equipped with intelligent systems and integrated services, and provides treatment and follow-up for diabetic patients thanks to a system of two-way communication between patients and healthcare professionals. Patients measure their sugar levels using a glucose meter integrated into their iPhone or computer and send these readings to healthcare personnel, who interact with the patients in response. Using the DiabeTIC platform, patients can also access a wide range of services: nutritional and physical exercise programmes, questionnaires, books, etc. They can therefore broaden their understanding about the condition and learn to manage it better. For patients, DiabeTIC is a simple tool that is easy to manage, which they can use without any hassle or restriction wherever they are (travelling, on holiday, etc.).

7.2.2 Stages of implementation / critical service elements

The project was a collaboration between the Spanish subsidiaries of Orange Healthcare and Sanofi, who developed a new solution: The DiabeTIC platform. This project is expected to increase patients' autonomy in the management of their diabetes while strengthening the relationship with the care providing team. Hospital and private clinical sites are involved in the project's assessment.

The information available on the practice do not allow to further develop this aspect.

7.2.3 Strengths

- Involvement of patients in the management of their condition;
- Better understanding of the disease by the patient;
- Improved service delivery;

- Lower costs for the system;
- Decrease in visits to the doctor;
- Improved remote service delivery;
- Provision of integrated and effective solutions for patients and professionals.

7.2.4 Challenges

- The ability of patients to get a smart phone;
- Access to and familiarity with technology;
- Technical difficulties related to the internet connection;
- Access to the internet, in some areas.

7.2.5 Resource requirements

Human resources

- IT and/or telecommunications support officers;
- Delivery agents;
- Health professionals (nurses, medical specialists);
- Application developer.

Infrastructure and equipment

- Online platform;
- Application for mobile phone;
- Data collection facility or system

7.2.6 Time and skills requirements

Information not available.

7.2.7 Funding

Information not available.

7.2.8 Impacts

For patients, DiabeTIC provides the security of regular, personalised monitoring at their fingertips, through regular communication with healthcare personnel. By being more involved in the management of their condition, patients gain increased independence and, as a result, better quality of life.

For healthcare professionals and entities within the health ecosystem, the benefits can be summed up in three words: reliability, optimisation and proximity.

 RELIABILITY of a global solution that heralds a new healthcare model in a context where the viability of national health systems represents an ongoing challenge for the public authorities

- OPTIMISATION of the organisation of work through a reduction in hospital visits and consultation duration
- PROXIMITY to the patient thanks to the two-way communication system and better monitoring of prescriptions.

7.2.9 Rationale

Against a background of budgetary pressure and in the light of population ageing – one of the major causes of the onset of diabetes – the challenge is twofold: improving treatment of the disease and ensuring better control of health costs. The DiabeTIC telemedicine platform provides a response to these challenges.

The platform offers integrated and effective solutions to the patient and the healthcare professional, to improve the quality of life of the diabetic patient. It also helps public authorities in their ongoing effort to find solutions to ensure the sustainability of the national health system. It also promotes:

- Improved communication between people with diabetes and health care professionals.
- Strengthened communication and coordination between health professionals.
- The development of effective self-management skills in people with diabetes.
- Reduced barriers to effective treatment.
- Better psychological support for people with diabetes.

7.2.10 Contact information

Marc-Antoine Lucchini General Manager Sanofi Spain and Portugal

7.2.11 Reference

• http://healthcare.orange.com/eng/Orange-Healthcare/discover-e-health/all-use-cases/How-can-we-improve-the-treatment-of-diabetic-patients-using-telemedicine

7.3 Patient access to personal health information for the selfmanagement of asthma

7.3.1 Description

This project is in its second implementation phase, but is not recruiting new participants. It will enable and assess patient access to personal health information and electronic health records (EHR) by developing a mobile asthma self-management application and integrating it with a consumer-oriented platform, as well as electronic medical records (EMR) of the local asthma program. It will allow the exchange of confidential data with other users of the application, care providers and families.

The project is funded by Canada Health Infoway and carried out through collaboration between the Ministry of Health and Long-Term Care of Ontario, the Ontario Lung Association, TELUS and

the Lawson Health Research Institute. The intervention began in February 2013 and is planned to end in March 2016. The aim is to demonstrate that a mobile application and the platform together contribute to improving the life of asthma patients more than conventional methods. The *breathe* app is currently not available to the general public. A benefits evaluation study is in process involving 400 participants from multiple locations across the province. The relevance of the intervention is based on the reduction of unplanned medical visits by patients.

7.3.2 Stages of implementation / critical service elements

This study is a multi-centre, randomized controlled trial comparing a web-based (Smart phone mobile device, tablet and/or personal computer PC) asthma action plan application to best practice/usual care within an asthma program. The study will enrol approximately 400 patients in total at all study sites. The aim is to have people with asthma monitor their symptoms, triggers of asthma attacks and use of medication; this is supported by an action plan prepared by their doctor, who helps them control the symptoms of the disease.

As part of this initiative, the data in the control group will be compared with those of all the people with asthma in Ontario using data obtained from the Ontario Asthma Surveillance Information System (OASIS). To participate, patients must be aged 18 or over, be familiar with the technology, complete a consent form and be proficient in English (reading and writing). People with other conditions such as cystic fibrosis, chronic obstructive pulmonary disease and bronchiectasis are not eligible to participate. All protocols / procedures used in the project were approved by the research ethics committees of the academic institutions involved. The collected personal information is treated confidentially and used only for the purpose of the research.

Participants use their smart phones or the platform to record in real time the asthma control measures (symptoms, medication use, factors that trigger an attack, etc.). Data from participants is collected for a period of 12 months; participants may withdraw from the program before the end of collection. The data is transmitted immediately after entry into the smart phone application or web-based platform, to a secure central server hosted by TELUS Health & Financial Solutions; it can then be shared with project partners. TELUS health space is a certified platform used to collect, store, use and share information relating to eHealth.

7.3.3 Strengths

- Improves health practices and develops skills;
- Provides a complement to medical care;
- Reduces unplanned visits;
- Promotes self-management;
- Improves the quality of care and reduces congestion in the care system;
- Educates patients to better manage their condition;
- Helps patients understand their disease;
- Supports the identification, avoidance or control of triggers;
- Helps to better control symptoms of the disease;

- Improves patients' quality of life;
- Develops a sense of security for patients;
- Promotes healthy lifestyles;
- Supports surveillance and monitoring, including evaluation of symptoms, drug response and measurement of lung function;
- Provides the ability to develop a guided self-management plan.

7.3.4 Challenges

- The ability of patients to get a smart phone;
- Access to and familiarity with technology;
- Withdrawals of patients from the study;
- Technical difficulties due to the internet connection;
- Access to the internet, in some areas.

7.3.5 Resource requirements

Human resources

- IT and/or telecommunications support officers;
- Delivery agents;
- Health professionals (nurses, medical specialists);
- Application developer.

Infrastructure and equipment

- Online platform;
- Application for mobile phone;
- Data collection facility or system

7.3.6 Time and skills requirements

The pilot project began in February 2013 and the end is scheduled for the month March 2016. The tests are conducted on a patient over a period of 12 months. The literature does not provide information on the disposal of records for participants who withdraw within the 12-month period. The intervention requires patient involvement and the participation of professionals with advanced skills (computer, medical specialists, other health professionals, clinical administrative staff), who should be are easily accessible in the context of the intervention. The intervention is a multi-sector collaboration (medical, academic and private sector).

7.3.7 Funding

Funded by Canada Health Infoway.

Total budget: \$1,000,000

Beneficiary: Ontario Lung Association

7.3.8 Impacts

The project is ongoing, but is no longer recruiting participants. The results of the intervention are not yet known.

7.3.9 Rationale

Ontario and Canada, many patients suffering from asthma are effectively treated by a well-conducted program and can live relatively normally. However, a significant proportion suffer from severe asthma and may not respond to pharmacological treatments that are currently available. To improve asthma management, it is important to gain knowledge about the daily experience of patients in addition to clinical data and evidence. The project seems to have this in mind and that's why promoters have invested in the development a new technology that will open up new perspectives in the approach to the management of this disease.

Scientific research indicates that asthma is a heterogeneous disease; therefore, the response to treatment varies considerably from one patient to another. Besides genetics, response to therapy also depends on factors such as ethnicity, culture, compliance, health literacy, peer influence, numeracy, economic factors, attitudes, beliefs, preferences, fears and misconceptions, which are all part of the human economy. A lack of understanding of these socio-economic factors could lead to sub-optimal management of asthma. Asthma is an increasingly difficult burden to manage for patients and their families; in addition to its obvious impact on health systems, the disease affects the professional, social, family and sexual lives of patients.

Asthma can have adverse repercussions on patients' careers. People with asthma, depending on the severity of the condition, may be required to reduce their working hours, taking days of absence or in some cases leave a job they love. It is therefore important to develop medical technologies that can advance science and offer an extended range of high performance solutions, in order to meet the unmet needs of patients and to minimize costs to health systems. The objective of the project is to develop innovative techniques that can help overcome daily difficulties faced by patients and their relatives, as well as support health professionals.

7.3.10 Contact information

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7.3.11 References

- https://www.infoway-inforoute.ca/en/what-we-do/progress-in-canada/project-list
- https://clinicaltrials.gov/ct2/show/NCT01964469
- http://www.on.lung.ca/Breathe-App
- https://clinicaltrials.gov/show/NCT01964469







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