







Partnership in Practice

Two key strategies involving home care yield high impact benefits for primary health care in Canada



National Home Care and Primary Health Care Partnership Project

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Production of this document has been made possible by a financial contribution from the Primary Health Care Transition Fund, Health Canada. The views expressed herein do not necessarily represent the official policies of Health Canada.

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Foreword

As President of the Canadian Home Care Association Board of Directors, and on behalf of that Board, I am very pleased to share with you this final report of outcomes from the National Home Care and Primary Health Care Partnership Project. As you will discover, the report clearly demonstrates the important role that home care has to play within primary health care when two key strategies are undertaken – meaningful partnerships with family physicians, and expansion of the home care role to include chronic disease management.

As a contributor to the original Project proposal, it is particularly exciting for me to see what has transpired over the course of the last three years. There has been much significant learning for everyone involved in the Project, and there is the promise of much more to come as we share our experiences with other jurisdictions who can tailor the Project findings to suit their own needs.

This is indeed a challenging time for health care in general, and primary health care renewal in particular. The enthusiasm of our Project participants to experiment with new models of integration and care delivery, however, shows that we have the will and capacity to make the changes required to make our system the best it can be. The Project also clearly demonstrates that with teamwork (whether between home care and family physician partners and their patients/clients, or between the Project's many other contributors) we can accomplish incredible things.

The National Home Care and Primary Health Care Partnership Project has done just what its name suggests: it has created strong and meaningful partnerships between family physicians and home care case managers.

The bottom line and the real centre of this Project, however, has always been the patient/client. Using best practices — which really means the combination of evidence-based care that best suits a particular patient/client — the Project successfully demonstrated a collaborative care process based on teamwork that focused on the needs of patients/clients with chronic disease (in particular diabetes).

Importantly, the Project findings show that this patient/client population experienced greater satisfaction with their care, more awareness of and connection to other health resources in the community, a greater awareness of their own role in their care, and better clinical results.

But it is also wonderful to observe that there were other significant benefits for the physician and home care partners involved in the Project, and for the primary health care system as a whole. Like Barbara, I encourage other jurisdictions to look closely at the work done through this Project and the potential it could offer to your own efforts around integration and chronic disease management.

Barbara Korabek

President,

Canadian Home Care Association

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Murray Nixon, MD, CCFP, FCFP Chair of Project Advisory Board, Past President, Canadian Home Care Association

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Strategies for change

- Align home care case managers with family physicians through formalized and structured partnership to create health teams uniquely equipped to provide optimal patient/client care.
- Expand the role of home care in chronic disease management to serve a broader scope of patients who would benefit from earlier interventions.

Executive Summary

Partnership in Practice

Two key strategies involving home care yield high impact benefits for primary health care in Canada

"Integration of care is a winning solution. The National Partnership Project has shown that all kinds of positive outcomes are possible – for the patient, for health providers, for the Canadian health care system – when there is productive collaboration of the primary and home care teams."

Nadine Henningsen, Executive Director, Canadian Home Care Association

The National Home Care and Primary Health Care Partnership Project was a demonstration project funded by Health Canada's Primary Health Care Transition Fund and sponsored by the Canadian Home Care Association. The Project was initiated in November 2003 and completed in March 2006. The goal was to optimize collaboration between home care and family physicians by strengthening existing home care case management roles in treating adults with diabetes. As part of the interventions, sites adopted evidence-based, preferred practice care protocols for the defined patient population and agreed on how to manage the care of patients/clients with this chronic disease. The participants concluded that chronic disease is a community-based issue where home care can, and should, play an integral role.

Canada's health care system is clearly facing many challenges. Changes in technology, demographics, economics, human resources, and politics are only some of the forces impacting health care. As a result, re-thinking how primary health care is delivered has become an urgent priority across Canada and a challenge that requires new and innovative thinking.¹ Better integration of health care services and improved chronic disease management are two of the tenets of primary health care renewal.²

This report is about the experience of the National Home Care and Primary Health Care Partnership Project ("the Project" or "the Partnership Project"), a two-year initiative funded by Health Canada through the Primary Health Care Transition Fund and sponsored by the Canadian Home Care Association (CHCA). It is part of the final evaluation and dissemination phase of the Project and is designed to present a 'big picture' overview of Project findings, lessons learned and conclusions drawn.³ This report on the Project's findings is not intended as a data-heavy document, because the National Partnership Project was a demonstration project.4 We have learned through the experiences of our participants – experiences that have been relayed to us through surveys, interviews, and some data collection.

We have a story to share that we think is very much worth telling. It's the words of our participants (presented throughout this document), along with the data that we did gather, that speak volumes about the Project's many successes. We also want to share our thoughts on aspects of the initiative that may not have gone as we expected, and the resulting insights we gained en route that may be valuable for other jurisdictions contemplating a similar venture.

We would further emphasize here that the descriptions you will find in this report are not prescriptive. Our intent is to share new models, key success factors, and important concepts, knowing full well that the front line staff directly involved in any home care and primary health care setting will know best how to operationalize change in their own environment.

The targeted readership includes: Project stakeholders (such as health care policy makers, home care leaders, and physicians), other jurisdictions interested in pursuing a similar initiative, and other chronic disease management programs. Our hope – to build awareness of the Project now that it is finished, and to share our learning and information with other provinces and territories in order to accelerate the adoption of this approach, which we believe is integral to a strong primary health care system.

The Project was implemented in Ontario and Alberta; the fact that the two sites had very different health systems led to broader learning, thereby creating opportunities for application in other settings in Canada.

The main focus of the Project was to explore how an augmented role for home care - through collaborative partnerships with family physicians within a chronic disease management model could address many aspects of the primary health care agenda, including access, integration, outcomes, and efficiency, all with a fundamental focus on patient-driven care.

The Project goals were designed to achieve greater proactive patient care with an emphasis on prevention, improved patient empowerment and more effective use of appropriate health care personnel. The priorities included:

- Collaboration and Partnership
- Case Management
- Chronic Disease Management
- Information technology (IT)

What we learned was that home care programs have a definitive and essential role to play in primary health care so that Canadians are able to achieve better health and a better health care system overall. The Project results and experience strongly suggest that implementing two key strategies involving home care – specifically, aligning case managers with family physicians and expanding the role of home care in chronic disease management – yields significant benefits for primary health care in Canada and most importantly for patients.

Lessons learned

In terms of partnership

- Reorganizing home care case managers to align/partner with family physician practices makes sense and can happen guite easily and without huge costs. It enables the effective leveraging of both physician and case manager skills and competencies to the patients' benefit and the providers' satisfaction.
- The nature of partnership required to achieve productive collaboration takes time. It requires the development of a trusting relationship, agreement on how best to communicate and work together, and a mutual understanding of optimal approaches to patient/client care in order to achieve the desired outcomes (e.g. using care algorithms).
- System barriers are minimized and transitions across that system are more seamless when partners work together, understand each other's context, and strive to jointly make decisions about best utilization of limited health care resources.
- The partnership model has broad application serving a wide range of patient/client populations.
- Without exception, physicians who have worked in partnership with a home care case manager do not want to revert back to the traditional relationship.

In terms of expanding the scope of home care in chronic disease management

- Home care has a role to play within chronic disease management. By providing patients/clients with access to a wide range of community based services, patient/client confidence, self-care and clinical outcomes are improved (for example, A1C levels may be reduced). This is critical for curtailing the costly crises that arise without effective proactive care.
- Health promotion and illness prevention strategies to keep patients/clients well (including strategies to prevent premature deterioration in those with chronic disease) need to be considered equally important to illness treatment.
- Team based care with shared accountability is more effective. Physicians can confidently delegate certain aspects of care to home care case managers, thereby ensuring best care for their patients. Case management at a systems level – where all health professionals (and patients) can contribute their respective skills, strengths, and perspectives – is greatly enhanced as a result.
- Focusing on system wide health outcomes positions home care, along with other sectors within health care, to determine its contribution and accountability and measure success as it applies to a patient/client population and the overall system.

Project participants were extremely positive about the Project experience itself and what the experience suggests on an even wider scale. Numerous benefits that positively impact patients/clients, providers and the health care system were realized. By aligning home care case managers with family physicians and expanding the role of home care in chronic disease management, we found that our model:

- Enhances quality patient/client care
- Facilitates patient/client empowerment
- Optimizes health human resources
- Enhances chronic disease management in the community
- Achieves more effective communication and decision making
- Reinforces value of system-level case management
- Demonstrates potential for improved cost management

Doable transformation

Through a review of each of the high impact benefits above, it will become clear to readers that the key strategies we are proposing constitute a do-able transformation. They are not expensive, they do not take a particularly long time – but they can have profound impact. The notion of partnership in health care, furthermore, is certainly not new – there are many other examples of successful partnerships (lots of which are interdisciplinary in nature⁵) that contribute significantly to the Canadian health care system. What is different in terms of the Project is the particular kind of arrangement we are proposing between home care case managers and family physicians, and the particular focus (chronic disease) for their partnership.

The approach we're advocating requires a willingness to try new roles and relationships, and it also requires some political will to commit to a new path. In order for this approach to be successful, the Canadian Home Care Association offers the following recommendations:

- Case management needs to be regarded as an overall strategy that is central to primary health care in Canada. To that end, the contribution of both physician and home care partners to this strategy should be considered a first priority option when planning health care services. There must also be a commitment to operating within a clinical framework wherein the entire health care team takes responsibility for clinical outcomes.
- Chronic disease management must be recognized as a community-based responsibility, wherein home care can, and should, play an integral role. Both resources and training are needed for this expanded role.
- More resources and training need to be devoted to the development of teamwork and partnership that achieves productive collaboration amongst the primary health care team.

- Continued investment in and emphasis (including public education) on the vital importance of electronic health records and enhanced health IT systems needs to occur. Progress in these areas must proceed as rapidly as possible.
- The use of electronic forms and tools (including algorithms and minimum data sets) must continue to be a high-priority area for health providers. These tools are critically important as best practice guidelines that help to ensure consistency and direction for managing patient/client care, both on an individual and population level.

By implementing the key strategies we propose, the potential of home care can be realized, particularly in relation to primary health care renewal and chronic disease management; and most importantly the patient/client can achieve improved outcomes clinically and in terms of quality of life.

"I think there are opportunities to take some of the framework and principles that have been developed through this Project and develop some further models in terms of coordination of patient/client care."

Dr. John Maxted, Associate Executive Director, Health & Public Policy, The College of Family Physicians of Canada, Member of Project Advisory Board "I really think this is the wave of the future... it reduces the burden of care and produces better outcomes. Quite simply, it's a very positive move forward."

Dr. Chris Bockmuehl, Southwest Medical Clinic, Alberta physician partner

"This is a system that can easily be replicated across the rest of Canada."

Sandra Henderson, Executive Director, Community Care Access Centre of Halton For readers interested in pursuing models similar to those in the Project, our website contains valuable lessons we learned en route.

We invite you to explore, learn and build upon our experience...

www.cdnhomecare.ca

Project Primer

A basic overview of the Project

Project goal

The National Home Care and Primary Health Care Partnership Project was a demonstration project funded by Health Canada's Primary Health Care Transition Fund and sponsored by the Canadian Home Care Association. The Project was initiated in November 2003 and completed in March 2006.

The Project's three strategic priorities were:

- chronic disease management
- partnerships
- enhanced case management.

Through the Project we were able to facilitate local enhancement of information technology (IT) systems to support the three priority areas above.



With an overarching goal of enhancing the integration of home care and primary health care services in Canada, the Project used Transition Fund resources to demonstrate a model in two provinces and then disseminate the findings. The model focused on the benefits of partnership between family physicians and home care case managers, where the roles of both groups were optimized. This was done within a chronic disease management framework, specifically focusing on patients with diabetes. As part of the interventions in the Project, sites adopted evidence-based, preferred practice care protocols.

The choice of diabetes was made because of the rigor of research regarding this disease and the understanding that if the model works for diabetes it will likely work for other chronic diseases as well.

Project sites

The Project had two sites — in Ontario (Halton and Peel) and Alberta (Calgary). These sites were selected based on their progressive work in primary health care and to highlight the applicability of the Project in different health care models with different home care structures and varying resources. The Project involved thirty (30) physicians collaborating with sixteen (16) case managers. Over 940 patients/clients have had the opportunity to benefit from the Project.

What were some of the notable differences between the sites?

Different health care structures

Alberta has a regionalized model of health care; Ontario has a centrally managed provincial health care system, although during the life of the Project has been undergoing transition to Local Health Integration Networks which will assume responsibility for devolved health care management from the province.

Different home care structures

Within the home care context, case managers in Ontario and community care coordinators (CCCs) in Alberta have slightly different roles – specifically, Alberta CCCs provide some direct patient/client care whereas Ontario case managers do not. Interestingly, as discussed further below, over the course of the Project these roles evolved and changed.

Different starting points

The sites began the Project at different stages. The Calgary Health Region (CHR) had already started two initiatives — partnership-building between home care services and family physicians, and a chronic disease management focus — before this Project (this Project has benefited greatly from key findings and lessons learned from Calgary's previous experience). For Ontario, formalized structured collaboration between case managers and family physicians is a relatively new paradigm shift from traditional relations between these two groups. On the other hand, Ontario already had a number of IT components in place or under development before the Project started.

It should be particularly noted that because Calgary patients/clients had already been involved in a partnership model of care previous to the National Partnership Project, they would not necessarily perceive any dramatic changes in the way their care was delivered over the course of the Project. They were, therefore, not part of one of the Project's evaluation tools — a 'patient/client survey' — though it is important to note that they were earlier surveyed as part of the preceding Calgary initiative and the results served as a benchmark for the National Partnership Project results for Ontario patients/clients.

Other Project findings for Calgary patients/clients need to be seen within this historical context as well (that is, these patients/clients had been enrolled in a chronic disease-focused, partnership-based model far longer than the newly enrolled Ontario patients/clients). It should be pointed out that the Calgary starting point also enhanced the diversity of the Project with the inclusion of patients/clients at different stages of their conditions and providers at different stages in the development of partnerships.

Why was it so valuable to have such different sites?

One of the strengths of the Project was its capacity to allow the unique features and priorities of each site to emerge within the context of a national initiative, thereby contributing to the richness of the Project and (eventually) the transferability of outcomes to other jurisdictions across Canada.

It was also significant that the different sites were able to learn from one another. There was considerable knowledge exchange, including visits between sites (at their own expense), which proved to be a very positive side effect of the Project. The Project intranet site was designed as a 'virtual meeting place' for participants, and also provided a common resource for the sites and participants.

What were the main initiatives within the two sites?

In Ontario, the Project sought to move from:

- home care services delivered geographically to an arrangement that ties case management services to family doctors' practices
- a system of centralized intake to home care services to intake that does a better job in considering the family doctor, patient/client, and broader health care team as partners in service planning
- reactive or episodic interventions to a disease management approach that is more proactive
- paper based records to using technology to enable effective chronic disease management.

In Calgary, much of the focus was on how IT could improve relationships and initiatives already underway. Interventions strove to achieve:

- improved and more consistent decision-making in allocation of resources
- more frequent goal attainment by patients/clients
- more predictable and consistent interventions
- proactive planning and decreased crisis intervention.

Project participants

This Project involved a great number of people (see Appendix A). Clearly, those most directly involved on a day-to-day basis were the physicians and home care case managers/CCCs (the 'partner providers'6) who were experimenting with new styles of collaboration, enhanced chronic disease management tools, and new IT systems, along with their patients/clients who agreed to be part of the initiative. Project site leaders played pivotal roles in overseeing the Project at their respective sites.

The Canadian Home Care Association had overall accountability as Project sponsor; two advisory groups (an advisory board and a steering committee) lent support and guidance in this regard.

Evaluation is a critical component for all projects funded by the Primary Health Care Transition Fund; in this case, IBM Business Consulting was the Project's external evaluator. The evaluation framework for the Project, including a logic model, was constructed during the developmental phase and was modified over time to reflect the realities of Project implementation at the sites. Patient/client, provider and public evaluation objectives were identified, and indicators (a set of measures to demonstrate achievements (or failures) over time for each objective) were established. To view the Project logic model and a full listing of Project objectives, please see Appendix B. Workflow Integrity Network (WIN) carried out a work sampling study as part of the Project evaluation, using a method called Function Analysis™ to "track and quantify" the work of case managers, particularly in relation to disease management outcomes.

External communications, IT, and physician consultants were also part of the Project team. Overall Project coordination was the responsibility of a Project Manager and support staff, with assistance from an implementation team made up of a variety of individuals from many of the groups just mentioned.

"This Project is helping us to re-orient health services and put the supports where they need to be, empowering both the clients or patients and the caregivers with the kinds of tools they need to better manage chronic conditions."

> Dr. Richard Musto, Executive Medical Director, Southeast Community Portfolio, Calgary Health Region

Project stages

Stage 1:

Developmental/Baseline Work (November 2003 – June 2004)

This was the time when the groundwork was laid for the key strategies to be implemented through the Project, and initial baseline information (including a week of Function Analysis data) was gathered so that there would be a reference point from which to assess and measure any changes over the life of the Project. Some of the challenges and successes achieved during this period are reviewed in our Partnership in Progress interim report, and also mentioned in some of the high impact benefits that follow.

Stage 2:

Implementation Phase (July 2004 – December 2005)

This was the period that saw the priority areas of the Project in action and the two key strategies brought to life. During this stage, Project evaluators sought to quantify some of the changes since baseline; a Function Analysis was performed in January/February 2005 (Time 1) and again in September/October (Time 2). Significantly, Function Analysis results contributed to changes in both Ontario case manager and Alberta CCC patterns of practice, a success story discussed in more detail in our High Impact Benefit on case management.

Stage 3:

Dissemination Phase (January – March 2006)

Projects funded by the Primary Health Care Transition Fund are intended to benefit the public and stakeholders nation-wide. Project organizers are obliged to ensure there is awareness of their project's activities and broad dissemination of learnings.

The final Evaluation Report for the Project has now been completed. Project partners are busy reflecting on their Project experience and how learnings can be carried forward to future activities and relationships. Consideration of how the IT component of the Project will carry forward is also underway. And the important task of spreading the news about the Project is taking place through many channels (including this report, conferences, journal articles, stakeholder meetings, and the Project website) to ensure broad dissemination and awareness of the Project and its outcomes.

"Patients have improved their blood pressures, fasting blood sugars, and cholesterol. It's exciting for them and it's really exciting for me.... You feel like you make a difference in their lives."

> **Dr. Corinne Breen,** Dorval Family Health Team, Ontario physician partner

High Impact Benefit

Enhances quality patient/client care

Strategies for change

Aligning case managers with family physicians, and expanding the role of home care in chronic disease management contributes to better quality care for patients/clients with chronic disease.

Premise

Patients/clients working together with their health teams is more effective

While physicians and case managers/CCCs can certainly provide quality care on their own, within a chronic disease management model upstream care by a team of providers is considered best practice.⁷ Quality care, in this context, is all about patients/clients working together with their health care team: it means ready access to the right services when needed (with a particular emphasis on proactive rather than episodic care), a more personal delivery of health care, increased opportunity for patients/clients to learn more about and be more actively involved in self-care (including following protocols), and, ultimately, improved health outcomes.

Evidence based guidelines

Electronic templates⁸ that incorporate evidencebased guidelines are another important contributor to improve consistency, quality, and outcomes within a chronic disease management framework. Electronic health records provide easy access to a patient/client's health information so interrelated problems can be better managed and so the provider has more time to spend on care rather than administration.

Diabetes was chosen as the particular Project focus within the range of possible chronic diseases because it is recognized that diabetes has generally accepted clinical guidelines (based on data from across Canada and around the world) that are linked to clinical outcomes.9 For example, a suitable reduction in A1C10 has been shown to decrease secondary complications in patients with diabetes, leading to improved cost-effectiveness.11 Since the Project was relatively short term, it was important to have a foundation of proven guidelines and tools on which to build. Further, research has demonstrated that there is an important role for case management within diabetes treatment – specifically, that "case management is effective in improving both glycemic control and provider monitoring of glycemic control."12

The premise of the Project was that by partnering home care case managers with primary care physicians, patients/clients with diabetes could receive better quality care. Specific interventions by case managers around diabetes care captured by the Function Analysis portion of the Project included:

- Blood glucose monitoring
- Nutrition education management
- Monitoring a patient/client's condition
- Retinopathy prevention
- Nephropathy prevention
- Hypertension management
- Dislipidemia prevention
- Cardiovascular prevention¹³

Our Experience

From	→ To
A non-aligned, undefined relationship between family physicians and home care	An established partnership that is built on trust and good communication (including the use of enhanced IT)
A reactive or episodic approach to patient/client care	A proactive, disease management approach that uses the special skills and contributions of provider partners as well as community services, and includes a focus on health promotion and patient/client involvement in self-care
Process-based delivery of home care services	Outcomes-based care where home care case managers and family physicians work together toward agreed-upon clinical outcomes for patients/clients

We found that...

- Aligning a home care case manager with a family physician's practice leads to a better understanding of available community resources, more timely introduction of those resources, and an increase in time afforded to the physician to focus on the complex clinical aspects of a patient's condition.
- A partnership approach facilitates seamless and timely transitions across the health system and encourages preventive care instead of episodic care.
- The use of standardized tools and guidelines by provider partners allows them to focus on mutually understood and agreed upon clinical outcomes as well as steps to achieve those outcomes.
- The application of a chronic disease model for patients/clients with diabetes (with a focus on health promotion, disease prevention, case management, and teamwork) appears to be very promising in terms of better health outcomes. At the Project's Calgary site, where the chronic disease management model is more mature because of prior and ongoing focus in this area, a statistically significant reduction in A1C levels was linked to this model and continued to be achieved over the duration of this Project.

Partnerships and collaboration contribute to quality care.

Our Evidence

From a patient/client perspective

Better health status

Compared to results reported by Statistics Canada for the Canadian population as a whole (where the majority of people with diabetes reported they were only in fair health¹⁴), patients/clients at both sites were more positive about their health status. Specifically, by the end of the Project there was a significant increase in the proportion of patients/clients who reported their health status was "about the same" as one year earlier, an increase that was largely due to a reduction in those who reported their status was worse than one year earlier.¹⁵

Reduction in A1C

Acknowledging that we cannot attribute a direct causal link, the first two cohorts of Project patients/clients in Calgary showed statistically significant reductions in their aggregate A1C levels over the life of the Project (see 'More of the story: A1C levels' at the end of this benefit section). Significantly, these clinical results were achieved/maintained in Calgary even during a challenging period of implementing new IT systems.

Reduction in complications

Patient/client comorbidities linked to their diabetes declined over the course of the Project. Whereas over 75% of all Calgary patients/clients in the first three quarters had at least one comorbidity, by the last quarter this figure was reduced to just over 50%. Similarly, in Ontario the decrease was from 71% to 64%; this was a statistically significant reduction that indicates clinical improvement for these patients/clients.

Increased access

Opportunities were found to expand the care community for patients/clients; patients/clients were also provided with information and resources that are known to have a positive impact on care and health outcomes, with a particular focus on self-care.

"By working hand-in-hand with our case managers and with the Community Care Access Centre we can discuss our patients' needs and get feedback in a timely fashion, and that means better care for the patient."

> **Dr. Don Collins-Williams,** Applehills Medical Group, Ontario physician partner

From a provider perspective

Improved knowledge

Physicians and case manager/CCC partners reported an improvement in their knowledge and skills because of their involvement in the Project (and, in the case of Calgary, because of the previous partnership relationship) – clearly a positive result in terms of their ability to provide high quality care.

Extra insight

As a result of the partnership and the corresponding increase in communication with the case manager, physicians reported that they had additional insight into a patient's condition that normally cannot be captured during an office visit. Case managers also said they gained a better understanding about how physicians' offices operate. Again, such learning is an important contributor to the ability to provide quality care.

More diabetic interventions

Function Analysis showed the amount of time that case managers/CCCs engaged in diabetic interventions increased dramatically from baseline and then decreased again somewhat at Time 2. In Calgary, this reflected a conscious decision to delegate interventions to other members of the team. In Ontario, some of the early interventions were related to initial assessment (particularly the time-intensive use of the Diabetic Screening assessment tool) or time spent establishing monitoring patterns with patients/clients; as some patients/clients became more involved in their own care they required less intervention (see our next High Impact Benefit on patient/client empowerment for more on this story).

From a system perspective

Better community linkages

Project partners were very pleased about how their partnership and a chronic disease focus helped them provide better quality care for their patients/clients through more appropriate and timely linkages to community services and other health care providers.

Use of chronic disease tools and guidelines

Provider partners said that the use of standardized tools and algorithms has, overall, positively impacted on the care they provide and has led to changes in their patterns of practice, including the adoption of chronic disease best practices (such as health promotion), which ensures consistency in treatment and contributes to the provision of quality care for patients/clients.

"We really have to be a little more proactive in primary and secondary care disease management so that we can use acute care for what it was intended to do."

> Carol Slauenwhite, Primary Care Specialist, Calgary Health Region

Lessons Learned

Shared understanding regarding patient/client outcomes

There is high value in having all team members (including the patient/client) understand which specific patient/client outcomes are being sought and what constitutes progress towards those outcomes. The use of standardized care pathways and tools can help everyone focus on what's most important and ensure a sense of shared accountability.

Patient/client interventions in a chronic care model evolve over time

Providers should be prepared for more intensive interventions with patients/clients at first, when initial assessment and health promotion teaching is the focus. But given the emphasis of the chronic care model on self-care, the expectation should be that this time commitment will reduce as patients/clients become more active and confident participants in their own care.

A1C is a potential focus for patient/client education

Project survey results showed that the vast majority of patients/clients did not know the results of their last A1C test. This may point to a potential area for patient/client education in the future. If Interestingly, those who did know their A1C results tended to have a normal result (mean 6.7), perhaps suggesting that having knowledge of results leads to better efforts (and success) at self-care.

"One key element of the Project is the introduction of algorithms or care pathways for certain chronic diseases. These are based on best practices and clinical evidence that shows 'this is the right way to do it'."

Bob Morton, former Executive Director, Community Care Access Centre of Peel

More of the Story... **A1C levels**

Project participants received diabetes education so they could be active contributors to interventions that sought to reduce A1C levels, the gold standard indicator for patients/clients with diabetes. The Project experience led to several observations, including: positive results are related to the length of time that diabetic interventions have been in place; efforts to ensure regular testing result in better outcomes; IT systems can support patient monitoring (through such things as electronic reminders and alerts); and patients/clients benefit from education about A1C levels.

A normal A1C level is below 0.070. According to the Canadian Diabetes Association (CDA), randomized controlled trials have provided compelling evidence that long-term complications of diabetes can be reduced by tight glycemic control – specifically, intensive treatment regimens aimed at lowering A1C levels toward the normal range have been associated with a reduction in microvascular complications in people with both Type I and Type II diabetes.

Other studies also suggest there are cost savings for the health system when patients experience a sustained reduction in A1C levels.18

One of the Project indicators assessed changes in A1C levels over time for Project patients/clients.

What we discovered

- In Calgary, there were positive and statistically significant results in aggregate A1C levels measured over the life of the Project. When final A1C test results are compared to earlier results for the first two Calgary cohorts, there was an overall rise in the proportion of patients/clients who had normal A1C results from 45% to 52% (with a significance level of 0.10). Project participants saw the Calgary results as very exciting news.
- In Ontario, no such statistically significant results were obtained, as the Ontario sample

size was too small. However, reductions in A1C that were achieved are promising, particularly given the Calgary experience.

It is important to emphasize that even small movements downward in A1C levels are important in light of the fact that, as indicated above, such decreases have been associated with better health and reduced health care costs. The Calgary findings and the Project experience in general around A1C testing have also led us to the following observations:

- The longer patients/clients have been receiving interventions the more likely they are to have positive results. This was seen, in particular, with the first cohort of patients/clients from Calgary who had already been undergoing diabetic interventions for some time; it is important to recall that in Ontario such interventions were a new undertaking. The Calgary site was also very pleased that positive results were achieved even during IT transition.
- Measuring A1C levels is an important precursor to managing A1C levels, and the CDA recommends such measurement on a quarterly basis. The partnership model within a chronic disease framework can help encourage and enable such regular testing. This was evidenced at the Calgary site where such a model had been in place for some time. There, initiatives to collect, analyze and report A1C results have been accompanied by intensive provider and patient/client education. There is also a clear expectation that the team reinforces the importance of the CDA guideline of quarterly A1C testing. Within the partnership model, CCCs are involved in monitoring A1C levels and may remind patients/clients when tests are required or have them complete a test before their regular check-up with physicians.

The recent introduction of IT tools facilitates adherence to the testing guidelines by providing electronic reminders, and positions the team to be able to readily issue results to patients/clients.

In Ontario, the partnership and chronic disease management models experimented with through the Project were new and very much in a state of evolution in terms of their maturity.

In terms of the Ontario results, as one of our Calgary physician partners, Dr. June Bergman explains, "When you introduce a new model, it takes three years to actually see changes attributable to that model." CCAC case managers are system navigators and it has not traditionally been their role to monitor or reinforce patient/client activity related to specific outcomes; during the course of the Project, case managers undertook new responsibilities for patient care and adopted a new working relationship with physicians. Given the magnitude of change in the relatively short term of the Project, establishing statistically significant improvements in A1C levels within the Project timeframe simply would not have been expected.

Also, the delay in implementation of Ontario's IT system meant that most of the physicians and case managers did not have the benefit of electronic reminders/alerts. What both the Calgary history and the more recent Ontario experience point to is how IT and provider education are important enablers for regular A1C testing. We think the overall Project experience suggests that further analysis would be useful, so that questions such as the following could be answered: If Ontario had a larger sample size and the Project timeframe had been longer, would it have shown the same positive A1C trend as seen in Calgary? Were the Calgary results transitory, or can a sustained shift in outcome be demonstrated?

Certainly it is important to point out that Project participants regard the Calgary data as a wonderful building block for Ontario that will hopefully serve to trigger even more commitment to partnership and chronic disease management models of care.

Finally, at Project end 80% of patients/clients in Ontario did not know their A1C levels. As suggested in our lessons learned, this would appear to point to the need for still greater patient/client education in this area. Interestingly, of those who did know their A1Cs, one-third had a normal result and the mean result was 6.7 – suggesting a correlation between knowing the A1C and achieving improved results.

Reducing A1C levels in the population with diabetes depends on an approach to care that is a team responsibility including the patient/client, home care, and the physician.

"As a team, we can help patients understand their situation better so they ask their own questions rather than just hear a pre-packaged script of what they may or may not need."

Dr. Adrian Gretton, Southwest Medical Clinic, Alberta physician partner

High Impact Benefit

Facilitates patient/client empowerment

Strategies for change

Aligning case managers with family physicians, and expanding the role of home care in chronic disease management helps empower patients/clients with chronic disease.

Premise

Consistent support from the health care team leads to increased patient/client involvement

Diabetes is a highly concerning illness. People with diabetes, compared with those without the disease, are more likely to be hospitalized or ill enough to have to stay in bed more often over the same time period.¹⁹ Diabetes is the seventh leading cause of death in Canada today.

However, research shows that health outcomes are improved when patients/clients are involved in personal health practices that help them to self-manage their diabetes. Patient/client involvement in their own care is a basic principle of chronic disease management.

A partnership approach supports patients/clients

When case managers and physicians work in partnership using clinical pathways, patients/clients feel empowered and supported to make the prescribed management of their condition a priority.

Case manager intervention can also provide patients/clients with additional support whereby they can receive more information about their care needs and the resources available to them in the community. A partnership approach to care can provide further assistance to patients/clients with diabetes: Calgary's previous experience demonstrated an improvement in patients/clients' control of their diabetes subsequent to the full implementation of a case manager/physician partnership.

Finally, the use of clinical algorithms and care pathways is helpful for patients/clients to better understand the course of their condition and its treatment and monitoring.

"I see this Project becoming the way we do home care on a wider scale, where linkages with family physicians allow patients/clients to have seamless care."

> **Lynne McTaggart**, Client Services Manager, Community Care Access Centre of Halton

Our Experience

By moving	
From	→ To
An episodic, acute-care approach to patients/clients' disease treatment, where they may fall through the cracks	A chronic disease management model of care, where patients/clients are actively monitored and actively contribute to their own health
Patients/clients who are unfamiliar with care guidelines	Patients/clients who are involved in directing their own care and understand the steps involved
No consistent use of standardized tools, data sets or algorithms by providers	Providers who use tools and guidelines as a standard base for clinical care
Patients/clients who don't know where to get help	Patients/clients who have familiarity with the array of resources available to them
Patients/clients who don't know their A1C levels	Patients/clients who monitor and understand the significance of their own A1C levels

We found that...

- Provider partners adapt and make changes to their patterns of practice to involve patients/clients in a very active and meaningful way in their own care.
- Using appropriate tools and guidelines, providers can adopt a best practice approach when they recognize a specific patient/client population and its needs, and they can respond directly to this group to ensure the best care possible.
- Patients/clients are more confident in their understanding of their illness.
- Patients/clients are more satisfied with their care, and appreciate learning about and from community resources available to them to help them with their condition.

Patients/clients are more satisfied with their care.

Our Evidence

From a patient/client perspective

Increased confidence

Project patients/clients reported increased confidence in the management of their own care. By the time of the final Project survey, nine out of ten respondents felt they knew enough to make healthy self-care choices. 84% strongly or somewhat agreed that they received enough self-care information when they were ill.²⁰

That said, it is also important to note that roughly one in three patients/clients responded that they "somewhat agreed" with the statements on care experience and knowledge, suggesting that their needs were not being fully met. This would appear to present an opportunity for providers to improve the sharing of self-care information with patients/clients. It is important to acknowledge that the family physician and home care staff were not the only source of information for patients/clients as many of them also accessed diabetic education centres and other resources. Further collaboration with other resources to minimize duplication in the production and dissemination of patient/client information is envisioned by Project participants.

Better self-management

Project patients/clients showed improvements in control and management of their diabetes over the life of the Project (specifically, keeping their blood sugar and weight under control, following diet, exercise and medicine regimes, and handling their feelings about their diabetes).

The percentage of patients/clients who reported a very good or excellent understanding of certain factors related to diabetes management (specifically, the role of exercise, treatment and care, special foot care, prevention of complications, and use of tests for management) also increased over the Project term. Not surprisingly, those who had received their education from a diabetes centre had scores that were slightly higher than patients who had received their education from other sources, pointing to the important role played by these other community resources.

Further, there were significant improvements in the proportion of individuals who followed their meal plan and regularly checked food labels for carbohydrate content among those patients/clients for whom follow-up data was available.

"What is empowering for patients with diabetes is hearing consistent messages from all their health care providers. Having heard the same story, they can take ownership of decisions in a much more powerful and informed way."

> **Dr. June Kingston,** Trillium Health Group, Ontario physician partner

Relationship with providers

The final survey of Ontario patients/clients in the Project revealed that 93% agreed they felt comfortable asking their family doctor questions about diabetes. However, most patients/clients responded 'not applicable' when asked this same question about their home care provider. The survey also revealed that while 79% of patients/clients were very or somewhat satisfied with their overall treatment and care, only 52% felt this way about treatment and care from their home care provider; similarly, very few indicated they had received diabetes-related education from their home care provider (although there was a significant increase in the number of patients/clients who felt their home care provider was open to their questions and opinions).

We believe these results need to be viewed within the Ontario context, where the 'key strategies' being tested (that is, partnership and chronic disease management models) were very new. The results offer important lessons about patient/client perception and understanding of what constitutes 'treatment' and 'education' within such models, where both the case manager's role and the patient/client's own involvement are quite different when compared with a 'traditional' home care client/case manager relationship for clients with acute needs. See 'More to the story – Shifting to a new paradigm for patients: the adult-centred learning approach' at the end of this benefit section.

From a provider perspective

More knowledgeable patients

Physicians reported that Project patients/clients are more knowledgeable about their condition and are more active in determining care plans. Project site leads also relayed anecdotally that physicians felt their other (non-diabetic) patients benefited from the physicians' own enhanced understanding of the importance of health promotion and patient/client self-care.

Different modes of communication

Information was shared with Project patients/clients through a variety of modes that included face-toface contact, phone, fax, e-mail, forms, and educational material. Patients/clients received information on the status of their condition, services they were eligible to receive, and resources on diabetes education, health promotion and selfcare. Modes of communication were actually changed during the course of the Project, also discussed in 'More to the story – Shifting to a new paradigm for patients: the adult-centred learning approach' at the end of this benefit section.

From a system perspective

Better use of system

Provider partners expressed the view that when patients/clients are empowered with information to better manage their own health, they can make more appropriate choices in their usage of valuable health care resources.

Lessons Learned

'Patient empowerment' may mean something different in a chronic disease management context

The nature of chronic disease is very different from acute illness. Patients/clients with conditions such as diabetes face a life-long challenge that usually necessitates fundamental changes to lifestyle. Correspondingly, health care teams need to think about how such patients/clients can best be empowered to cope with such a challenge. This can mean quite a different focus and a different kind of patient/client involvement than in an acute or episodic care scenario.

The importance of being responsive and flexible

Recognizing and responding to particular needs and circumstances of a patient/client group – for example, by adopting a different communication mode – is an important part of encouraging and enabling those patients/clients to be active participants in their own care.

Patients/clients can share accountability for their disease management

Fully informed patients/clients can and should be responsible to ensure that the assessments documented as 'best practice' are followed.

"We know that patients often get confused if they have providers who give them different information. Having clear algorithms and making sure that all the providers are operating from the same page helps to ensure there is consistent information that can be trusted by patients and their families."

Jeanne Besner, Director of Research Initiatives in Nursing and Health,

Calgary Health Region,

Member of Project Advisory Board

More of the story...

Shifting to a new paradigm for patients — the adult-centred learning approach

Patients/clients with chronic disease have unique needs that require a different care delivery approach by home care. Compared to traditional home care clients, the Project patients/clients were generally younger, healthier, and interested in learning more about managing their own care. In response, Project home care partners employed new patterns of contact (such as using e-mail and text messaging) to allow for patients/clients to self-direct much of the interaction around their care. Further, home care staff realized that they need to re-think the expectations that they establish for this specific patient/client population.

Insights into the implementation of a new model of service delivery

Project survey results about Ontario patients/clients' satisfaction with their home care providers (and their impression that home care had offered relatively little education or treatment around diabetes) provide, in our view, invaluable insights into what is involved when patients/clients are brought on board to a new model of chronic care treatment and delivery.

First, it should be made abundantly clear that the satisfaction results are not at all reflective of traditional Ontario home care patients/clients (who typically respond in an overwhelmingly positive fashion about the care they receive from their home care providers).

The results need to be considered within the following context (which, we hasten to point out, is applicable to both Project sites):

 Patients/clients with chronic diseases tend to have a higher level of general health and are younger than traditional home care patients/clients. They also tend to have a greater interest in health outcomes and are either engaged in health seeking behaviour, or are open to learning about such behaviour. As a result, this population has different communication needs from the home care system. Traditional, more intensive home care interventions are simply not what management of this group is all about.

"The longer time horizon and fluctuating course of many chronic illnesses requires regular interaction between caregivers and patients. The IOM [Institute of Medicine] report described this as a "continuous healing relationship" and argued for the increased use of methods of interaction other than face-to-face visits." ²¹

As the quotation above suggests, chronic disease management is an ongoing effort where other modes of interaction besides face-to-face visits are important.

- We believe that the survey results reflect that the Ontario Project patients/clients may have not fully understood how their case manager would assist them and the kinds of 'education' he/she would be providing. Much educating, for example, was done during the administration of the Diabetic Screening Tool, but patients/clients may not have been aware of this — they may have thought 'education' is something more formal, such as information sessions with the diabetic education centre or their family physician. Similarly, they may not have understood that 'treatment' within a preventative/health promotion model can mean ongoing monitoring and coordination of other community services.
- This suggests that case managers who admittedly were themselves (through the course of the Project) experimenting with a very new model of home care — need to think differently about how they establish expectations with this patient/client population.

Adult – centered learning approach

Second, the results point to the importance of an adult-centred learning approach for patients/clients with chronic disease. Both sites have recognized this, and have instituted new patterns of contact with this particular population.

In Calgary (where, it is important to recall, patients/clients had been part of a diabetes management program for a longer period of time), CCCs have started to use e-mail and text messaging to accommodate this distinct patient/client population, many of whom are working.

As a result, CCCs now engage in less face-to-face contact and less outgoing telephone calls with these clients. CCCs report the change has improved access to clients, ensured a more timely response, and is highly regarded by this patient/client group.

This is an adult-centred learning approach that encourages greater patient/client autonomy so clients call in to the care team when required, as opposed to CCCs always being the 'director' of the relationship.

An interesting corollary to this is that it would be expected that case manager/CCC contact with a new patient/client within a chronic disease management program would be more frequent (when initial information about diabetes and resources etc. is provided). However, once patients/clients are equipped with this information, the hope is that they are in a position to conduct more self-care management, which does not require continuous case manager/CCC intervention.

Certainly this was the case in Calgary, as patients/clients became more actively involved in initiating contact about their care, rather than depending on CCCs to direct all communication.

The bottom line: We need to truly empower patients/clients so they become responsible contributors and important members of their own health care team.

"In terms of collaboration, 1+1=3, because the synergy achieved is so significant."

> **Jan Kasperski,** Executive Director, Ontario College of Family Physicians, Member of Project Advisory Board

High Impact Benefit

Optimizes health human resources

Strategies for change

Aligning case managers with family physicians, and expanding the role of home care in chronic disease management, when combined with enhancements to IT, can have significant and positive implications for health human resources.

Premise

Strengthened partnerships positively impact health human resources

Health Canada's Health Human Resource Strategy includes a focus on 'Recruitment and Retention' that is, encouraging more people to enter the health care field and improving working conditions to keep them there. The Strategy also emphasizes 'Interprofessional Education for Collaborative Patient-Centred Practice' – that is, changing the way we educate health providers so they are equipped and prepared to work in teams. Such a change in orientation can enable better and faster access to health care for Canadians by connecting them with the most appropriate member of the team when they need it, ultimately boosting the satisfaction of both patients/clients and health-care providers.22

Health human resource challenges

The human resource challenge in relation to family physicians is something with which many Canadians are all too familiar. Family physicians are the cornerstone of the primary health care system and are highly valued by their patients for the excellent and tireless work they perform. But there are simply not enough of them. Fewer medical residents are opting for General Practice, and younger family doctors are giving up hospital privileges and seeing fewer patients. As one Canadian health care executive puts it, "We need more Family Physicians, but we also need much deeper changes. We need to re-engage Family Physicians by using their skills more intensively within teams of providers and in new settings..."23

A team approach

Fragmentation of services is recognized as a particular challenge for patients/clients with diabetes and other chronic conditions; working in silos is not an efficient use of scarce health care resources and personnel and makes communication difficult. Uncertainty around who shoulders what responsibility can be confusing. In contrast, collaboration and specialization within a health care team enables full skill utilization. And many studies link teamwork and collaboration to job satisfaction, productivity, quality of work and the well being of team members.24

The Project was based on the premise that through strengthened partnerships and the support of IT, health human resources are positively impacted (providers feel better about their jobs and retention is more likely), and on a clinical basis the right person is called upon for the right intervention at the right time.

Through a team approach, health care professionals can negotiate the overlap of their practices, to everyone's satisfaction. Multidisciplinary teamwork is proven to be more effective when members are informed and have trustworthy lines of communication (both personal and electronic).

Our Experience

By moving	
From	→ To
Fragmented delivery of care	A team-based and integrated approach to decision-making and care delivery
Impersonal communication between health professionals	Trusting partnerships where interaction is based on understanding and familiarity
Less than optimal use of individual health care providers' strengths and abilities	Better use and recognition of contributions by all members of the team, leveraging each individual's unique competencies
Limited use of electronic tools and records	Enhanced IT systems (specifically, the use of standardized care pathways) that enable partners to communicate more effectively and optimize their individual contributions to patient/client care

We found that...

- Aligning home care case managers and family physicians' practices enables the effective leveraging of both groups' skills and competencies so they are much happier about their own work and feel they are able to provide better care to patients/clients.
- Partners learn to communicate effectively, minimizing interruptions and ensuring prompt access when appropriate. Through good communication (including enhanced IT systems and the use of standardized care pathways) team members can have the information they need to practice at their best.
- By working together, individual providers come to better understand their own roles, responsibilities, accountabilities, and capacity. Further, the more that team members understand one another's roles, the greater the chance for cohesiveness.

- Partnership leads to much better use of each person on the team, including the recognition that certain people might serve broader or different roles. All partners actually take on a 'case management' role at different times.
- Many administrative/bureaucratic layers can be eliminated through the use of IT and partners' willingness to work together through trusting relationships. Partners begin to operate on assumptions of good faith.
- Within a collaborative setting there is a high level of enthusiasm for professional education and knowledge enhancement; provider partners welcome new learning opportunities.

Partnerships enable effective leveraging of skills & competency.

Our Evidence

From a client perspective

Improved collaboration

A significant increase was achieved in patients/clients' perceptions that their home care provider was open to questions. Most clients recognized that their providers were working as a team, although the survey results suggest room for improvement.

From a provider perspective

More synergy

Most of the Project partners expressed that by working in a team they established greater synergies within the health care system and greater efficiencies in providing care to patients/clients.

Skill recognition in self and others

Project partners said that through the partnership they felt increased recognition for their knowledge and skills, as well as an increase in their own ability to call upon the right team member more frequently.

Maximizing potential

By being part of a more focused and streamlined delivery model where patients/clients had fewer 'channels' to have to work through, and by establishing a trusting working relationship with one another, partners were able to maximize their own potential as health care providers. The majority of physicians felt more positively about their work life as a result of their partnership involvement with a home care case manager. These physicians do not want to revert back to the traditional relationship with home care, and agree that home care case managers are critical to their practice. A partner physician in Ontario put it this way: "It was as early as the very first patient who was referred to (the CCAC) that it became apparent that it was a very good thing for our practice. I hope the CCAC feels the same way, because I sure hope this continues...."

Case manager/CCC job satisfaction was also dramatically increased as a result of the partnership relationship. Interestingly, case managers and CCCs remarked that the work involved in being a partner was very independent and self-directed, and required them to be flexible and have the ability to "think outside of the box".

"The members of the partnership teams tend to be happier and more satisfied with their jobs, and that's very important at this time when we need to both retain and attract health care professionals."

> **Jeanne Besner,** Director of Research in Nursing and Health, Calgary Health Region, Member of Project Advisory Board

More collaboration and trust

Function Analysis results and Project surveys indicated that over the life of the Project there was an increase in the nature and scope of collaboration between physicians and case managers, and the level of trust increased between these groups.²⁵ Case managers and CCCs actually underwent changes in their roles as a result of the Project experience, a story you can read more about in our High Impact Benefit on case management.

From a system perspective

Improved knowledge and skills

Both physicians and case managers/CCCs indicated an improvement in their knowledge and skills in many areas – for example, understanding one another's roles and scope of practice, gaining IT experience and capability, and enhancing their use of chronic disease management tools.

Contribution of IT

The increased use of tools and algorithms and the enhancement of IT were regarded as important (though sometimes challenging) contributors to better professional relationships, enhanced information-sharing among partners, and (ultimately) partners' ability to provide better care (often involving change in patterns of practice).

Importance of continuing education

Professional development opportunities were seen as very important and valuable. Ontario case managers, for example, said that they increased their knowledge of diabetes management through education sessions and collaboration with the Diabetes Education Centre. CCCs in Alberta said that the Project provided them with learning opportunities that they otherwise would not have received, particularly around IT.

"Through our partnerships we have the opportunity to talk about some of the system issues for diabetic patients. We have the chance to share ideas in order to improve outcomes."

> Lucia Cheung, Client Services Manager, Community Care Access Centre of Peel

Lessons Learned

What alignment means

Reorganizing the structure of the home care/physician relationship through alignment — to optimize the work and satisfaction of both groups — can happen quite easily and without huge costs. However, alignment does not mean hiring case managers into the family practice, as this would only create another layer of bureaucracy and loss of access to the extensive service network managed by home care.

Adapting the model to fit the situation

The specific nature of provider partnerships cannot be overly prescribed by participant organizations as it must respect the unique needs, mission, values and priorities of each physician practice and home care office. In other words the partnership model must be adapted to different circumstances — indeed, this was the case within the Project itself, where clearly there were differences between sites, and even between locations (Halton and Peel) within one site.

At the outset of the Project, it was also clear that prospective partner physicians, who were keenly interested in finding new and innovative ways to improve access and quality of care for their patients, needed to understand the benefits of the two key strategies being tested through the Project. It became evident that a document that set out some of the roles and responsibilities of physicians, as well as what they would gain from the strategies being proposed, would be a helpful tool when partnerships were first being established. Such a document was, therefore, developed as part of the Project.

Ongoing learning is important

Ongoing educational opportunities for providers are essential. The regular chance to acquire professional knowledge and skills is an important part of being a member of a vital health care team.

How other health care providers/services fit into the partnership

As will be discussed in more detail in the High Impact Benefit that follows on enhancing chronic disease management in the community, it may take time to sort out the role of other disciplines/services within a partnership — case managers/CCCs said they interacted regularly with these other resources, but physicians expressed the view that keeping partnerships simple was important (that is, not having too many lines of communication).

The challenge of funding

One challenge related to a collaborative approach is that the fee-for-service model of compensation for physicians offers minimal remuneration for a team approach to care. It is a reality that organizations interested in a partnership arrangement need to include physician compensation in their business model, particularly as there is extra physician time required at the outset of a partnership when new patterns and protocols are being established. Similarly, case manager salary time also needs to be 'funded' in terms of the development work required at the outset of a partnership.

More of the story...

The five cornerstones for building an effective partnership - Team-building, time, trust, tools, and talking

An integrated, team-based approach to patient/client care can produce wonderful patient/client outcomes, professional satisfaction and efficacy, and system-wide benefits. A collaborative care model functions best when trust is established between team members. This requires overt effort on the part of the individuals involved. Using best-practice tools and algorithms can help provide objective reference points around which to build care pathways that are trustworthy resources for all the team members involved. The opportunity to communicate in a reciprocal, respectful manner is also a critical component of good partnership-building.

The Project experience made it very clear that if working together can help health professionals each feel better about their own contribution to patient/client care and the overall health care system, certain essential building blocks for such collaboration are needed.

Taking the time to build productive collaboration

First, we found that the case managers and physicians in our Project needed to be supported to develop team-building skills. Specifically, team-building initiatives need to be explicitly undertaken right at the outset of a new partnership arrangement. As Alberta physician partner Dr. Adrian Gretton explains: "we needed to spend time up front to get the team really working well and that has paid off because each member of the team feels more in touch with what's going on..."

It also takes time to achieve the kind of partnership that engages in productive collaboration. New ways of doing things do not happen overnight. For example, in Calgary CCCs had to make themselves available to physician partners as required to build their relationships, and this often necessitated face-to-face contact at the outset. As relationships grew and trust was established, CCCs did not have to spend as much time meeting with the physicians and more phone contact occurred.

Evolving partnerships build trust

In Ontario, as partnerships evolved and physicians came to know and trust their case manager partner, it was discovered that case managers could also liaise with the family practitioner's nurse as another alternative to direct contact with the physician.

Overall, our Project partners discovered that it is wise to limit the amount of change occurring all at once and important to acknowledge past achievements. Trust is clearly another absolutely essential ingredient to a successful partnership.

Such trust is built upon partners understanding one another's roles and determining together how patient/client care can be best provided in order to achieve desired outcomes.

The use of best-practice tools and algorithms can be invaluable to provide objective reference points and guidelines around which partners can build standardized care pathways.

"When you can fully use the skills, critical thinking, and the professionalism that you have, then you definitely feel more in control, more empowered, and are able to translate that into results for your patients/clients."

Ann Boucher, Director of Client Services, Community Care Access Centre of Peel

Open communication and participatory decision making

Talking openly about roles, responsibilities, and communication mechanisms is critical, as is a participatory decision-making process where both sides feel like valued partners and where individual differences are respected. Partners are, after all, people first — as individuals they need to get to know one another's style and substance.

As Ontario case manager Jeannette Adlington succinctly puts it, "What I found was that it all boils down to communication between the two of you and you work together as a team... I found that as the partnership progressed we became more comfortable with one another and we were able to work more closely together."

And the payoffs, professionally speaking, can be huge, as Jeanette also attests: "I find that I feel much more part of a team and not so much an individual practitioner out there in the community..."

Finally it should be made clear that partnership is not an achievement that remains static. It is interesting to note, for example, that in Calgary (where multidisciplinary partnerships had been in place for some time) the perspective of CCCs on collaboration over the life of the Project was variable. This could have been attributable to several factors, including changes in leadership within their home care program and the Calgary Health Region over the term of the Project.

The results remind us yet again of the human element in any partnership initiative, and how important it is to be prepared for adaptation and reassessment to keep the partnership healthy and vital.

"The team of the family physician and the home care case manager supports the patient/client as they learn about the resources in the community and how to manage their chronic disease."

> Nadine Henningsen, Executive Director, Canadian Home Care Association

age 4

High Impact Benefit

Enhances chronic disease management in the community

Strategies for change

Aligning case managers with family physicians, and expanding the role of home care in chronic disease management positively contributes to chronic disease management.

Premise

Disease management is described as 'case management at its finest'.26

A chronic condition is an illness, functional limitation or cognitive impairment that lasts (or is expected to last) at least one year, limits what a person can do, and requires ongoing care.²⁷ While people are living longer, this also means they often develop at least one chronic condition: During the 21st century, chronic (non-communicable) diseases will be the leading cause of avoidable illness, health care system utilization, and premature deaths.²⁸ At present, half the Canadian population lives with one or more chronic conditions, consuming approximately 70% of health care resources; 4.6% of Canadians have diabetes.

Chronic conditions and our health care system

Unfortunately, chronic conditions are frequently neglected because health care systems are organized to respond in an episodic fashion to acute illness and injuries. However, research shows that chronic diseases can be very expensive for the health care system, and efforts to stabilize or improve certain clinical indicators can help control health care expenditures.²⁹

The Canadian health care system needs strategies to transform its approach to chronic disease. High-quality chronic disease management (a key tenet of primary health care renewal) is a proactive treatment approach focused on community resources and collaboration among primary care team members and patients/clients, with an emphasis on outcomes, health promotion, patient/client self-care, and the use of best-practice guidelines and algorithms.

The Project was based on the view that expanding the traditional role of home care case managers to include chronic disease management – specifically, through partnerships with family physicians – is an effective primary health care strategy and a sustainable approach to managing chronic disease across Canada.

"Through new tracking methods made possible with enhanced IT, we are able to look at patients as groups. This can give us valuable information for the purposes of treatment and prevention."

Pat Reader, Chronic Disease Management Information Manager, Calgary Health Region

Our Experience

By moving	
From	→ To
Reactive, episodic interventions	A proactive disease management approach where specific clinical outcomes are sought
Providers working independently	Partnering home care case managers and family physicians More integrated and coordinated delivery of service, including other community resources
Patients/clients as recipients of care	Patients/clients as active participants in their own care
Largely paper-based system	Using IT to enable effective and evidence-based chronic disease management (specifically, the use of clinical algorithms and guidelines) where there is better monitoring of patient/client clinical data

We found that...

- Patients/clients are more satisfied with a proactive treatment approach built on collaboration.
- Provider partners (case managers and physicians) feel that being part of a trusting partnership enables them to confidently use algorithms for best-practice patient/client care.
- Through a partnership relationship where professional perspective is shared and decisions are made together - both home care case managers and family physicians are more inclined to see their actions as outcomes-related.
- Working together, provider partners can ensure the best use of broader community resources for chronic disease management and there is less fragmentation of care.

- Patients/clients feel good about being active participants in their own care.
- IT is an enabler for provider partners to better manage their patients/clients with chronic disease.
- Physicians express satisfaction at being able to look at a specific population and introduce proactive measures and not just engage in reactive or episodic care.

System benefits are realized from effective disease management strategies.

Our Evidence

From a patient/client perspective

Patient/client satisfaction

By the time of the final Project survey, close to 80% of patients/clients were very satisfied or somewhat satisfied with their overall treatment and care — this included the nature of the patient-provider relationship, the relationship among providers, and the availability of information, support and follow-up.³⁰

Interestingly, the survey also revealed a small decrease in patient/client satisfaction around: the way their providers worked together as a team to ensure ongoing support; the way providers coordinated and communicated regarding care provided; and diabetes-related services available. This could be because Project partners naturally had more interaction at the start of their relationship both with each other and with patients/clients, and as processes were more streamlined over time provider interaction was still very much ongoing, but not as obvious.

More knowledge

In the final Project survey, nine out of ten patients/clients reported an increase in their knowledge about where to get support and felt they had sufficient information about self-care.

From a provider perspective

Ability to provide better care

Provider partners felt that their collaboration led to improvements in their knowledge, skills and attitude

in providing care to patients/clients with diabetes. Case managers/CCCs received in-service training about diabetes care and treatment, in particular A1C levels, so they could focus on clinical outcomes for their diabetic populations. As described in our High Impact Benefit on quality care for patients, those outcomes were noteworthy.

Better understanding

Provider partners felt that by establishing strong relationships with one another and understanding one another's roles, they provided integrated and cohesive care for their patients/clients, built on trusted information-sharing. This is not to say that such relationship-building was necessarily easy. Both case managers/CCCs and physicians relayed that at the outset of the Project the expectations of them were unclear, however, as the partnership model progressed the expectations were clarified and this led to strong working relationships within partnership teams. Case managers and CCCs also had some initial concerns about being merely seen as extra resources for physicians, but as the teams evolved and the role of the case manager/CCC became clearer to the physicians, the team was able to function more effectively.

Involvement of wider care community

Case managers/CCCs said they experienced an increase in the scope of collaboration with a broader care community in chronic disease management, although the role of some of these other resources in relation to the case manager/physician partnership was an area that was identified as needing more attention (in terms of structuring these other relationships).³¹

"Community-based services for health care will become increasingly important as the population ages. This Project helps demonstrate that community-based services and partnerships work."

Nancy Milroy-Swainson, Director of Primary and Continuing Healthcare Division,
Health Canada

Building tools

Together, provider partners have either built on existing chronic disease management tools (mainly through the use of enhanced IT) or created new tools specifically as a result of the Project. Other community partners, such as the Living Well with a Chronic Condition Program in Calgary³², have also been involved in this effort.

Providers said these tools have, overall, positively impacted on the care they provide and have led to changes in their patterns of practice³³, including the adoption of chronic disease best practices (such as health promotion), which ensures consistency in treatment.34 The experience of Project partners in this regard is discussed in more detail in 'More of the story: The Importance of tools and protocols for partners working in a chronic disease management model' at the end of this benefit section.

From a system perspective

Better referrals

Physician and home care partners believe their collaboration has contributed to increased and more appropriate referrals to other community services for patients/clients with chronic disease. This is particularly noteworthy in the case of the Calgary site, as they already had partnership relationships in place prior to the Project, so further improvements might not necessarily have been expected.

For their part, external stakeholders were positive about the collaboration they had with Project partners and felt that delivery of patient/client care had benefited as a result (in particular, referrals were made more efficiently). There was anticipation that with further enhancement of IT, there would be opportunities for partners to reinforce messaging and advice being offered by other stakeholders (like diabetes education centres).

Appropriate service usage

Project partners also believe that a community and team-based approach to diabetic patient/client care can help minimize the use of other institutional services.35

System benefits

Representatives from both provincial ministries of health (Alberta and Ontario) who were surveyed observed that there has been improved collaboration between the home care and primary care sectors as a result of the Project. These representatives recognized that the partnership model has allowed for more integration in the overall health care system.

"I think having an extra person along with me to help patients make changes by improving their health care and health status makes a big difference."

> Dr. June Kingston, Trillium Health Group, Ontario physician partner

Lessons Learned

While the term of the Project may have been too short to conclusively demonstrate the benefits (clinical, economic, etc.) of the chronic disease management model (including IT as an enabler for that model), the results were highly promising. Project partners were extremely positive about using the model; there was also anticipation that IT would eventually help create a more seamless system and allow for more streamlined communication and data management to enable better patient/client care both on an individual and an overall patient/client population basis. The many lessons learned included the following:

Allot time and training

Shifting to a new model of professional interaction and care delivery takes time and requires that all participants (providers and patients/clients) are given adequate information and training to take on their new roles and responsibilities. The time commitment may be particularly heavy at the outset, when new patterns and relationships are being sorted out, and there needs to be some flexibility around projected timeframes because of this. By focusing on 'early wins', partners can see the potential in their new patterns and that it is worth the effort to pursue new directions. Similarly, getting used to new tools and guidelines also takes time, and the willingness (where necessary) to refine and revise such tools to better serve both patients/clients and providers.

Keep patients/clients informed about teamwork

As a partnership evolves, partners may need to stress to patients/clients that while the use of tools and practice protocols may sometimes make the team approach seem less obvious, collaboration is still ongoing in a meaningful way.

Make the commitment

It is not enough that tools and guidelines are in place for benefits to be realized, but there has to be assurance that these tools are being followed.

Awareness and understanding is essential

Health care partners working with an outcomesbased focus need to receive and understand information regarding their mutual activities and outcomes so they can continually refine and work together on best practices to achieve desired end results; trustworthy and helpful electronic systems can go a long way to making sure this happens.

"This Project has opened doors in the community that hadn't been opened before, and this has been an important contribution to how the overall system runs."

> Jan Kasperski, Executive Director, Ontario College of Family Physicians, Member of Project Advisory Board

More of the story...

The importance of tools/protocols for partners working in a chronic disease management model

Essential to chronic disease management is the use of best-practice tools and algorithms enabling providers to work together to achieve the best outcomes for patients/clients with chronic conditions. Calgary undertook computerization of many of its existing resources and introduced new assessment tools. Halton/Peel achieved changes to patterns of practice as a result of implementing new assessment and disease management tools which were ultimately computerized. The Project experience led to the recognition that tool development is an evolutionary, ongoing process that may at times be challenging for providers.

The value of best practice guidelines and algorithms

Clinical protocols and tools are regarded as important devices for interdisciplinary teams to use in providing evidence-based care, assuring the quality of that care, and eliminating unnecessary steps to get that care delivered as efficiently as possible.36 The use of best-practice guidelines and algorithms is, as set out in the introductory section for this benefit, a fundamental tenet of the chronic disease management model. It has been demonstrated that combinations of various forms of provider education, guidelines and tools for managing diabetes achieve the greatest outcomes for diabetic clients.37

Leveraging the expertise of the Project sites

At the Project outset, the Calgary site was already using various chronic disease management tools that had emerged from previous initiatives (for example, algorithms based on clinical guidelines to support the diabetic patient/client in the community setting). Through the course of the Project other tools were developed and several existing tools were refined further, including shared care pathways, and there was a shift from a paperbased to computer-based system. The Calgary

team worked closely to develop a minimum data set that informed the development of the electronic shared care pathways. This work, we understand, is serving to inform other initiatives in the province and the Western Health Information Collaborative.

Developing new tools

In Ontario, the Project CCACs did not have any such tools in place for patients/clients with diabetes, but they had clearly made a commitment to chronic disease management. The home care sites actually developed a number of tools through the course of the Project, including a physician request-for-services form, a case management intervention report, and a communication log.

Changes to practice standards

Significantly, changes to standard patterns of practice protocols (for example, intake management of physician partner referrals to home care) have also been initiated within the Ontario CCACs as a result of their involvement in the Project.

An evolutionary process

It is important to point out that tool and protocol development is an evolutionary process, and once developed both tools and protocols should not remain static, but need to be regularly reassessed so they reflect current decision making processes, workflow patterns, etc. Certainly this has been the case within the Project.

Site specific requirements

Tools also need to be unique to the jurisdictions in which they are to be used. The Project participants are happy to share some of their creations (see our Project website at **www.cdnhomecare.ca** for some helpful tools), but we encourage readers to see how they may be adapted for their own particular circumstances.

Accepting and incorporating the use of clinical tools and guidelines is also not necessarily an easy task. In the case of Calgary, where partners were experienced with such tools, the introduction of enhanced IT solutions (which directly impacted on the use of the tools) posed various challenges. There was, for example, a decrease in CCCs' satisfaction around the use of chronic disease management tools at the time of the Project's final survey, which is likely due to frustrations they had in relation to implementation of a new regional IT system (CDMIS). Providers in Calgary also expressed concern that the CDMIS did not interface well with physicians' systems, which produced double documentation.

For additional background about this, see 'More of the story: The Project IT experience' in our High Impact Benefit on communication and decision-making. We certainly think it is very significant that the Calgary site managed to maintain its clinical outcomes even during this time of IT transition.

In Ontario, where there is a shorter history using chronic disease management tools, some physician partners (who did have some tools in use prior to the Project and considered them effective) reported that they did not always use the Project tools consistently as they found them quite time consuming.

Case managers also initially reported low satisfaction regarding the tools and their impact. However, this did increase somewhat over the life of the Project, suggesting that once the tools had been introduced case managers gained a better understanding of their effectiveness, but due to the timeline of the Project (as well as IT challenges) case managers had relatively limited opportunities to use them.

The collaborative approach used in the Project emphasizes the use of good practices that have been demonstrated throughout the country and the world.

"Partnerships allow physicians and case managers to understand one anothers' roles better and develop communication processes to get resources and care to the client more quickly."

> **Joan deBruyn,** Director of Home Care, Calgary Health Region

High Impact Benefit

Achieves more effective communication and decision making

Strategies for change

Aligning case managers with family physicians, and expanding the role of home care in chronic disease management, with the assistance of better IT, can lead to more effective communication and decision-making.

Premise

Good communication impacts quality care

All health care professionals seek to provide the best quality care possible. Using time efficiently is essential toward that end, particularly in a system that now asks more (and more often) from everyone involved.

The Project planning team recognized the pivotal importance of good communication to good care. We also realized that there is a high level of frustration among providers around duplication, copious amounts of paperwork, excessive use of voice mail and the resulting lost messages and/or inaccurate information. These challenges contribute to misunderstandings and unfounded assumptions about the services available for patients/clients.

When developing the Project, we believed that if provider partners developed communication guidelines and coupled this with practice guidelines and algorithms, their interactions could be significantly better: the quantity of unnecessary communication would reduce, while the quality of meaningful contact would be enhanced.

Not only does better communication make for happier providers, but it is also critical within a chronic disease management context where maximizing patient/client self-management is essential. The longer time horizon and fluctuating course of many chronic illnesses entails ongoing monitoring and cumulative gathering of information regarding patient care and status.³⁸ And this requires regular and effective interaction both between providers and between providers and their patients/clients. Effective information-sharing

rests on good teamwork. Without trusting relationships in place between providers, it's easy to lack confidence in data being shared and decisions being made. Further, patient confidence and ability to self-manage is compromised when information is missing or inconsistent among the care team.

Research also suggests that health care teams can make better decisions and communicate more effectively if they have a common IT framework in place. Electronic disease management tools (including clinical practice guidelines or CPGs) are important contributors to better planning, better monitoring and follow-up, and better patient/client outcomes.39

Within the Project framework, it was recognized, even more specifically, that electronic health records can provide an essential link between home care and primary health care so providers are able to share essential information and track patient/client health.

The Project goal, therefore, was to enable more effective communication of health information and better decision-making through partnerships and enhanced IT.

"Patients are more comfortable knowing I'm in the loop and I'm part of the home care they are getting."

> Dr. Don Collins-Williams, Applehills Medical Group, Ontario physician partner

Our Experience

By moving	
From	→ To
A lack of familiarity and connection between family physicians and home care	An established and trusting relationship
Home care services delivered geographically	Tying case management services (and a particular case manager) directly to a physician's practice for more streamlined and effective communication and decision-making
Ad hoc and irregular communication	Agreed-upon strategies for regular communication between partners
A system of centralized intake to home care services	Intake that involves the family physician, patient/client, and broader health care team as partners in decision making and service planning
A largely paper-based record- keeping system	An electronic system shared by provider partners, using best- practice tools and algorithms

We found that...

- Partnership is all about working together with confidence, and depends on robust communication both in person and electronically. In a trusting environment where people communicate effectively (and focus on finding solutions) bureaucratic barriers disappear.
- Physicians make increased, and more appropriate, general referrals to home care when they work in tandem with a case manager. They are able to actively participate in important decisions for their patients/clients concerning home care services.
- Good communication and joint decisionmaking by providers working in partnership leads to better care, better service choices for patients/clients (both within home care and within the community), and better utilization of scarce resources. Case managers contribute their understanding of a patient/client's home situation and the community resources; family

- doctors bring their knowledge of the patient/client's medical needs. By sharing with one another, and involving the patient/client in that exchange, they make better care decisions.
- Enhanced IT within a partnership (including use of standardized care pathways and tools) can improve transfer of information and contribute to better quality care.
- On a larger scale, effective IT can contribute to more dependable and useful patient/client data that can allow providers to better understand the needs of patient/client populations so appropriate proactive measures can be introduced; this can have positive implications for public health knowledge and initiatives.

Partnerships lead to better use of resources.

Our Evidence

From a patient/client perspective

Teamwork

The majority of patients/clients surveyed said that they felt their providers worked as a team to ensure ongoing support for their care (although as noted in our High Impact Benefit on chronic disease management, this level decreased slightly by the end of the Project — likely reasons for this are explored in that benefit section). Patients/clients were also satisfied with the information they received about their diabetes.40

Increased trust

Partner providers relayed that trust is more easily established with patients/clients when patients/clients are aware the team is working in collaboration. For example, patients often will have longstanding relationships with their physician and are more likely to trust the case manager/CCC their physician knows and communicates with on an ongoing basis.

From a provider perspective

More contact

The number of case managers per physician practice reduced dramatically, allowing partners the opportunity to have more personal and direct communication.

Function Analysis results⁴¹ showed an increase in the time that case managers and CCCs spent interacting with physician partners over the life of the Project.42

Increase in general referrals to home care

Project physicians' referrals of non-diabetic (i.e., non-Project) clients to home care increased over the life of the Project as physicians' awareness and understanding of home care services grew (a finding also discussed in our High Impact Benefit on case management).

Better information sharing

Provider partners experienced an increase in information-sharing with one another and felt this facilitated integration and collaboration of service delivery (for example, Calgary CCCs' time spent with partner physicians almost doubled between baseline and Time 2). Case managers/CCCs reported that they appreciated receiving information about a patient's history from their partner physician prior to conducting an assessment. For their part, physicians indicated they appreciated the case manager/CCC's insight about a patient's everyday life (something not often captured during an office visit).

"The health care system is complex, and it can be mind boggling for patients. We need someone to act as navigator and case managers are well equipped and well prepared for this role. What was missing before this Project was the relationship with primary care physicians. "

> Ann Boucher, Director of Client Services, Community Care Access Centre of Peel

Increased confidence about information shared

Partner physicians reported improved confidence in communications and accuracy of information because of their direct relationship with their home care case manager/CCC. They said that prior to the partnership, they would receive home care information (if any) from a variety of sources, and because there was no relationship in place they were not as "comfortable" with the information they received.

Some of the partnership teams indicated they met on a regular basis and this helped their relationship and their work; other teams who did not meet as regularly were interested in pursuing this notion, although they were concerned about being able to schedule the time to conduct such meetings.

Significance of tools and guidelines

Provider partners recognized the important contribution of standardized tools and care pathways (including minimum data sets) to optimal provision of care.

IT enhancements

Calgary site leaders felt the IT changes that took place over the course of the Project (while admittedly challenging) have advanced things there in a very meaningful way (for example, there have been significant time savings, as well as increased standardization⁴³) and there is much anticipation of things to come. As Cheryl Grady, Program Planning Manager, Home Care, Calgary Health Region, puts it: "The possibilities of what you can do with the proper IT piece are phenomenal."

In Ontario, the hope is that as changes in IT are further operationalized, benefits will accrue both for patients/clients and providers.

From a system perspective

Implementing IT

Although the IT systems were not implemented in the timeframe as expected, and this was a source of frustration, many providers stated that better IT has the potential to facilitate collaboration within their partnerships and create greater efficiencies in service delivery through more timely communication, once it is being used more consistently. See 'More of the story: The Project IT experience' at the end of this benefit.

"It all boils down to communication... As our partnership progressed, we became more comfortable with one another and were able to work more closely together."

> Jeanette Adlington, Case Manager, Community Care Access Centre of Peel

Lessons Learned

Two-way dialogue is essential

Reciprocal communication within a partnership is important if shared accountability is the goal. Both partners need to feel that what they have to say will be heard and valued. When communication is positive and effective, partners feel invested in the work at hand and take more responsibility for ensuring that work is done to the best of their respective abilities.

Extra effort is needed at the outset of a partnership

Because of the added time needed up front to establish good communication protocols and patterns, partners' overall work/case load may need to be adjusted to reflect this extra commitment.

At the outset of a partnership relationship, people need to spend time considering and then agreeing on their care guidelines, communication framework and tools, and communication frequency (through structured meeting time). Partners need to share and communicate about both clinical and process matters. Mechanisms to share information within the team should be simple and should not create extra work.

IT transformation takes time

As the 'Project IT experience' story that follows clearly shows, there is no simple solution to accelerating IT implementation and adoption. There are many constantly shifting variables to contend with -- from the immediate pressures of how individuals and offices will cope and respond to the proposed changes, to the overarching pressure of having to ensure IT solutions align with regional or provincial initiatives and requirements. Providers need continual reassurance that a certain level of discomfort or trepidation is natural, but that this will reduce over time as IT solutions unfold and familiarity is increased. Providers need to keep their sights on the long-term benefits that better IT can offer.

"In the past, we have had case managers through home care, but we had so many that, frankly, I had never met any of them. Now I can call Jeanette because I know that together we can ensure our patient gets the right kind of care."

Dr. June Kingston, Trillium Health Group, Ontario physician partner

More of the story... The Project IT experience

Electronic health records and enhanced IT systems are critical to the efficient functioning and ongoing evolution of an integrated health care system. The Project sought to enhance local IT systems to support the Project priority areas. However, IT changes could not be divorced from wider (regional or provincial) initiatives, which made implementation complex and challenging. Notwithstanding, Calgary has already reported significant gains in efficiency, and although Ontario did not go live until November 2005, participants are positive about the potential and will continue to evaluate the solution beyond the Project.

As discussed in many of the High Impact Benefits in this report, the IT piece of the Project was an important enabler for the main areas of focus (chronic disease management, case management, and partnership). Clearly, effective IT systems are essential for good communication and for effective teamwork. Among other things, IT can:

- Reduce workload by allowing for easy retrieval and sharing of important patient/client medical data by different health care professionals
- Increase the capacity for communication and collaboration
- Reduce duplication
- Reduce the potential for problems related to illegibility
- Increase the opportunity for management to track patient/client outcomes and variances
- Enable the consistent application of clinical practice guidelines and algorithms.

"IT enhancements won't do our work for us, but they will enable us to do our work better."

> **Bob Morton,** former Executive Director, Community Care Access Centre of Peel

The challenge of implementing an IT system to support the Project

However, one of the main challenges faced by the Project participants was how to implement IT systems to support the Project that would also integrate into the bigger picture of regional or provincial IT strategies either already underway or in the planning phase. Contending with this challenge made the Project's IT journey longer than was originally anticipated. Project sites had to work with IT consultants to understand the regional and provincial strategies and work the Project's IT solution into those larger strategies. The good news is the expectation that the solutions that were eventually identified and implemented will be more sustainable as a result. For those readers particularly interested in the IT segment of the Project, the Project website contains a detailed overview of this topic, including a review of the Project IT objectives, the challenges recognized at Project outset (including background surrounding the state of IT at both sites and the eventual Project decisions made), and the unfolding of the IT experience at both sites.

Certainly, from the onset of the Project, physicians, case managers/CCCs and representatives from both Calgary and Ontario expressed their anticipation of the enhanced IT systems. That said, delays in IT implementation were a source of understandable frustration for Project participants. Ultimately, the main areas of concern for providers were slower than anticipated progress, levels of integration with existing systems, the degree of functionality, and the time required to learn and effectively use the new systems.

Calgary site IT solution

Having gone live with its IT solution in Spring 2005, the Calgary site is now working on enhancements to the solution. MDS-HC (assessment software) and Soprano (chronic disease management software application) will be maintained by the Region and adopted more broadly.

The interface of the Soprano to the physician electronic medical record is taking longer than anticipated, but there is commitment to continuing the work to establish this link. Importantly, the evaluation data shows that Calgary providers have been successful in maintaining their partnerships and patient/client clinical outcomes while undergoing the implementation of the IT solution

and making adjustments to the deployment of home care staff. Calgary CCCs also report significant time savings as a result of IT enhancements.

Ontario site IT solution

The Ontario site's IT solution went live in November 2005. While later than originally anticipated, this was a major accomplishment because of the decision to host the application at SSHA (Smart Systems for Health Agency, the provincial organization responsible for technology infrastructure) where the complexity and rigor of process is escalated by the nature of a provincial mandate.

Typically, start up to completion of a go live process can take six months to a year depending on the complexity of the solution and coordination efforts involved. We were successful in completing the user requirements with key stakeholders, prototype review with the physicians, an approved design document, SSHA project sponsor support, server hosting environment and equipment from SSHA, high speed Internet access provided by SSHA, User Acceptance Testing, and resolution of software problems and enhancements needed before the go-live point.

For some physicians the solution, at this point in time, requires duplication of effort. We are itemizing and prioritizing potential enhancements, including such things as creating interfaces to minimize duplication, that can be completed before the Project concludes. Because the go-live date of the IT solution occurred after the completion of the data collection by our evaluation team, we are conducting a mini-evaluation of the solution to date.

We hope to get some validation that will support continued use of the application and will identify priority enhancements. We will work to implement as many enhancements as possible in order to demonstrate responsiveness to the Project participants and help to secure commitment to continued use by the Ontario site.

Evolution of the IT solution

At the time of the final Project survey, providers in both Ontario and Calgary expressed that while increased electronic connectivity has improved their computer skills, it has not necessarily (to date) influenced the care they provide. Ultimately, the 'IT story' from our Project has had several main themes to emphasize:

- IT enhancements are, by necessity, incremental
 — the full articulation of their benefits is not immediate, but must follow a (sometimes painful) learning curve.
- The Project's IT plans and strategies evolved over time, and changed from the original vision at the start of the Project – what we learned was that it is often only by trying to create something that you realize what you really need or want.
- While the IT aspects of the Project went differently than we had expected, there were valuable lessons in what did happen and the directions taken.

While IT can be a powerful tool, the bottom line is that it cannot enable change without having trusting partnerships in place.

"Case managers apply their knowledge, their experience, and their talent as equal members of the health care team."

Marg McAlister, National Partnership Project Manager

High Impact Benefit

Reinforces value of system-level case management

Strategies for change

Aligning case managers with family physicians, and expanding the role of home care in chronic disease management positions physicians and case managers to fully contribute their respective case management skills so patients/clients receive the best care possible.

Premise

Case management on a broader systems level improves outcomes

Over the past two decades the evidence on disease management and case management as two interrelated interventions has shown improvement in care, health outcomes and costs to the health care system.44

Case management at a systems level is a strategy or process undertaken by all health care professionals (and even used by patients/clients themselves) to maximize patient/client wellness and autonomy through advocacy, communication, education, identification of service resources, and service facilitation.

The principle of case management is also regarded as integral to the home care system, and 'case managers' are the individuals who are primarily responsible for this activity within the home care sector. However, there has been confusion around the definition and contribution of case management within the home care context,45 and the full potential of case managers is not always realized.

Mission critical functions of a home care case manager

At the outset of the National Partnership Project we focused on trying to understand how the home care case manager's role would be impacted if two key strategies were implemented – that is, partnership with a family physician and a chronic disease management focus. In particular, through the work-sampling (Function Analysis) portion of the Project, it was possible to consider what the 'mission critical' functions of a home care case manager working within a partnership and disease management model would be. We were interested in how case managers' roles might change as a result of building trusting partnerships with physicians; and how redeployment of some case manager activities might help better achieve those 'mission critical' functions within a chronic disease management model.

Systems level case management

However, while we went into the Project trying to gain an understanding of the home care case manager in this new context (and we gained valuable insight in this regard), what we also (and perhaps even more significantly) learned about was case management on a broader, systems level. We discovered that when physicians and home care case managers work in a defined structure where they are partnered together, they reinforce one another's case management functions. Case management on a systems level ends up working far better than when these groups of professionals work independently.

It became very clear that family physicians remain as patients' most common point of first contact for primary health care. But the reality is that doctors simply cannot fulfill this role alone and they require good access to community based service – access that can be provided through partnership with a home care case manager. Further, by clarifying the home care case manager's role, both members in the partnership are better able to contribute their own unique case management skills and knowledge to effectively achieve integrated and collaborative care. Essentially, the attitude becomes 'I'll assume responsibility for this, you do that portion, and we'll do this part together.'

Our Experience

By moving	
From	→ To
Discipline driven case management	Collaborative case management activities where each discipline agrees to a care algorithm
Managing patient/client care from within separate health care silos	Managing patient/client care as a team
A complicated maze of services that are challenging to access	A network of services navigated by experts

We found that...

- When physicians move from a lack of familiarity with home care to seeing case managers as integral partners in providing optimal patient/client care, traditional barriers between home care and family physicians are removed and interaction is very positive.
- When physicians feel as if case management is a collaborative effort, and they understand the role that home care case managers can play in that effort, they feel less frustration about dealing with a bureaucracy and better appreciation for the limitations and options to be considered through home care.
- Joint decision-making by home care/family physician partners leads to better understanding and allocation of resources (for example, faster and more appropriate referrals).

- The home care case manager's role in achieving improved clinical outcomes for patients/clients with chronic disease is validated.
- Physicians feel less alone and more supported in dealing with their patients; home care case managers experience a huge increase in satisfaction with their role and their sense of contribution.
- Patients/clients are satisfied to know they have a team addressing their needs and recognize the home care case manager as an important part of that team.

Effective case management is a collaborative strategy.

Our Evidence

From a patient/client perspective

Teams work

By the time of the final Project survey, more than seven in ten patients/clients said their Project providers worked as a team to link them with the right health care provider or service and 65% said their providers worked as a team to give ongoing support (reasons for a slight decrease in this figure over the life of the Project are explored in our High Impact Benefit on chronic disease management).

There was a significant increase over the course of the Project in the percentage of patients/clients who felt their home care case manager was open to their questions and opinions on treatment and care. 46

The story around satisfaction rates related to actual home care treatment and education is told in our High Impact Benefit on patient/client empowerment.

From a provider perspective

Partnership leads to understanding

Project physicians said the partnership they established with a case management resource (i.e., their case manager or CCC) provided them with better understanding and insight regarding the case manager/CCC role.

Increased collaboration

Provider partners reported an improvement in their collaboration over the life of the Project, although they also noted this was a gradual process and something that requires ongoing commitment. All providers agreed that it took time to build trust and that team-building is an essential first-step toward any partnership effort.

Better use of core competencies

Physicians expressed that by understanding the role of home care case managers within the larger case management context (that is, what services and assistance home care could provide), physicians were better able to focus on their own core competencies; they also said that through the partnership they felt supported in their efforts to offer the best care possible for their patients.

"In family medicine in Canada, there are not enough family physicians. Quite simply, we cannot offer the kind of broad services and coordinated care that are necessary without some sort of connection to a team."

Dr. Adrian Gretton, Southwest Medical Centre, Alberta physician partner

Role adaptation

The role of case managers/CCCs actually changed within each site through the course of the Project as Function Analysis results were shared with participants.⁴⁷ Case managers and CCCs took on the unique role of bonding, bridging and linking individuals with chronic disease to the broader care community. This, in turn, allowed physician partners to better focus on clinical care within the office setting as well as more effectively engage in their piece of the broader 'case management' function. See 'More of the story: Refining and redefining roles within a partnership' at the end of this benefit section.

From a system perspective

Fewer boundaries

A team approach to care, where home care case managers have a distinct role to play, leads to service delivery that is more integrated and coordinated; home care involvement helps minimize the boundaries between physician and community care. For example, as mentioned in our previous High Impact Benefit on communication and decision-making, Project physicians' referrals of non-diabetic (i.e., non-Project) patients/clients to home care increased over the life of the Project as physicians' awareness and understanding of home care services grew.

"Family physicians' offices have not always understood the whole range and breadth of what home care can do for them and their clients. One of the wonderful things about this Project was seeing the docs really energized about this 'new-found treasure'. They're really enjoying it and so we're enjoying it too."

> Cathy Hecimovich, Director of Client Services, Community Care Access Centre of Halton

Lessons Learned

Clarifying the role of home care case managers can benefit everyone

While the Project set out to augment and clarify the role of the home care case manager, what we learned about was the value of the case management activity of every professional on the team. By contributing the case manager's ability to bond, bridge and link to the family physician's practice, and by establishing a system of shared accountability, we were able to leverage the competencies of both members of the partnership.

Figuring out roles in a partnership can be challenging, but ultimately rewarding

Case managers/CCCs relayed that having undefined roles initially within a team caused some frustration, but also provided them with the flexibility to utilize their competencies to determine where they best fit into the team. As the Project progressed, they noted that their roles became clearer to themselves and others.

Investing in home care has long term payoffs

Better understanding of home care by physicians led to more overall (non-diabetic) patient referrals to home care, a positive corollary effect from the Project, but it is important to recognize that an increased demand for service also has budget implications.

"The broader scope of care that you can get through the CCAC [home care] is something beyond the capabilities of most family doctors."

> **Dr. George Southey,** Dorval Family Health Team, Ontario physician partner

More of the story...

Refining and redefining roles within a partnership

It was anticipated that through ongoing evaluation, provider participants would be able to re-evaluate their roles through the results of the work sampling data. Calgary used the information to explore a CCC role that required less direct care. Halton/Peel developed a model that increased direct time with patients/clients and the physician partnership.

Physicians expressed that they were able to clarify their own role vis-à-vis home care and that they were better supported to focus on their own best skills and competencies so their patients could receive optimal care from everyone involved.

As noted in our story on the cornerstones of partnership in our High Impact Benefit on health human resources, partnerships are evolutionary relationships where partners' roles need to be regularly reviewed and refined. This Project too was built on the understanding that continuous evaluation would contribute to ongoing decision making and continuous program improvements, including role refinement.

Evolving roles within the partnership

As the Project's two key strategies were brought to life, it became evident that within the case manager/physician partnerships there were opportunities to redefine certain aspects of certain roles.

In particular, insights gained from early Function Analysis data led to changes in the way home care case managers/CCCs saw their case management role. In both Calgary and Ontario, Function Analysis results were used to inform participants about efficiencies in practice by reducing the extent of duplication, rework, hand-offs, and use of paper-based tools. Specific activities were employed at both sites to build team capacity and clarify and delineate roles and functions between and among the team.

The clarity in roles enabled a greater focus on critical functions (specifically bonding, bridging and linking individuals with chronic disease to the broader care community) that have a direct impact on patient/client care and health outcomes, and less focus on areas that could be appropriately triaged to another member of the care team.

Both sites then used this information to adapt in a different way.

Evolution at the Calgary site

As a result of the Project, Calgary has moved towards a new model of case management that reduces direct care offered by CCCs, increases collaboration and navigation activities, and reduces fragmentation. Specifically, by reassigning certain chronic care activities such as wound care to other members of the care team, more time is available for CCCs to focus on health promotion, increasing patient/client self-care capacity, and other bonding, bridging and linking functions (components of the CCCs' role that were not occurring with desired frequency).

"Bringing appropriate care providers together and having them focus in a more coordinated fashion on targets like A1C levels increases the likelihood those targets will be met."

> Dr. John Maxted, Associate Executive Director, Health & Public Policy, The College of Family Physicians of Canada, Member of Project Advisory Board

Evolution at the Ontario site

For its part, the Ontario site has developed a model that reduces a case manager's indirect patient/client activities and increases direct time with patients/clients and the physician partnership.

It should be noted that role refinement for case managers/CCCs has also clearly involved role enhancement and redefinition for other members of the home care team such as float RNs and LPNs (in Calgary) and team assistants (in Ontario, where strategic efforts were made to re-engineer processes in reducing case manager administrative activities and improve communication between case managers and team assistants).

Impact on partners

Function Analysis results gathered near the end of the Project showed that case manager/CCC time had, indeed, been significantly and successfully redirected and there was considerably more emphasis on chronic disease management and collaborative team practice, both best practices within primary care.

Finally, not only were home care provider roles redefined, but physicians in the Project noted during final interviews that they had initiated some changes to their patterns of practice as a result of their involvement with the Project. For example, Ontario physicians reported that with an increased awareness and understanding of home care services, they increased their referrals to home care. Having a designated case manager also streamlined the process for physicians to gather information from and about home care. Physicians further expressed that by knowing what home care could and would do, they could focus on their own core competencies much better so that patients were able to receive the best care possible.

Case management is a collaborative clientdriven strategy for the provision of quality health and support services through the effective and efficient use of resources in order to support the client's achievement of goals.

"This Project is about using scarce health care resources most effectively."

Bob Morton, former Executive Director, Community Care Access Centre of Peel

High Impact Benefit

Demonstrates potential for improved cost management

Strategies for change

Aligning case managers with family physicians, and expanding the role of home care in chronic disease management has the potential to contribute to cost management within the health care system.

Premise

Savings are anticipated as a result of partnerships

Research has shown that changing the way health care is approached and delivered can contribute to more effective cost management of limited health care resources. It has been proven, for example, that:

- Applying the chronic care model improves patient/client outcomes and reduces costs for many chronic conditions.⁴⁸
- A team approach to patient/client care reduces hospitalization time and costs, improves service provision, and enhances patient/client satisfaction, staff motivation and team innovation.⁴⁹
- Case management interventions implemented in a collaborative practice model improve care, outcomes and costs for individuals and populations with diabetes.⁵⁰
- Home care is more cost effective than the acute care sector.
- As patient/client data accumulates over time, the use of enhanced IT systems leads to financial savings from less staff time spent finding, pulling, and filing charts and less physician time spent locating information.

The right care at the right time

The Project did not undertake a formal study of how a partnership model for home care and family physicians, working within a chronic disease management framework, could impact health care costs. What was anticipated was that by working together as a team, each partner would be enabled to provide his/her best professional service more efficiently (that is, the right care at the right time).

Similarly, we anticipated that proactive health promotion and illness prevention strategies would help to delay deterioration and/or reduce the incidence of acute exacerbations, which typically require more costly interventions.

Using IT systems as an enabler

Finally, we hoped that new IT systems would serve as an enabler to the Project partners, and improved communication would reduce tedious duplication. By ending voice mail madness and excessive administration, the anticipation was that providers would have more time to focus on their core competencies. We further hoped that better IT systems would allow the team to access information in a timely manner, which would let them serve their patients/clients more effectively. The storage of information would also enable the team to monitor a patient/client population and plan interventions specific to the group served.

The Project experience and findings were reviewed with these expectations in mind, to see if there were signs that cost management could potentially be positively impacted if the key strategies the Project employed were executed on a larger scale.

Our Experience

By moving From	
From	→ To
Minimal use of electronic records and data management	Increased use of IT to track patient/client information and clinical outcomes, both in terms of individual patients/clients and for patient/client populations within a practice
Copious amounts of information recorded in multiple files	A minimum data set that effectively captures that information which the team of professionals believes is necessary to provide care
A reactive approach to patient/client care	A proactive, disease management approach with an emphasis on health promotion and earlier interventions, to prevent the necessity of using more costly acute or episodic care and institutional services
Excessive use of voice mail	Internet based communication that serves to improve documentation
Heavy administrative component	Decreased time and expense related to paperwork

We found that...

- System barriers are minimized as partners work together, understand each other's context, and move to joint decision-making about best utilization of limited health care resources.
- Team-based care with shared accountability is more effective and efficient. Physicians can confidently delegate aspects of care to home care case managers, thereby ensuring best care for patients/clients.
- Using the right person for the right intervention makes sense, is cost effective, and is professionally gratifying.

- By enhancing case management and improving communication, the primary care/home care team can detect and prevent both costly and debilitating complications and reduce the frequency of crisis situations.
- The administrative burden placed on health care professionals can be reduced and/or redirected, thereby ensuring best use of funds.

Home care and primary care partnerships are effective and rewarding.

Our Evidence

From a patient/client perspective

Teams work

Most Project patients/clients said they felt their providers worked as a team to ensure the patient/client saw the right type of health care provider and had ongoing support (more on this finding is discussed in our High Impact Benefit on chronic disease management in the community).

Reduced A1C levels

The first two cohorts of Project patients/clients in Calgary experienced a statistically significant reduction in their A1C levels during the Project timeframe. In light of research that links A1C levels and medical charges, this was a finding that was exciting in terms of the cost savings potential it could point to.⁵¹ For more on the A1C story see our High Benefit Impact on quality care for patients/clients.

From a provider perspective

Better resource usage

For their part, provider partners reported anecdotally that they felt they were able to use scarce specialized health resources much more efficiently.

Leveraging competencies

Synergies through collaboration produced more efficient care, and leveraging the skills of each member of the health care team meant that solutions were enhanced, not rediscovered.

Better use of time

Function Analysis results⁵² showed that case managers/CCCs experienced a reduction in paper-based activities by the end of the Project, along with a corresponding reduction in administrative time.⁵³

From a system perspective

Quality care and efficiency through IT

The anticipation was that with further refinement of IT systems, better organization of health information and its timely availability would result in better service quality and a reduction in duplication of care. The IT story is discussed in greater detail in our High Impact Benefit on communication and decision-making.

"It (the model) lets each member of the partnership do what he/she does best, rather than spinning wheels on work that is not within his/her particular area of expertise or skill set"

Dr. George Southey, Dorval Family Health Team, Ontario physician partner "The greatest benefit for a family physician is more efficient use of time. By meeting regularly with a case manager you know and trust, a family physician can be assured his/her patients are getting the right care in an efficient manner."

Dr. June Kingston, Trillium Health Group Ontario physician partner

Lessons Learned

New IT systems require time and patience

The effort to reduce duplication through enhanced IT is definitely worthwhile, but takes time; there may, in fact, initially be more duplication as new systems are established.

Need to commit to data analysis

Having the ability to store patient/client health information for population analysis is wonderful, but providers need to commit time and resources to be able to review and reflect on this information so that it truly can be useful on a larger scale.

Re-considering roles and duties also requires time and patience

It can take some time to figure out who should/could best be filling a certain role or function (particularly in relation to trying to re-direct some administrative tasks), and every partnership will figure out its own best solution, but the results in terms of efficiency and the better use of everyone's professional skills are certainly well worth the effort.

The bottom line: Providers need to look at the 'big picture gains' when undertaking systems changes - the reality is that transformation can be challenging and frustrating at times, and adaptations must be made en route.

"Part of the value of this Project is that it serves as a demonstration for others. It signals that they too can work in partnership to provide the right care..."

> **Nancy Milroy-Swainson,** Director of Primary and Continuing Healthcare Division, Health Canada

Recommendations & Action Planning

A Doable Transformation

Conclusion & Recommendations

The National Partnership Project demonstrated that primary health care is enhanced through the involvement of home care, particularly for individuals with a chronic disease. Partnerships between physicians and home case managers were created, and where already existing, were enhanced; the scope of home care was increased to include proactive care for patients with chronic disease and IT systems were implemented.

Home care case managers at the Project sites were able to effectively support their physician partners to ensure that patients with diabetes received case management interventions to assess and reassess their needs according to clinical practice guidelines and algorithms developed by the teams. Over 900 clients benefited from the initiative and expressed increasing levels of satisfaction over the life of the Project with this model of care.

CCCs, case managers and physicians reported high levels of satisfaction with the case management, chronic disease management, and collaboration aspects of the Project. Most felt that Project interventions in these areas had a positive impact on patient/client care, interactions with other health care professionals, and improved their knowledge, skills and attitude in providing care to patients with diabetes. Providers reported increased levels of trust, communication and information sharing.

There was evidence of improved clinical indicators. In Calgary, where the model had been in place longer, the decrease in A1C for patients was statistically significant – an achievement that is even more noteworthy as the Calgary site implemented two software systems during the implementation phase of the Project. In Ontario, improvements in A1C were noted but statistical significance was not achieved. Given Calgary's experience, positive trends achieved in Ontario do suggest that as the model matures, the Ontario participants have the potential to improve their A1C levels.

The partnership of family physician and home care case manager resulted in increased referrals to the home care program in Ontario. This was not identified in Calgary as the model has been operational for a number of years. CCAC staff in Ontario reported that the referrals by physicians reflected an improvement in physicians' understanding of services that can support their patients. Both the case managers and physicians experienced enhanced collaboration and problem solving. They reported an awareness of consciously making choices for their patients with a better understanding of limited resources and the broader range of services available.

Recommendations

The Project sites have committed to continuing the partnership and information technology solutions adopted throughout the Project. Sustainable partnerships between case managers and primary care physicians will require changes to home care programs. Home care programs will need to continue expanding their capacity to serve more clients and their ability to serve a different mix of clients with a range of needs. The Canadian Home Care Association recommends that:

Case management be regarded as an overall strategy central to primary health care in Canada. To that end, the contribution of both physician and home care partners to this strategy should be considered a first priority option when planning health care services. There must also be a commitment to operating within a clinical framework wherein the entire health care team takes responsibility for clinical outcomes.

- Chronic disease management be recognized as a community-based responsibility, wherein home care can, and should, play an integral role. Both resources and training are needed for this expanded role.
- More resources and training be devoted to the development of teamwork and partnership that achieves productive collaboration amongst the primary health care team.
- Continued investment in and emphasis (including public education) on the vital importance of electronic health records and enhanced health IT systems occur. Progress in these areas must proceed as rapidly as possible.
- The use of electronic forms and tools (including algorithms and minimum data sets) continues to be a high-priority area for health providers. These tools are critically important as best practice guidelines that help to ensure consistency and direction for managing patient/client care, both on an individual and population level.

The Canadian Home Care Association thanks you for your interest in this report and the story it tells of the National Partnership Project. As indicated at the outset, the Project was a demonstration initiative and not research based, a design set out by Health Canada and the Primary Health Care Transition Fund. This report has sought to convey how Project participants (providers and patients/clients alike) felt real enthusiasm about their Project experiences. Our hope is that other jurisdictions will reflect on what took place, use whatever information and resources we can offer, and pursue similar initiatives designed especially for their own unique needs and circumstances.

Two key strategies for change

- Aligning home care case managers with family physicians through formalized and structured partnership, thereby creating health teams uniquely equipped to provide optimal patient/client care.
- Expanding the role of home care in chronic disease management to serve a broader scope of patients who would benefit from earlier interventions in order to improve their self-management.

Action Planning

An introductory road map for building partnerships between home care and family physicians within a chronic disease management model

For readers interested in pursuing models similar to those in the Project, our 'High Impact Benefits' all contain valuable lessons we learned en route.

Our participants also felt a very brief run-down of some of the 'best advice' they have to give arising from their experiences in the Project could give other jurisdictions a starting point for their own journeys. Here is that advice:

When building partnerships

- Adapt the nature of the partnership arrangement to suit the partners' needs: recognizing the mission, values and priorities of the partner organizations is very important.
- The nature of partnership required to achieve productive collaboration takes time, and it requires the development of a trusting relationship.
- In particular, take the time up front to agree on partner roles, responsibilities, communication mechanisms, etc. (and recognize that some of this work can be challenging).

- It can be very helpful to engage in teambuilding exercises at the outset and to focus on early wins so partners can see the potential in their new patterns; there needs to be a willingness to empower staff within partner organizations to take risks, and there needs to be recognition that new approaches may need modification over time.
- Consider how the partnership arrangement may impact on workload and workflow issues, and how it may impact on the roles and relationships of other members of the broader team (for example, administrative support).
- Consider how the partnership may impact on reimbursement issues for physicians.
- Consider how to build in time for partners' meetings – two-way dialogue is essential, and partners need to communicate about both clinical and process matters; however, mechanisms to share information do need to be kept simple rather than creating extra work.
- Physician champions who will provide leadership and support are invaluable; similarly, having senior management commitment and enthusiasm within home care is essential.

Reorganizing home care case managers to align/partner with family physician practices makes sense and can happen quite easily and without huge costs.

When working in a chronic disease management model

- Partners need to understand and agree on which specific patient/client outcomes are being sought and how they will be measured.
- Using standardized tools and pathways can help everyone focus on the same thing and ensure shared accountability; be prepared to refine and revise these tools as required.
- Listen and learn from your patients/clients in terms of how to best assist them become more active participants in their own disease management.
- Partners should consider together how other community health care service providers and professionals will interact and fit into the partnership arrangement.
- Allot time and resources for training so partners can have adequate knowledge and confidence about working within a chronic disease management model (including learning about the use of standardized tools and clinical guidelines).

When making changes to IT systems

- Enhancements are incremental, and benefits often follow a challenging learning curve.
- What you end up with often differs from your original vision.
- While IT can enable good care and good communication, technological changes don't change people – having trusting relationships and strong communication is still the most important starting point for collaborative care and a team approach.
- Health care providers need appropriate time and training to make the transition to new IT systems.

Video testimonials, tools, resources and quick facts are available at www.cdnhomecare.ca

"I would encourage our colleagues in other regions or provinces or across the country to embark on something like the Project..."

> **Dr. Richard Musto,** Executive Medical Director, Southeast Community Portfolio, Calgary Health Region

"This [the Project] has allowed us to be proactive in the care of not only traditional home care clients, but it has enabled us to look after clients before they even get into the traditional home care stream. So what we're really trying to do is to keep people healthier for a longer period of time."

> **Carol Slauenwhite,** Primary Care Specialist, Calgary Health Region

Appendix A

Acknowledgements

Appendix A

Acknowledgements

The Canadian Home Care Association (CHCA) is a national, not-for-profit membership organization representing over 600 organizations and individuals from publicly funded home care programs, not-for profit and proprietary service agencies, consumers, researchers, educators and others with an interest in home care. Through ongoing dialogue, publications, and position papers the CHCA acts as a united voice and access point for information and knowledge about home care across Canada.

The National Partnership Project would not have been possible without the cooperation of countless individuals who contributed their time and resources to this exciting initiative. On behalf of the CHCA Board of Directors, we would like to express our appreciation to all these individuals and organizations for their input and support.

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We invite you to explore, learn and build upon our experience...

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Appendix B

Objectives & Logic Model

Appendix B Objectives

The Project performance was measured against these objectives.

National Partnership Project Objectives

	,	<u> </u>
Client Objectives	Increased access to case	e management for PHC and home care
	Increased collaboration	between patients/clients and providers
		al health practices (health promotion, -care) and health status
	Increased client satisfac	tion
	Reduction in avoidable/ services	unnecessary use of institutional
Describes Objective		
Provider Objectives	Development of provid	er partnerships
	Enhanced collaborative	care among Project providers
		and evidence-based clinical guidelines nagement by Project providers
	Increased electronic con	nnectivity amongst providers
	O Increased information s	haring amongst providers
	1 Improved coordination	of service
	2 Increased provider satis	faction
	3 Improved efficiency of	service delivery
		uate health outcomes, use of health nt/client and provider satisfaction
Public Objectives	5 Increased public and st services and PHC renev	akeholder awareness of change in PHC val

Logic Model

Mandate

To enhance and augment primary health care provider collaboration through a strengthened role of home care case management for clients/patients with chronic diseases

Program Components

PHC services delivered at 2 sites in Ontario and Alberta

Measurement and Monitoring

Marketing and Communications

Activities

Provision of "traditional" PHC services Strengthened case management

Collaboration between PHC and home care

Enhanced Information Technology Collection and sharing of program data Public relations and knowledge exchange

Target Population

Patients of PHC practices with specific chronic conditions

Service providers (family physicians, case managers and others)

General Public

Short - Term Outcomes

- Increased access to home care case management by PHC patients/clients
- Increased patient/client satisfaction
- Increased collaboration between patients/clients and providers
- Improvement in personal health practices (health promotion, disease prevention, self- care)
- Reduction in avoidable/ unnecessary institutionalization

- Increased collaborative care among providers
- Increased provider partnerships
- Increased use of chronic disease management tools and evidence-based guidelines by interdisciplinary teams
- Increased electronic connectivity
- Increased information sharing
- Improved coordination of services
- Increased provider satisfaction
- Improved efficiency of service delivery
- Improved ability to evaluate health outcomes, service use and satisfaction levels
- Increased awareness of change in PHC services
- Increased awareness of PHC renewal

- Long Term Outcomes
- Improved health outcomes
- Increased involvement in health promotion and disease management
- Sustained provider partnerships
- Better integration of PHC and home care services
- Better understanding of PHC services
- Adoption by other jurisdictions

We invite you to explore, learn and build upon our experience...

www.cdnhomecare.ca

Appendix C

Endnotes

Appendix C **Endnotes**

¹ As revealed in recent surveys by the National Primary Health Care Awareness Strategy, many Canadians are unsure what 'primary health care' means. The Strategy itself is designed to address this confusion. In its own 'fact sheet on primary health care', the Strategy acknowledges that primary health care defies any single definition, but says it essentially refers to the basic, everyday health care accessed by Canadians. The Strategy describes that primary health care is built on several key pillars: healthy living (including a focus on prevention and self-care), a team approach to patient/client care, a '24/7' access to the right services when needed, and improved information sharing between health providers and expanded access to health information by Canadians (through the use of tools and electronic health records and systems). The National Partnership Project is itself (as befits a Primary Health Care Transition Fund project) built on many of these same pillars. For more information on the Primary Health Care Awareness Strategy, please see www.phc-ssp.ca.

² We think it is significant to note here that in its second annual report on the overall status of Canadian health care (released February 2006), the Health Council of Canada cited primary care and home care as two of five priority areas that require immediate attention to ensure better access to quality health care for Canadians. Interestingly, the report also focused on a great many other recommendations that align with the work of the National Partnership Project, for example:

- The need for faster implementation of interprofessional primary health care teams.
- The need for greater use of electronic health records and technologies.
- The importance of enabling health care professionals to practice to the best of their potential for the best use of skill sets.
- Expanding the range of home care services to assist people with chronic conditions.
- Taking a team approach to chronic disease management, using standardized tools.

For further information on the Health Council report, please see www.healthcouncilcanada.ca.

- ³ The full "Final Evaluation Report" for the Project, prepared by IBM Business Consulting Services, is a lengthy analysis of the Project work and is available electronically upon request.
- ⁴ The Project was funded as a contribution agreement between CHCA and Health Canada, specifically intended to advance primary health care initiatives. The focus was on working in a live environment as opposed to a more carefully controlled research setting. Our one main clinical indicator was looking at patient/client A1C levels over the life of the Project.
- ⁵ Interdisciplinary diabetic management programs are a particularly relevant example of such an approach, in light of the National Partnership Project's focus on diabetes.
- ⁶ For the purpose of this report, 'providers' refers to the home care case managers and physicians who were the health care providers central to the Project. Other health care providers will be specifically referenced by their discipline.
- ⁷ Clarke, J et al: Evaluation of a Comprehensive Diabetes Disease Management Program: Progress in the Struggle for Sustained Behavior Change. Disease Management. Volume 5, No. 2, 2002.
- 8 A document or file having a preset format, used as a starting point for a particular application so that the format does not have to be recreated each time it is used.

- ⁹ Diabetes is one of the few disease pathologies where the literature does exist to support the hypothesis that case management as an intervention, in and of itself, can make an absolute change in the outcomes of patients/clients with the condition. Norris et al (2002): The Effectiveness of Disease and Case Management for People with Diabetes A Systematic Review; The California Med-Cal Type 2 Diabetes Study, January 2004.
- ¹⁰ The A1C test (haemoglobin A1C test, glycosylated haemoglobin A1C test, glycohaemoglobin A1C test, or A1C test) is a lab test that reveals average blood glucose over a period of two to three months. Specifically, it measures the number of glucose molecules attached to haemoglobin, a substance in red blood cells.
- ¹¹ Ryan, EA, Todd, KR, Estey, A, Cook, B, Pick, M: Diabetes Education Evaluation: A Prospective Outcome Study. *Canadian Journal of Diabetes*. Volume 26, June 2002, pp. 113-119.
- ¹² Norris, S et al: The Effectiveness of Disease and Case Management for People with Diabetes: A Systematic Review. *American Journal of Preventive Medicine*. Volume 22(4S), 2002, p. 15.
- ¹³ Recognizing that each time the case manager Function Analysis (FA) process was undertaken it could only capture one week in time, the FA study was useful to the Project home care programs in considering the redeployment of case manager/CCC activities; however, data cannot be relied on as conclusive statistical information regarding how much time a case manager/CCC engages in certain activities (given there were no work load indices). Nevertheless, the overall trends and patterns noted through the FA were, from the Project perspective, both significant and suggestive.
- ¹⁴ Statistics Canada Health Reports, Vol. 9, No. 3, Winter 1997.
- ¹⁵ Patient/client surveys were done solely with patients in Ontario, because Calgary patients/clients had already been involved in a partnership model of care previous to the National Partnership Project (Health Innovation Fund Project #307), so would not necessarily perceive any dramatic changes in the way their care was delivered. When those Calgary patients/clients were surveyed as part of the preceding Calgary initiative, results were very much in keeping with Partnership Project results for Ontario patients/clients.
- ¹⁶ In a January 2006 article in *Clinical Diabetes* (Volume 24, 2006, pp. 6-8.), researcher Dr. A. M. Delamater says: "As the 'gold standard' measure of diabetes control, [the A1C] test provides important feedback to health care professionals and patients. It follows that patients' understanding of this test and its implications for long-term health risk is essential." Delemater comments that relatively few studies have examined diabetic patients' knowledge and understanding of A1C testing. Delamater's own study concludes: "Most patients do not understand the test and are not aware of their recent A1C results. Clinicians have the opportunity to use the A1C test as part of the clinical encounter to engage their patients, discuss their glycemic goals, and work collaboratively with them to improve diabetes self-management."
- ¹⁷ Beckley, ET: Knowing A1C Goal Begets Better Control. *DOC News*. Volume 2, No. 9, September 1, 2005, p. 7.
- ¹⁸[http://www.diabetes.ca/cpg2003/chapters.aspx; Gilmer TP, O'Conner PJ, Manning WG, Rush WA: The cost to health plans of poor glycemic control. Diabetes Care 20:1847–1853, 1997
- ¹⁹ Statistics Canada Health Reports. Volume. 9, No. 3, Winter 1997.
- ²⁰ See Endnote 15.

- ²¹ Wagner, E et al: "Improving Chronic Illness Care: Translating Evidence Into Action; Interventions that encourage people to acquire self-management skills are essential in chronic illness care." The People-To-People Health Foundation, Inc., Health Affairs, 2001.
- ²² From: http://www.hc-sc.gc.ca/hcs-sss/hhr-rhs/strateg/index e.html
- ²³ Comments made by Alberta-based Capital Health President and CEO Sheila Weatherill on February 15, 2006, the opening day of a major conference on primary health care in Edmonton. See www.capitalhealth.ca
- ²⁴ Canadian Institute for Health Information and Statistics Canada, *Health Care In Canada 2005*, p. 78.
- ²⁵ See Endnote 13.
- ²⁶ Powell, Suzanne K. Advanced Case Management Outcomes and Beyond, p. 3.
- ²⁷ National Academy of Social Insurance, "Medicare in the 21st Century: Building a Better Chronic Care System," January 2003.
- ²⁸ http://www.chronicdiseaseprevention.ca/content/case_for_change/case_for_change.asp
- ²⁹ Gilmer TP, O'Conner PJ, Manning WG, Rush WA: The cost to health plans of poor glycemic control. *Diabetes Care.* Volume 20, 1997, pp. 1847–1853 and Wagner EH, Sandhu N, Newton KM, McCulloch DK, Ramsey SD, Grothaus LC: Effect of improved glycemic control on health care costs and utilization. *JAMA*. Volume 285, 2001, pp.182–189.
- ³⁰ See Endnote 15.
- ³¹ For example, in Calgary, providers from other service disciplines were considered to be ad-hoc members of the partnership team and not fully integrated; furthermore, it was CCCs who did the liaising and physicians rarely interacted with these other providers (and physicians actually indicated that they preferred having one line of communication). In Ontario, both physicians and case managers noted that the Diabetic Education Centre was not fully integrated with the partnership team. Case managers expressed the need to have the Centre and other providers better integrated with the team as the partnership model evolves. At both sites, time spent educating service providers at the early stages of Project implementation was significant, but it did yield very positive results.
- ³² In Calgary, the Living Well with a Chronic Condition Program is integral to chronic disease management. Living Well Centres offer community-based exercise programs, disease education and self-management classes to enhance the capacity of individuals with chronic conditions to maintain or improve their quality of life and manage their chronic disease. The facility infrastructure for this program is achieved by working together with a variety of community groups. In both Alberta and Ontario, Diabetic Education Centres also play a highly important role in diabetes management.
- ³³ Ontario site results were not as resoundingly positive as Calgary, but this is understandable given the recent introduction of the tools and the fact that IT implementation was slower than originally anticipated.
- ³⁴ The term 'best practices' is considered to be state-of-the-art medicine delivered in the most efficient and effective manner.

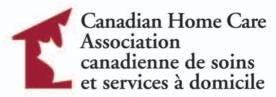
- ³⁵ While the Project timeframe was too short to demonstrate this for example, the Ontario patient/client survey revealed that no Project patients were hospitalized for a reason related to their diabetes over the life of the Project many other health program evaluations have cited reductions in hospital admissions and Emergency Department usage as a result of improved coordination and access to community-based services. See, for example, a study where a case management approach has been piloted with success in Castlefields Health Centre in Runcorn, Cheshire (UK) www.hda-online.org.uk/hdt/1101/local.html; and a 1997 evaluation of the 'Comprehensive Home Option of Integrated Care for the Elderly (CHOICE)' in Edmonton referenced in the Toronto District Health Council's Coordinated.nccessible.community-bealth-care for Elders in Toronto: The CACHET Model. December 2004.
- ³⁶ Hurst, K., Ford, J., Gleeson, C., Evaluating self-managed community teams. Journal of Management in Medicine. 2002, Vol 16(6), 463-483).]
- ³⁷ Wagner, E et al.: Improving Chronic Illness Care: Translating Evidence Into Action; Interventions that encourage people to acquire self-management skills are essential in chronic illness care. <u>The People-To-People Health Foundation</u>, Inc. Health Affairs. 2001.
- ³⁸ Wagner, E et al.: Improving Chronic Illness Care: Translating Evidence Into Action; Interventions that encourage people to acquire self-management skills are essential in chronic illness care. <u>The People-To-People Health Foundation</u>, Inc. Health Affairs. 2001.
- ³⁹ For example, the establishment of a centralized, computerized database system that improves transfer of information among all members of a team has been shown to improve the efficiency of diabetic health care. Canadian Diabetic Association Clinical Practice Guidelines. 2003.
- ⁴⁰ See Endnote 15.
- ⁴¹ See Endnote 13.
- ⁴² This was a particularly positive trend in Calgary given the known and established relationships already in place at baseline. In Ontario (where no previous partnerships had existed) case manager time with physicians increased significantly at the outset of the Project (when the relationships were being established), then decreased somewhat in Time 2 (when some case managers were spending more time with the physician's office nurse, as different modes of partnership communication evolved).
- ⁴³ For example, the computer-based RAI-HC tool (Resident Assessment System for Home Care) is now in use.
- 44 Norris et al, op. cit.
- ⁴⁵ The Canadian Home Care Association held an invitational round table on this subject in March 2005 and looked at the core principles, key elements, competencies, and outcomes of case management, as well as recommendations to support effective case management. For a copy of the report from this round table, see: http://www.cdnhomecare.ca/reports_position.php.
- ⁴⁶ See Endnote 15.
- ⁴⁷ See Endnote 13.
- ⁴⁸ "How the Chronic Care Model Has Been Operationalized in the Calgary Health Region". Presentation by Dr. Sandra Delon and Dr. Peter Sargious. Action Centre 2004.

- ⁴⁹ Borrill et al.: <u>The Effectiveness of Health Care Teams In the National Health Service</u>, 2000.
- ⁵⁰ Norris et al, op. cit.
- ⁵¹ For example, a US historical cohort study found that a sustained reduction in A1C levels among adult diabetic patients is associated with significant cost savings within 1 to 2 years of improvement. See Wagner, Sandhu et al, op. cit.
- ⁵² See Endnote 13.
- 53 The Calgary site actually showed an increase in administration time, but this was attributable to new communication methods employed by CCCs with their clients, and to adjustments to the new Soprano system, and the anticipation was that administration time would quickly reduce.









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