

## Bridging the gap between primary care and the cancer system

### *The UPCON Network of CancerCare Manitoba*

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#### ABSTRACT

**PROBLEM BEING ADDRESSED** Patient care is poorly coordinated between family physicians and the cancer system and the working relationships are not strong.

**OBJECTIVE OF PROGRAM** To improve integration of patient care and communication between FPs and cancer specialists; enhance FPs' knowledge of cancer and the cancer system; and promote the role of primary care within the cancer care system.

**PROGRAM DESCRIPTION** The Uniting Primary Care and Oncology (UPCON) Network of CancerCare Manitoba has created partnerships with 12 primary care clinics in Winnipeg, Man, by providing the following: access to the provincial electronic medical record for cancer; small group continuing professional development for a "lead physician" from each clinic to make him or her the local cancer resource; educational outreach to all clinic staff; and changes within CancerCare Manitoba to highlight the role of FPs.

**CONCLUSION** Lead physicians are appreciated by their clinic colleagues, and these FPs are the main users of the cancer electronic medical record. A strong cancer continuing professional development program has been implemented and a voice for primary care has been created within the agency. The UPCON Network is now expanding throughout Manitoba.

#### RÉSUMÉ

**PROBLÈME À L'ÉTUDE** La coordination des soins entre les médecins de famille (MF) et le système de soins aux cancéreux est déficiente, et les relations de travail ne sont pas idéales.

**OBJECTIF DU PROGRAMME** Améliorer l'intégration des soins aux patients et la communication entre MF et spécialistes du cancer; également, promouvoir le rôle des soins primaires à l'intérieur du système de soins aux cancéreux.

**DESCRIPTION DU PROGRAMME** Le Uniting Primary Care and Oncology (UPCON) Network de CancerCare Manitoba s'est associé à 12 cliniques de soins primaires de Winnipeg, au Manitoba, en leur fournissant les services suivants: accès aux dossiers médicaux électroniques de la province sur le cancer; formation professionnelle continue d'un « médecin leader » pour chaque clinique, qui devient alors la ressource locale pour le cancer; formation offerte à tout le personnel des cliniques; et certains changements à l'intérieur de CancerCare Manitoba pour mettre en valeur le rôle du MF.

**CONCLUSION** Les médecins leaders ont été appréciés par leurs collègues de clinique et ils sont les principaux utilisateurs des dossiers médicaux informatisés sur le cancer. On a mis en place un important programme d'éducation médicale continue et on a créé une voix pour les soins primaires au sein de l'agence. Le réseau UPCON s'étend maintenant dans tout le Manitoba.

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Patients and FPs know that communication and coordination of care can be difficult as patients move from the primary care clinic to specialist care. The challenge was explained by a European family practice group as the following:

Each part of the system tends to focus on its own tasks and not on the system as a whole—that is, the system actually experienced by patients. The task of improving the quality of interaction and cooperation across the interfaces is not seen as any one group's particular responsibility.<sup>1</sup>

The cancer care system has been recognized as posing particular challenges to achieving good coordination of care.<sup>2,3</sup> Family physicians report that they lack familiarity with cancer treatments and sense that their role and expertise are not recognized by oncology specialists. Communication between these physician groups is seen as difficult, and opportunities for relationship-building are few. Patients themselves report confusion about the organization of their care, and, although they evaluate FPs well for the help they provide, they might perceive FPs as “out of the loop” if communication with cancer specialists is poor.<sup>4-6</sup>

These concerns have created growing interest in improving the ways in which FPs and the cancer system work together in the care of their mutual patients. Cancer agencies face the challenge of providing treatment to a steadily increasing number of patients at a time of a shortage of oncology specialists. The need for FPs to provide follow-up care in particular has become acute, a responsibility that builds on their more established roles in screening, diagnosis, and palliation. The need to partner more actively with FPs has been strengthened by the expectations of hospital accreditation bodies, by a growing body of research supporting the effectiveness of FPs in providing cancer care,<sup>7</sup> and by the demands of FPs themselves for cancer agencies to provide the information and support they need.

### Objective of program

The Uniting Primary Care and Oncology (UPCON) Network is a program of CancerCare Manitoba (CCMB), designed to enhance partnerships between FPs and the cancer system. It has the following goals:

- enhance knowledge of FPs regarding cancer and the cancer care system;
- improve communication and build relationships between FPs and cancer specialists;
- improve integration of patient care between FPs and the cancer care system; and
- promote the role of primary care within the cancer care system.

This article outlines the history and nature of the program and offers initial evaluation data of its key

elements: the role of “lead FPs,” sharing the electronic cancer care record, small group education, patient perceptions, and the developments within CCMB. Survey research that assesses the effects of UPCON on perceptions of collaboration among FPs and cancer specialists is being prepared for publication.

### Description of program

The UPCON Network arose from a consultation with Manitoba FPs in 2002 about improving linkages between primary care and CCMB. It received 3 years of funding in 2003 from Manitoba Health through the Primary Health Care Transition Fund of Health Canada and is now supported by CCMB and the CCMB Foundation. The program resources include an academic FP (as the medical leader), a full-time manager, and an administrative assistant. A multistakeholder advisory board met quarterly until 2006 to provide advice and direction to program staff. CancerCare Manitoba is a provincial agency responsible for cancer control in Manitoba and provides patient care in 2 multidisciplinary outpatient facilities affiliated with teaching hospitals in Winnipeg, Man. As a complement to the Community Cancer Program Network—a well established rural chemotherapy program that partners with FPs and other hospital-based professionals—the UPCON Network chose to focus on building relationships with FPs in Winnipeg, a city of 700 000, which is the province's capital and only large urban centre.

Letters outlining the proposed program and inviting participation were sent to 18 group family practices and community health centres in Winnipeg, which were chosen based on perceived interest and on the desire to include all regions of the city. Twelve clinics responded with interest and later agreed to participate. Among the

#### Examples of the UPCON case-based small group education sessions, 2004–2007

- Advanced care planning
- Cancer pain management
- Facilitating small group learning
- Failing bone marrow
- Follow-up care of breast and colon cancer patients
- Highs and lows of benign hematology
- Human side of cancer
- Issues and resources in prostate cancer care
- Issues in radiation therapy
- Lymphoma in family practice
- Managing neuropathic pain
- Oncologic emergencies
- Role of the FP in cancer care
- Skin cancer
- What's new in surgical oncology
- Workup and referral of cancer patients

12 clinics in 2004, there were 82 FPs and 59 nurses and other health care professionals. Clinic characteristics are described in **Table 1**, and UPCON Network activities in the primary care and cancer agency settings are outlined in **Tables 2** and **3**.

Each clinic nominated an FP with an interest in cancer who was willing to serve as the clinic's lead FP for the network. These lead FPs were the primary focus of the program and were paid honoraria for participation in orientation events, 8 hours of cancer clinic exposure, periodic meetings, and monthly small group education sessions about cancer and access to the cancer care system. Topics were derived from a needs assessment of lead FPs, using an instrument created by Cancer Care Nova Scotia.<sup>8</sup> Sessions were case-based and were developed and led jointly by a lead FP and an oncology specialist with the support of UPCON staff. Written summaries of key learnings were created after each session and distributed to all UPCON clinic physicians.

Lead FPs were equipped to act (and were promoted to their clinic colleagues) as informal resources about cancer care questions that arose in practice, but were not expected to perform any unique patient care role, apart from accepting the occasional referral of new cancer patients into their own practices. They served as

**Table 1. Characteristics of the 12 clinics in Winnipeg, Man, that agreed to participate in the UPCON Network in 2004**

CHARACTERISTICS	NO. OF CLINICS
<b>Location</b>	
• Core area	2
• Suburban	10
<b>Type</b>	
• Fee for service	7
• Community health centre	3
• Academic teaching centre	2
<b>Health records system</b>	
• Electronic	4
• Paper	8

CCMB liaisons in clinics, distributing newsletters, organizing UPCON lunch-and-learn sessions, and sharing information about education events, research trials, and other initiatives of interest sent to them by UPCON staff. They also served as a primary care advisory group to CCMB, meeting with oncologists and CCMB leadership and providing input about cancer care issues of concern to primary care.

The UPCON clinic physicians and support staff were offered training in the use of the comprehensive cancer electronic medical record (EMR) used throughout

**Table 2. Activities of the UPCON Network program in the primary care setting**

ACTIVITY	LEAD PHYSICIANS	WHOLE CLINIC
Education	<ul style="list-style-type: none"> <li>• Monthly case-based small group Mainpro-C sessions</li> <li>• Cancer clinic time with oncologists</li> <li>• Honoraria</li> </ul>	<ul style="list-style-type: none"> <li>• Summaries of small group sessions for all FPs</li> <li>• Annual Cancer CME Day and "Open House"</li> <li>• Annual lunch-and-learn sessions</li> </ul>
Communication	<ul style="list-style-type: none"> <li>• Frequent e-mail contact</li> <li>• Site visits</li> <li>• Check-in dinners</li> </ul>	<ul style="list-style-type: none"> <li>• Newsletters every 2 months</li> <li>• Collection of enhanced FP contact information for CCMB patient charts</li> <li>• Fax sheets for communication with oncologists</li> <li>• Support from UPCON staff</li> </ul>
Information technology	<ul style="list-style-type: none"> <li>• Training in CCMB EMR</li> </ul>	<ul style="list-style-type: none"> <li>• Training and support for EMR as requested</li> <li>• Computer hardware and high-speed Internet service</li> <li>• Access to cancer records of all clinic patients</li> </ul>
Patient referrals	<ul style="list-style-type: none"> <li>• Accepting 6-12 CCMB patients with no FPs per year</li> </ul>	<ul style="list-style-type: none"> <li>• Integration of these new patients</li> </ul>

CCMB—CancerCare Manitoba, CME—continuing medical education, EMR—electronic medical record.

**Table 3. Activities of the UPCON Network program in the cancer agency setting**

ACTIVITY	ONCOLOGISTS	WHOLE AGENCY
Raising profile of FPs	<ul style="list-style-type: none"> <li>• Discussion sessions with FPs</li> <li>• Cancer clinic exposure clinics with FPs</li> <li>• Involvement in education sessions</li> <li>• Complete contact information appended to all notes and letters</li> </ul>	<ul style="list-style-type: none"> <li>• Ensuring capture of FP name at registration</li> <li>• Annual FP promotions in cancer clinic setting:                             <ul style="list-style-type: none"> <li>- "Who's your family doctor?"</li> <li>- "Seen your family doctor lately?"</li> </ul> </li> <li>• Newsletters</li> <li>• Including UPCON FPs in task groups and CCMB strategic planning</li> </ul>
Patient referrals to UPCON FPs	<ul style="list-style-type: none"> <li>• Development of template for new patient referral letters</li> </ul>	<ul style="list-style-type: none"> <li>• Linking patients without FPs with UPCON clinics</li> </ul>

CCMB—CancerCare Manitoba.

## Program Description | Bridging the gap between primary care and the cancer system

Manitoba and were granted “read-only” access to the records of all clinic patients. About half of the clinics accessed the cancer EMR through a secure Internet connection—the first time health records were available this way in Manitoba. Stand-alone terminals were provided, and in 2 clinics the EMR was made available on all physicians’ desktop computers. The cancer EMR required a separate log-in and was not accessible from the primary care EMR.

### Evaluation

**Clinics.** In 2006, Probe Research conducted telephone surveys with FPs of the UPCON Network to assess the effects of the program. Responses from 29 of 86 network physicians (34%) were received, comprising 8 lead FPs and 21 non-lead FPs. Response rates were low, owing in part to challenges in reaching FPs by telephone and during the summer. Of those, 69% agreed that UPCON was effective in improving the working relationship with CCMB; 56% of non-lead FPs viewed the presence of UPCON lead physicians in their clinics as useful; and 61% of non-lead FPs had sought advice from their lead FPs in the past year, most often regarding the name of a CCMB contact, making referrals to the agency, cancer treatment or follow-up care, or symptom management.

**Education.** Twenty small group education sessions of 3 hours each were held for UPCON lead FPs from March 2004 to December 2007. Evaluations were very positive, with mean ratings of 4.7 out of 5 for clarity, relevance, and quality of discussion at the sessions.

**Use of cancer EMR.** Fifty-five clinic staff received training for the cancer EMR; the annual use of the cancer EMR is reported in **Table 4**. Most of the use of the cancer EMR was by lead FPs and by clinic nurses, with only 13% of log-ins in 2007 done by non-lead FPs. Four clinics were the heaviest users and accounted for 89% of all UPCON log-ins in 2007; of these, one was a fee-for-service practice. The most commonly accessed parts of the charts were visit notes and laboratory reports, and in 62% and 91% of cases, respectively, FPs indicated that access to this information had made a difference in their patient management.

**Patient survey.** Cancer patients who had been referred to new FPs through UPCON were surveyed by telephone in 2006 about their experiences of coordination of care between their new FPs and CCMB. Sixty of 86 (70%) patients responded; of these, 77% were female, 55% were older than 55 years of age, and half had been with their new FPs for more than a year. Most respondents (76% to 89%) expressed satisfaction on 7 items assessing coordination of care, with the strongest drivers of satisfaction with FP care identified as receiving consistent information from the FP and the cancer clinic and FP

awareness of tests and treatments done at CCMB (bivariate correlation coefficient 0.88 and 0.83; both  $P < .01$ ).

**Developments within CCMB.** At baseline in 2003, only 42% of CCMB charts had the name of an FP recorded. The “Who’s your family doctor?” campaign promoted the identification of FPs for entry into the EMR and was effective in increasing the percentage of charts with the names of FPs recorded to 81% in 2006. The UPCON Network placed 120 patients with new FPs between 2006 and 2007 after referral from oncologists.

### Discussion

There are reports of several projects that have attempted to improve information transfer from cancer care facilities to FPs, particularly at the points of initial referral and discharge.<sup>9-13</sup> Several Canadian agencies have developed educational programs for FPs providing systemic cancer therapies,<sup>14,15</sup> and the Alberta Cancer Board is pursuing an active provincewide collaboration with FPs to enhance access, education, and communication.<sup>16</sup> The UPCON Network is unique in its focus on relationship-building through the creation of a sustained network of urban group family practices led by a community of lead FPs with strong links to CCMB. The UPCON Network has focused squarely on the care provided in the primary care setting to cancer patients and families, and UPCON staff have created a focus for leadership in primary care outreach within the cancer agency. CancerCare Manitoba is also the first Canadian cancer agency to make its EMR available to FPs in their clinics through secure Internet access, an innovation endorsed by a variety of professional groups.<sup>1,17</sup>

Two other programs similar to the UPCON Network have been reported: the Primary Care Cancer Lead Clinician (PCCL) initiative and the Lake Superior Rural Cancer Care Project. The PCCL initiative in England funded primary care leaders (mostly GPs) from 2001 to 2004 in each of its Primary Care Trusts (PCTs), in which they participated in their local Cancer Networks.<sup>18</sup> The average PCT served a population of about 170 000 people and contained about 30 GP practices and 106 GPs. Unlike the informal practice-based clinical resource role of UPCON lead FPs, the PCCL clinicians focused on providing leadership within the PCT to achieve health system priorities, such as palliative care standards and cancer screening targets. Manitoba is in the early stages

**Table 4. Annual use of cancer EMR in 12 UPCON clinics**

USE OF CANCER EMR	2006	2007
No. of clinics using	8	7
Range of log-ins in clinics	2-61	6-65
Log-ins by lead FPs, %	58	48
Mean log-ins in clinics	26	24

EMR—electronic medical record.

of primary care reform and lead FPs of UPCON have not focused on this more system-oriented role. A leadership role for FPs at the regional level in the delivery of primary care cancer services has merit and has been recently implemented in Ontario.<sup>17</sup> The presence of clinic-based cancer leaders, however, is also important and is supported by the perception of the English PCCL physicians, who received the most support and had the greatest effect in their home practices, despite having more regional roles.<sup>19</sup>

The Lake Superior Rural Cancer Care Project was a randomized trial that involved 18 towns in 3 American states from 1993 to 1997.<sup>20-22</sup> Lead clinicians (FPs, nurses, and pharmacists) were identified in the 6 “intervention towns” in the study to act as local resources and opinion leaders, and they sponsored a variety of cancer education, communication, and quality improvement initiatives in their communities. This trial showed significant improvements in knowledge about cancer management among all professionals attending 3 or more education sessions in the intervention towns. A trend ( $P=.06$ ) toward greater improvement in FP knowledge was seen in towns with more engaged FP leaders. An analysis of practice change found less effect, with 5 of 37 practice end points favourably affected, including management of lung cancer and breast cancer follow-up. This study provides a rigorous assessment of interventions very similar to those of UPCON, with the notable expansion of the lead clinician model beyond FPs to include nurses and pharmacists. It suggests that such a multifaceted approach achieves knowledge acquisition that translates in only a limited way into specific changes in provider practice. Stronger and more specific interventions might be needed to achieve such changes.

There are no published reports of making EMRs of cancer care facilities directly available to the offices of FPs. Manitoba enjoys the advantage of using the same cancer EMR platform throughout the province. Although the cancer EMR is generally rated as having a positive effect on patient care, its use was limited to lead FPs and key nurses in only a few clinics. Lack of integration with existing EMRs, emphasis on personal access by FPs, trouble remembering log-in information, and satisfaction with faxed cancer specialist visit notes have been barriers to its use. Because an FP will have only a handful of patients receiving cancer treatment or early follow-up care at any one time, infrequent need for this information makes fluency with the system hard to maintain. As the UPCON Network expands, training for the cancer EMR is being focused on lead FPs and key office support staff or nurse clinicians, with a stronger emphasis on integration of information retrieval into existing office procedures.

As a result of our experience and evaluation data, the provincial expansion of UPCON is under way. Clinics are being recruited in rural Manitoba communities, especially clinics with FPs connected to the rural

#### EDITOR'S KEY POINTS

- The cancer care system poses many challenges to FPs: they believe their roles in treating cancer patients are not recognized; and the coordination of care of mutual patients is difficult, as communication between themselves and other specialists is poor.
- The Uniting Primary Care and Oncology (UPCON) Network was designed by a provincial Canadian cancer agency to enhance partnerships between FPs and the cancer system.
- By providing clinics with access to the provincial cancer electronic medical record and small group education sessions for clinic “lead physicians,” UPCON was successful in opening communication between FPs and the cancer system.

#### POINTS DE REPÈRE DU RÉDACTEUR

- Le système de soins aux cancéreux est source de nombreux défis pour les MF: ils croient que leur rôle dans le traitement des cancéreux n'est pas reconnu; et la coordination des soins avec d'autres intervenants est difficile puisque que la communication avec les spécialistes est déficiente.
- Le Uniting Primary Care and Oncology (UPCON) Network a été institué par une agence canadienne du cancer de la province, pour favoriser la collaboration entre les MF et le système de soins aux cancéreux.
- Grâce à l'établissement de cliniques avec accès aux dossiers médicaux informatisés de la province sur le cancer et à des sessions de formation en petits groupes pour des « médecins leaders » dans les cliniques, UPCON a réussi à établir une communication entre les MF et le système de soins aux cancéreux.

chemotherapy program. Videoconferencing will be a key educational tool in this expansion. A full-day cancer system navigation event (“Be a CancerPro”) for primary care providers has been developed and an information hotline for UPCON clinics has been launched.

### Conclusion

The UPCON Network is a unique effort by a Canadian cancer agency to engage FPs in their primary care practices in the care of their cancer patients. It has created dialogue between the cancer system and FPs, which is critical if high-quality and well-integrated care is to be provided to the growing number of Canadians diagnosed with cancer.

**Dr Sisler** is an Associate Professor in the Department of Family Medicine at the University of Manitoba and Director of Primary Care Oncology for CancerCare Manitoba. **Ms McCormack-Speak** is Program Manager of Uniting Primary Care and Oncology for CancerCare Manitoba.

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## Program Description | Bridging the gap between primary care and the cancer system

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### Contributors

**Dr Sisler** was the lead author of the initial draft of the article and subsequent revisions. **Ms McCormack-Speak** managed the evaluation strategy for the project, gathering and reporting the data presented. She contributed to and revised the initial draft of the article. Both authors approved the final version for publication.

### Competing interests

None declared

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