Celebrating Success – Province-Wide Congestive Heart Failure Collaborative Closing Congress

On May 14, 2004, health care professionals and health system administrators from across the province attended the Closing Congress of BC’s first provincial Congestive Heart Failure (CHF) Collaborative. The Collaborative results clearly demonstrated that if given the appropriate support, general practitioners can find ways to achieve outstanding results in delivering congestive heart failure care according to clinical practice guidelines. (See Figures 1-4 page 2).

“Having worked in the trenches, I know why we are all here – and that is to help people. I have never seen the likes of this type of transformational change before”, said Dr. Penny Ballem, Deputy Minister of Health Services.

The Collaborative proved that exceptional results can be achieved through making small changes, a few changes at a time.

“Your performance in getting patients on beta blockers is out of this world – the results are better than any I’ve seen in the US, where we have been doing quality improvement Collaboratives for a number of years now. As well, the number of patients who now have self-management goals is tremendous”, said CHF Collaborative Coach, Connie Sixta, (formerly the National Director for the Institute for Healthcare Improvement and currently a collaborative coach with Improving Chronic Illness Care, a national program of the Robert Wood Johnson Foundation).
For more information on the Province-Wide CHF Collaborative see: http://www.heart-health.org/about/cfdocs.htm

CHF COLLABORATIVE

Per cent of Patients with Documented Self-Management Goals
June 2003 - May 2004

Per cent of Patients with Complete Ejection Fraction (source & value) Recorded
June 2003 - May 2004

Per cent Systolic CHF Patients on ACE-1 or ARB (Y or TNS)
June 2003 - May 2004

Per cent Systolic CHF Patients on Beta Blockers (Y or TNS)
June 2003 - May 2004
Through a grant from the Ministry of Health Services, the BCMA is sponsoring the BC Diabetes Collaborative.

Due to BC’s aging population, chronic care is quickly becoming the cornerstone of family practice. The goal of the BC Diabetes Collaborative is to give family physicians appropriate support and opportunities to make practical, small scale improvements in clinical practice to provide ideal diabetes care.

“This Collaborative has developed targets for good diabetes management based on the BC Diabetes Care Guidelines and includes patients setting self-management goals”, noted Dr. Dan MacCarthy, Collaborative Director and BCMA Director of Professional Relations. “The clinical teams tell me this is one of the most exciting professional development opportunities they have participated in.”

Effective diabetes control necessitates that patients become experts in their own care -- knowing what medications to take and when, and incorporating proper diet and regular exercise into their daily lives. Learning Session 2 focused on how family physicians can help patients become effective self-managers, and highlighted various community resources that can be of valuable assistance.

The Northern Health Authority is currently delivering a regional Community Collaborative with a focus on chronic disease prevention and management. Funded through the Health Canada, Primary Health Care Transition Fund, the Collaborative involves seven northern BC communities working towards the goal of improving health outcomes for patients by facilitating primary health care organizational changes. The initial focus will be on chronic diseases including congestive heart failure, diabetes, co-morbid depression, hypertension and kidney disease.

“Good chronic disease prevention and management requires a planned approach to patient care. Many practices and communities need help to support optimal chronic disease prevention and care”, noted Judy Huska, Manager of Health Service Integration, Northern Health Authority.

The Northern Health’s Community Collaborative will include interdisciplinary community-based teams, providing integrated prevention and management for multiple and concurrent chronic diseases. The community will have the opportunity to work together on essential system redesign of the local primary health care sector.

The Ministry of Health Services, has provided the College of Physicians and Surgeons of BC with a grant aimed at developing a physician practice self-assessment program to support practice change towards optimal chronic disease management.
The BC Ministry of Health Services participated in World Asthma Day on May 4th, 2004. This event, sponsored by the BC Lung Association, highlighted the fact that while asthma is the most prevalent chronic disease globally, it is also the most controllable.

Dr. Mark FitzGerald, a respirologist at Vancouver Hospital and a member of the Provincial Asthma Task Force, explained that asthma medications can effectively control symptoms and prevent asthma attacks, but only if taken properly. “Every person with asthma should have an action plan”, he stressed.

Personalized action plans clearly spell out what medications need to be taken when asthma is changing, getting worse, or under control. It provides a guide to when asthma symptoms warrant doctor’s attention or immediate emergency treatment. The action plan is also used as a tool recording environmental irritants that trigger asthma attacks as well as monitoring symptoms and lung capacity (peak flow) to alert when breathing problems are about turn into an asthma attack.

“Even if you are feeling fine, you need to take your long-acting corticosteroid medication”, emphasized Dr. FitzGerald. “This medication treats the lung inflammation that causes the asthma attacks. Relying on short-acting medication is like taking aspirin for a toothache – you might experience temporary relief, but the cavity that is actually causing the problem needs attention”.

Statistics show that most British Columbians rely on short-acting rescue medication to control their asthma. Statistics also show that approximately seven British Columbians die annually as a result of a serious asthma attack. “Given that asthma is fully controllable, even one asthma-related death is unacceptable”, said Dr. Howard Platt, Director of the Ministry of Health Services Utilization Management Branch.

The good news is that partners from across BC’s health care system have been working to provide the information and support people need to effectively manage their asthma. For example, asthma care guidelines have been developed and distributed to family physicians and many community pharmacists are providing asthma education. As well, the BC Lung Association and BC’s health authorities have made asthma programs and education resources available in many communities across the province. These combined efforts are working as BC statistics indicate a 50% decrease in asthma-related hospitalizations over the past four years.

“BC’s Asthma Task Force will be working to spread and sustain what works”, noted Dr. Platt. “We will look at ways to eliminate asthma-related deaths. We will also continue to measure and report on BC’s progress in reducing the burden of asthma.”

For more BC asthma statistics, see:
http://www.healthservices.gov.bc.ca/cdm/research/asthmadataview.pdf

Information and resources for people living with asthma is available at:
http://www.healthservices.gov.bc.ca/cdm/patients/asthma/index.html

Asthma Action Plans can be downloaded at:
http://www.lung.ca/asthma/manage/action.html
Due to BC’s aging population, chronic disease management is now a major part of family practice. In response to the difficulties general practitioners are facing in delivering good chronic care, the Full Service Family Practice Incentive Program was implemented through a 2 year, $20 million allocation for family physician services set aside under the Subsidiary Agreement for General Practitioners - November 2002. This program was developed by the General Practice Services Committee (a joint committee of the BC Ministry of Health Services, BC Medical Association, and the Society of General Practitioners of BC).

The Chronic Care Practice Enhancement Pilot Project component of the program supports full service family physicians incorporate guideline-based care into their daily clinical practice. An annual $75 incentive payment is available to physicians for each patient with a confirmed diagnosis of diabetes mellitus or congestive heart failure whose clinical management is consistent with the BC clinical practice guidelines.

To date, approximately 40% of BC’s general practitioners have participated in the program.

“Physicians tell me they have appreciated the opportunity and the financial recognition of the work needed to update the care of their patients with diabetes and congestive heart failure. They have also told me they feel participating in the incentive program has been very satisfying professionally”, noted Dr. David Attwell, Co-Chair, General Practice Services Committee.

In the past 3 years, both the Canadian Diabetes Association and the MSP/BCMA Guidelines and Protocols Advisory Committee released evidence-based diabetes care guidelines. Since then, improvements in diabetes care have started to emerge, especially for A1C testing. The impact of other initiatives (e.g., BC Diabetes Collaboratives, Chronic Care Practice Enhancement Pilot Project) on diabetes care will be tracked and reported. (See Diabetes Care graph below)
Helping Patients Become Experts In Their Own Health

Optimal health outcomes are rarely achieved if patients are not actively involved in managing their chronic illness. Exercise, proper nutrition and using medications appropriately are fundamental to slowing disease progression and improving overall well-being. As well, patients also need to be able to communicate effectively with family and health care professionals, manage stress, and cope with frustration.

The Chronic Disease Self-Management Program (CDSMP) is a six-week program that supplements regular treatment and disease-specific education programs (e.g., cardiac rehabilitation, diabetes education), by helping patients develop the skills and self-confidence they need to set and reach their self-management goals.

In contrast to patient education where the individual learns the facts about their chronic illness, patient self-management refers to a patient’s ability to problem solve and be confident that they can make the lifestyle changes needed for better health and well-being.

The CDSMP was developed by Stanford University, and its effectiveness has been evaluated both in BC and the US. In comparison to non-participants, people who completed the CDMSP course demonstrated exceptional improvement in the following areas:

- Overall health status (decreased disability, pain and discomfort, fatigue, shortness of breath)
- Psychological well-being (decreased depression, distress)
- Health care utilization (reduced physician and emergency room visits, reduced hospitalization and outpatient visits)
- Self-efficacy (increased confidence to manage disease and achieve goals)
- Increase self-management behavior (e.g., increased exercise, symptom management, relaxation, use of community resources)

Over the years, the CDSMP has helped thousands of British Columbians become experts in their own health. Dr. Patrick McGowan has been successfully leading the expansion of the CDSMP throughout the province (Table 1).

Table 1: Regional Statistics on CDSMP Implementation in BC, April 2003 - March 2004

<table>
<thead>
<tr>
<th>Health Region</th>
<th>4-Day Leader Training Workshops Held</th>
<th>Number of Leaders Trained</th>
<th>Number of CDSMP Courses Delivered</th>
<th>Number of CDSMP Course Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern</td>
<td>3</td>
<td>34</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>Interior</td>
<td>6</td>
<td>75</td>
<td>23</td>
<td>257</td>
</tr>
<tr>
<td>Fraser</td>
<td>4</td>
<td>41</td>
<td>7</td>
<td>81</td>
</tr>
<tr>
<td>Vancouver/Coastal</td>
<td>3</td>
<td>28</td>
<td>10</td>
<td>155</td>
</tr>
<tr>
<td>• Course provided in Chinese</td>
<td>1</td>
<td>16</td>
<td>8</td>
<td>122</td>
</tr>
<tr>
<td>• Vancouver &amp; Richmond*</td>
<td>3</td>
<td>31</td>
<td>43</td>
<td>375</td>
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<tr>
<td>VIHA</td>
<td>5</td>
<td>54</td>
<td>15</td>
<td>128</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
<td><strong>279</strong></td>
<td><strong>110</strong></td>
<td><strong>1,158</strong></td>
</tr>
</tbody>
</table>

*Funded through the Sharon Martin Community Health Trust Fund
Each CDSMP course is 2½ hours long and facilitated by trained leaders who themselves have a chronic disease. “We have trained-the-trainer in a number of cities and towns in each of the province’s health regions. These leaders then deliver CDSMP courses to other communities in their health region by outreach”, explained Dr. McGowan.

In upcoming months, approximately 46 courses will be offered province-wide, as well as additional leader training workshops. Currently there are 349 people waiting to take the next CDSMP courses, and 207 people are interested in becoming CDSMP leaders.

“We have countless success stories”, commented Dr. McGowan. “The CDSMP has undeniably changed the lives of so many chronically ill people for the better. This is why the CDSMP is being implemented nation-wide in the US, and was recently adopted in Australia and by the National Health Service of England.”

For more information or to register for CDSMP courses telephone toll free at: 1 866 902-3767. Information is also available at: www.coag.uvic.ca/cdsmp.

**BC College Of Family Physicians Offers**  
**Continuing Medical Education (CME) Workshop On Enhancing Patient Self Management**

The BC College of Family Physicians, through a grant from the Ministry of Health Services, is leading a patient self-management leadership initiative aimed at assisting family physicians on how to best support their patients in becoming informed and active self managers.

In June 2004, the College tested an innovative CME accredited workshop called “Empowering Interventions”, the aim of which was to give physicians tools and structures that only take from 2 to 10 minutes to implement during the patient visit, but effectively move patients forward in taking a central role in managing their own health.

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*The Three Corners Health Services Society in Williams Lake arranged a 4-day Leader-Training Workshop. Eighteen new leaders were trained, and as a result, the CDSMP has been delivered in Soda Creek, Canoe Creek and Dog Creek. More courses are planned. Photo Left to Right, Art Paul, Canim Lake, Marnie Brenner, RN, Home Care Nurse, Three Corners Health Services Society, Williams Lake, Gerald Charlie, Canim Lake*
BC Identified as Leader in Information Technology for Improving Chronic Disease Management

The Western Health Information Committee (WHIC) has identified BC as leading the Western provinces in re-designing its health care delivery system for optimal chronic disease management.

WHIC’s report, *Chronic Disease Management Infrastructure: Current State Assessment*, highlighted BC’s accomplishments in implementing the Expanded Chronic Care Model (below) across the province.


Significant progress has been made in the areas of patient-self management, and practice and health system re-design. In addition, BC is a leader in developing information technology enabling integration of best practice standards into clinical workflow. Examples include:

1. **CDM Secure Website for Practitioners** enables BC physicians to obtain a list of their patients who have been diagnosed with diabetes, congestive heart failure, and hypertension, and a report on the extent to which care provided is consistent with evidence-based best practices. Other diseases are being added as well.

2. **The CDM Toolkit** is an expansion of the CDM Secure Website for Practitioners, and is especially useful to practices not equipped with an electronic medical record system. The technology makes it possible for practitioners to: electronically access BC clinical practice guidelines; complete patient flow sheets; generate a list of patients who need to be recalled for an office visit; automatically generate...
clinical and administrative reports crucial to optimal chronic care provision (e.g., patient profiles, practice profiles, patient education reports); and share flow sheets with members of the group practice or practice network, or consultants via secure internet data transfer.

For more information on the CDM Toolkit see, http://www.healthservices.gov.bc.ca/cdm/practitioners/index.html

3. Personal digital assistant (PDA) access to evidence-based clinical practice guidelines: Through a grant from the Ministry of Health Services, the University of BC, Faculty of Medicine, Division of Continuing Medical Education has developed an electronic tool that will enable physician access to clinical guideline information at the point of patient care.

“To date, diabetes care guidelines have been condensed and redesigned into a format that can be accessed on a PDA. While with the patients, a physician will be able to look up information in seconds to help them in their decision making”, explained Dr. Kendall Ho, Project Leader and Associate Dean of Continuing Medical Education, UBC.

Examples of what physicians can look up instantly include:

- Recommended dosages of diabetes medications for their patients
- Choices of cardioprotective medications available for diabetes patients
- Normal limits of screening tests for diabetes, lipid control, or urine albumin
- Identification of non-pharmacological interventions that are effective in helping patients manage their chronic illness disease

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**Meeting Ministry of Health Service Priority: Making Ministry Data More Accessible and Useful to Providers and Health Authority Planners**

Patient registers identifying the populations of BC patients diagnosed with chronic diseases have been developed and enable the Ministry to:

- identify provincial chronic disease prevalence rates
- establish BC’s true burden of chronic disease (re: morbidity, mortality and health care utilization), and

To date the following patient registers have been developed, and will be updated on an annual basis:

- Diabetes
- Congestive Heart Failure
- Chronic Kidney Disease (Stages 2-3) *patients at CKD stages 4 & 5 are registered with the BC Renal Agency
- Chronic Kidney Disease (at risk population)
- Hypertension
- Asthma
- Chronic Obstructive Pulmonary Disease
- Rheumatoid Arthritis
- Osteoarthritis

**Chronic Disease Prevalence In BC**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>318,742</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>69,584</td>
</tr>
<tr>
<td>COPD</td>
<td>72,992</td>
</tr>
<tr>
<td>Diabetes</td>
<td>211,304</td>
</tr>
<tr>
<td>Hypertension</td>
<td>593,907</td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td>246,222</td>
</tr>
<tr>
<td>Rheumatoid Arthritis</td>
<td>37,245</td>
</tr>
</tbody>
</table>

**Ministry Data in Action**

- The Interior Health Authority has used the statistics, made possible through BC patient registers, extensively to guide their program and service planning.
- The Ministry data was also used by the University of BC, Centre for Health Services and Policy Research, for the Provinical Primary Health Care Mapping Project.
Evidence-based decision support is an essential component of good chronic care. The evidence-based clinical practice guidelines noted below have been developed and distributed to BC physicians through the MPS/BCMA Guidelines and Protocols Committee (GPAC).

GPAC would like to take this opportunity to thank the many partners who have contributed to clinical guidelines development for improved chronic disease management: the Canadian Diabetes Association, the BC Renal Agency, Ministry of Health Services, Mental Health and Addictions Branch, the University of BC’s Mental Health Evaluation and Community Consultation Unit, the BC Lung Association, Arthritis Association of BC and Yukon, the Arthritis Research Centre of Canada, the BC Centre for Disease Control, and the many hundreds of practicing BC physicians who have assisted in developing the clinical practice guidelines.

Guidelines Completed & Distributed to BC Physicians

- Diabetes (revised 2004)
- Congestive Heart Failure
- Hypertension
- Chronic Kidney Disease
- Asthma
- Hepatitis B & C
- Major Depressive Disorder

Guidelines Scheduled for Completion & Distribution 2004/2005

- Chronic Obstructive Pulmonary Disease
- Osteoarthritis
- Rheumatoid Arthritis

In support of the BC Provincial Depression Strategy, the Guidelines and Protocols Advisory Committee has developed an evidence-based clinical practice guideline on major depressive disorder. It will be distributed to BC physicians in June 2004. The guideline includes a patient flow sheet to assist in planning patient care, and information for patients on managing their depression and accessing community resources.

“Family physicians providing good primary care for patients with depression need more than just up-to-date knowledge of what is the right drug to use, in what dose, and for what length of time. We also need practical diagnostic strategies and tools, clear care objectives, effective accessible patient education and support, an understanding of the expected trajectory of recovery, valid outcome measures, and an understanding of when and where to refer. This guideline offers clear evidence-based information on all of these topics to support family physicians in continuing to provide high quality treatment for major depressive disorder.”

Dr. Ellen Anderson, family physician & member of the Depression Working Group.

BC Clinical Practice Guidelines are available at http://www.healthservices.gov.bc.ca/msp/protoguides/index.html
BC’s new evidence-based clinical practice guideline focuses on improving identification, evaluation and management of patients with chronic kidney disease. Many people with chronic kidney disease remain undiagnosed or do not receive appropriate treatment simply due to problems inherent in serum creatinine measurement, the standard blood test for assessing kidney function.

“This test is not sensitive to early kidney damage unless a complex table of age and gender specific reference ranges is used,” explained Dr. Michael McNeely, Chairman of the Chemistry Science Section of the BC Association of Laboratory Physicians. “In addition, it is difficult to identify the patient’s stage of kidney disease based on their serum creatinine results.”

The glomerular filtration rate (GFR) is widely accepted as the best overall measure of kidney function. Equations have been developed that use the patient’s serum creatinine, age and gender to provide a mathematical estimate of the true glomerular filtration rate. The estimated GFR (eGFR) provides a standardized measure that is easy to interpret and allows for the staging of kidney disease.

The Chemistry Science Section of the BC Association of Laboratory Physicians has coordinated a project that will see all provincial laboratories providing an eGFR whenever a serum creatinine is ordered for an adult outpatient. In addition, all laboratories will soon be standardizing their serum creatinine measures and their eGFRs.

“BC is the first geographic area in North America to report the eGFR, and the first time anywhere to standardize its serum creatinine measurements,” noted Dr. McNeely

Progression of chronic kidney disease to end-stage renal disease usually takes several years. Through lab reporting of eGFR, BC physicians will be better able to evaluate kidney function and provide appropriate, often simple treatment, at the stage when it will be most effective.

“It is important to appreciate that patients with impaired kidney function are at higher risk of cardiovascular disease and the potential consequences of improper drug dosing,” stressed Dr. Adeera Levin, Director, BC Renal Agency. “Using eGFR to detect reduced kidney function will also help physicians and patients ensure that appropriate drug dosing and testing are undertaken.”
Funding for the CDM Secure Web site, CDM Toolkit, and province-wide expansion of the Chronic Disease Self Management program was provided by the Health Canada, Primary Health Care Transition Fund.