

The Challenge of Chronic Disease Management in British Columbia

The challenge of managing chronic diseases confronts us. Fortunately we are not alone. Others, facing the same problems, have been seeking solutions and finding promising approaches¹. In British Columbia, the most promising option has been chosen and now we are working to make it real. The obstacles are formidable, the risks significant, but the potential benefits huge.

The challenge is fairly obvious. A small proportion of patients use a large proportion of all health care resources. A recent analysis in British Columbia showed that the top five percent of users of fee-for-service physician services in 2001/02 used 34.7 per cent of all FFS services, 44.8 per cent of all hospital admissions, and 68 per cent of all acute hospital bed days. This is not an issue of the age of the patients as many are not elderly. With the exception of pregnancy (over 20,000 of the top five percent of users have babies during the year) the defining characteristic of these patients is the presence of chronic disorders.

Our health system has developed excellent responses to acute situations, but is less effective in managing chronic conditions². Patients with chronic conditions often experience one acute episode after another, and many suffer from predictable complications of their conditions. The notable exception is pregnancy, and that may point the way to improvement.

Over the last few decades standard prenatal care has become a series of planned visits that incorporate the lessons from the best evidence through the use of a standard form. The form acts as a flow sheet and identifies actions that need to be taken at each visit so clearly that they become routine and many can be done by medical office assistants. It is no accident that perinatal mortality has fallen from over 14/1,000 in the 1980s to the current level of less than 10/1,000.

In the United States, extensive research has identified the key characteristics of practices that achieve the best results for patients with chronic diseases. They are patient self-management, use of guidelines and decision support tools, a practice organized for chronic care, and supporting information systems. The elements have been gathered in an explanatory model, the Chronic Care Model³.

None of the elements of the Chronic Care Model are new to British Columbia. All of them are used by some family doctors, for some disorders, part of the time. The challenge is to incorporate them all into the standard practice of family doctors most of the time, because it is through the synergy of the elements that the best results appear⁴.

In British Columbia four main shifts are needed:

Provider to patient

For acute conditions, the model has been for the health professional to take responsibility and control and for the patient simply to follow instruction. In chronic care the patient becomes the day to day manager and the health professional acts more as an expert coach.

A recent editorial in the British Medical Journal⁵ noted, "Despite the clinical differences across these chronic conditions, each illness confronts patients and their families with the same spectrum of needs: to alter their behaviour; to deal with the social and emotional impacts of symptoms, disabilities, and approaching death; to take medicines; and to interact with medical care over time." These needs put the patient, not the physician, at the hub of the care on a daily basis. The general approach is that promoted by Lorig in Stanford⁶. The UK has taken a similar approach⁷, as has Australia⁸. In British Columbia the Centre on Aging at the University of Victoria has its own program and web pages⁹.

Opportunistic to planned care

Family doctors are consulted by patients when the patient feels a need for care. The doctors take the opportunity to provide cervical cancer screening, check blood pressures or a number of other proactive services. Few family practices are organized like a dentist's office to concentrate on the improvement and maintenance of health and the prevention of acute problems.

The most effective management of chronic disease involves planned visits often using registers of patients and recall systems but these are not in general use in the province.

Habitual to evidence based care

British Columbia has already gone a long way to identify the best care from the evidence and present it in usable format to doctors. The Guideline and Protocol Advisory Committee is now building on eight years of success with guidelines and is producing realistic guidelines for the care of chronic disorders. The guideline for diabetes care was released in 2002¹⁰, and guidelines for hypertension, asthma, congestive heart failure and depression are expected in 2003.

These guidelines are designed to make it easy to incorporate evidence-based care into regular practice.

Data burden to information assistance

Every doctor's office copes with the burden of collecting and managing data. The creation of medical records, management of reports of investigation and consultations, billing and tracking payment for services, are all necessary activities but can detract from, rather than augment, the time and energy available to provide care. The promise of technology as an aid rather than a burden remains to be fulfilled.

Information systems must shift from being a burden to providing timely, efficient and economic support to practitioners.

The collaborative method

The direction we intend to follow in British Columbia is a conjunction of evidence-based medicine, self-audit and rapid quality improvement cycles¹¹. The broad direction can be discussed and agreed at a provincial level between the BCMA, government and other stakeholders, but the actual change can only occur at the level of practice in the community. Only the family doctors in each location fully understand the local context, the constraints and circumstances that must be carefully considered in tailoring the model to their practices.

Many hundred practices in the USA and elsewhere have engaged in applying this model and the results show marked improvement in care and in outcomes¹².

Specific activities

A large number of individuals and organizations are involved in efforts to improve the situation. Examples are:

- A collaborative to improve care for congestive heart failure, organized by the Healthy Heart Society.
- A collaborative planned for diabetes which the BCMA will lead.
- A program through the UBC Faculty of Medicine, CME department to assist the practical and efficient use of information technology in doctors offices.
- A voluntary self-assessment program to assist general practitioners examine their own practices, measure performance and ascertain competence, organized by the College of Physicians and Surgeons.
- The provision of coaching for family doctors to make the most effective use of patient self-management possibilities which will be lead by the College of Family Physicians.
- A secure web site designed to enable secure exchange of confidential information over the internet. The first information sets available are lists of each doctor's patients who, from administrative data, are likely to have diabetes or congestive heart failure. Although the limitations of the data do not permit these lists to be completely accurate they are a good starting place for doctors who wish to develop their own, accurate, practice registers of patients with chronic diseases.
- A chronic disease management web site, hosted by the Ministry of Health Services¹³.
- A chronic disease listserver to promote communication between those interested or involved in the chronic disease management initiatives.

All of these activities break new ground, all face major difficulties and none are certain to produce beneficial results. Current evidence suggests they are our best hope to improve the quality of life and health outcomes for the growing number of patients with chronic diseases. Our challenge is to find ways to realize the promise.

References:

¹ Weingarten SR, Henning JM, Badamgarav E, et al. Interventions used in disease management programmes for patients with chronic illness – which ones work? Meta-analysis of published reports. *BMJ* 2002; 325:925-8.

² Berwick DM. A user's manual for the IOM's "Quality Chasm" report. *Health Affairs* 2002; 1:80-90.

³ Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness: the chronic care model part 2. *JAMA* 2002; 288:1909-14.

⁴ Rothman AA, Wagner EH. Chronic illness management: What is the role of primary care? *Ann Intern Med.* 2003; 138:256-261.

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- ⁵ Wagner EH, Groves T. Care for chronic disease. *BMJ* 2002; 325:913-4.
- ⁶ Stanford Patient Education Research Centre. Chronic Disease Self-Management Program. <http://patienteducation.stanford.edu/> (08/01/02; retrieved 25 March 2003).
- ⁷ Department of Health. The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century. http://www.doh.gov.uk/healthinequalities/ep_report.pdf (retrieved 25 March 2003).
- ⁸ The Royal Australian College of General Practitioners. Chronic Condition Self-Management Guidelines. <http://www.racgp.org.au/folder.asp?id=299> (10/01/2003: retrieved 25 March 2003).
- ⁹ Centre on Aging University of Victoria. Living a Healthy Life with Chronic Conditions. <http://www.coag.uvic.ca/research/healthyliving/> (retrieved 25 March 2003).
- ¹⁰ Ministry of health Services Medical Services Plan. Diabetes Care. http://www.healthservices.gov.bc.ca/msp/protoquides/gps/diabetescare/diabetes_care.pdf (February 20, 2003: retrieved 25 March 2003).
- ¹¹ Institute for Healthcare Improvement. Collaboratives. <http://www.ihl.org/collaboratives/> (2003: retrieved 25 March 2003).
- ¹² Wagner EH, Glasgow RE, Davis C et al. Quality improvement in chronic illness care: a collaborative approach. *Jt Comm J Qual Improv.* 2001; 27:63-80.
- ¹³ Ministry of Health Services. Chronic Disease Management. <http://www.healthservices.gov.bc.ca/cdm/> (February 04, 2003: retrieved 25 March 2003).