EvidenceBoost for Quality

A series of essays highlighting evidence-informed management and policy options for improving quality of care

September 2005

INTERDISCIPLINARY TEAMS IN PRIMARY HEALTHCARE CAN EFFECTIVELY MANAGE CHRONIC ILLNESSES

The Issue: Chronic health conditions are often poorly managed in traditional primary care

Chronic illness is widespread in Canada, with approximately 16 million individuals and their families (nearly 50 percent of the population) living with a chronic illness. These include such conditions as asthma and other lung diseases, diabetes, heart disease, and depression. Contrary to popular belief, chronic illnesses are responsible for a far greater share of healthcare budgets than are acute and urgent care — 67 percent of direct healthcare costs are spent on chronic diseases.[i]

Effective management of chronic conditions by healthcare systems that are more attuned to treating acute and episodic illness is difficult to achieve. Canada's healthcare system is centred on physicians working in solo or small-group fee-for-service practices;[ii] these doctors face enormous time pressures, leading to a "tyranny of the urgent" that means chronic health issues are often not fully addressed.[iii]

Strategy for Change

Fortunately, other healthcare professionals complement the care provided by physicians. The research cited below shows that by working together with doctors they provide care for chronic illness which is better than that provided by doctors alone. By making the necessary changes to legislation to allow allied health professionals to work to their full scope of practice, providing appropriate financial incentives, and encouraging a culture of collaboration, governments can facilitate the creation of interdisciplinary teams to provide very effective chronic disease management. In these teams, family doctors, specialists, nurses and nurse practitioners, and other allied health professionals work closely with each other and with patients and their families to set goals, monitor patient compliance and outcomes, and provide patient education and support.[iv]

Research Base

Researchers have evaluated many different forms of interdisciplinary teams. While they differ in structure, they usually involve nurses, nurse practitioners, or other allied health professionals working semi-autonomously with a physician.

The most common type of team studied is located in the general practitioner's (GP's) office or clinic. In the interventions studied, nurses and nurse practitioners, psychologists, and physical therapists met with patients in the doctors' offices to provide education on the condition and how to manage it, offered counselling on diet and exercise as appropriate, did medication review medications, and, in the cases that involved nurse practitioners, made initial diagnoses and began treatments. Some interventions also involve follow-up telephone calls. The professionals meet regularly with the physicians to go over the patients' progress, and any medical problems are referred to the doctors.[v-xii]

Allied health professionals are also used extensively in homecare. In this environment, nurses (registered nurses and nurse specialists), social workers, physiotherapists, and occupational and speech therapists work with patients in the home and are supervised by a GP, psychotherapist, or advanced practice nurse, depending on the intervention. These professionals provide problem-solving treatment for depression, counselling and education on the patient's condition and medications, perform assessments and provide treatments, and work with social services and hospitals if the patients require extra care.[xiii-xvii]

Finally, teamwork is an important component of successful telephone-based care, or telehealth. This has been studied primarily as a complement to depression care and can involve nurses providing general emotional support and advice on activities the patients could do to improve their condition. Nurses also ask about medication compliance and any side

Making Research Work
www.chsrf.ca

1997 2007 TEN YEARS • DIX ANS
CHSRF FCRSS
Canadian Health Services Research Foundation
Fondation canadienne de la recherche sur les services de santé
1565 Carling Avenue, Suite 700, Ottawa, Ontario K1Z 8R1
Tel: 613-728-2238 * Fax: 613-728-3527

Evidence Boost is prepared by knowledge transfer and exchange staff at the Canadian Health Services Research Foundation and published only after review by experts on the topic.

effects the patients are experiencing. They usually work out of a GP's office and report back regularly to the physicians on the patients' progress and help implement any necessary changes to the patients' treatment plans.[xviii, xix] Recent work involving heart failure patients followed a similar intervention, with nurses speaking with patients over the phone about diet, medication, symptoms, and physical activity. Nurses also had the ability to adjust the dose of a certain medication and could recommend extra doctors' visits.[xx]

Conclusion

Evaluations of interdisciplinary care consistently find that patients who receive care from allied health professionals in addition to their primary care physicians fare at least as well as those receiving care from their doctors alone, and many studies find significant improvements.

For more information about improving quality of care, see the foundation's managing for quality and safety web page at ***www.chsrf.ca/research_themes/safety_e.php.***

References

i. Centre for Chronic Disease Prevention and Control. 2003. "The burden of chronic disease in Canada." Public Health Agency of Canada. www.phac-aspc.gc.ca/ccdpc-cpcmc/topics/integrated_e.html

ii. Hutchison B et al. 2001. "Primary care in Canada: so much innovation, so little change." Health Affairs; 20(3): 116-131.

iii. Bodenheimer T et al. 2002. "Improving primary care for patients with chronic illness." Journal of the American Medical Association; 288(14): 1775-1779.

iv. Katon W et al. 2001. "Rethinking practitioner roles in chronic illness: the specialist, primary care physician, and the practice nurse." General Hospital Psychiatry; 23(3): 138-144.

v. Rich MW et al. 1995. "A multidisciplinary intervention to prevent the readmission of elderly patients with congestive heart failure." New England Journal of Medicine; 333(18): 1190-1195.

vi. Windsor RA et al. 1990. "Evaluation of the efficacy and cost effectiveness of health education methods to increase medication adherence among adults with asthma." American Journal of Public Health; 80(12): 1519-1521.

vii. Moher M et al. 2001. "Cluster randomised controlled trial to compare three methods of promoting secondary prevention of coronary heart disease in primary care." British Medical Journal; 322(7298): 1338-1344.

viii. Wells KB et al. 2000. "Impact of disseminating quality improvement programs for depression in managed primary care: a randomized controlled trial." Journal of the American Medical Association; 283(2): 212-220.

ix. Vrijhoef HJM et al. 2003. "Undiagnosed patients and patients at risk for COPD in primary health care: early detection with the support of non-physicians." Journal of Clinical Nursing; 12(3): 366-373.

x. Aubert RE et al. 1998. "Nurse case management to improve glycemic control in diabetic patients in a health maintenance organization." Annals of Internal Medicine; 129(8): 605-612.

xi. Von Korff M et al. 2005. "A trial of an activating intervention for chronic back pain in primary care and physical therapy settings." Pain; 113(3): 323-330.

xii. Moore JE et al. 2000. "A randomized trial of a cognitive-behavioural program for enhancing back pain self care in a primary care setting." Pain; 88(2): 145-153.

xiii. Mynors-Wallis LM et al. 2000. "Randomised controlled trial of problem solving treatment, antidepressant medication, and combined treatment for major depression in primary care." British Medical Journal; 320(7226): 26-30.

xiv. Neff DF et al. 2003. "APN-directed transitional home care model: achieving positive outcomes for patients with COPD." Home Healthcare Nurse; 21(8): 543-550.

xv. Jarman B et al. 2002. "Effects of community-based nurses specialising in Parkinson's disease on health outcomes and costs: randomised controlled trial." British Medical Journal; 324(7345): 1072-1075.

xvi. Sommers LS et al. 2000. "Physician, nurse, and social worker collaboration in primary care for chronically ill seniors." Archives of Internal Medicine; 160(12): 1825-1833.

xvii. Shepperd S et al. 1998. "Randomised controlled trial comparing hospital at home care with inpatient hospital care. I: three month follow up of health outcomes." British Medical Journal; 316(7147): 1786-1791.

xviii. Hunkeler EM et al. 2000. "Efficacy of nurse telehealth care and peer support in augmenting treatment of depression in primary care." Archives of Family Medicine; 9(8): 700-708.

xix. Simon GE et al. 2000. "Randomised trial of monitoring, feedback, and management of care by telephone to improve treatment of depression in primary care." British Medical Journal; 320(7234): 550-554.

xx. GESICA Investigators. 2005. "Randomised trial of telephone intervention in chronic heart failure: DIAL trial." British Medical Journal; online publication August 1.