Health care at your fingertips

A new web-based tool empowers diabetes patients—and saves health care money

by Peigi McGillivray

Is it possible to improve health care delivery while reducing costs at the same time?

University of Victoria health economist Dr. Angela Downey thinks so. The business professor is currently investigating the service delivery needs and costs associated with the management and treatment of diabetes.

Over the next 10 years, Canada’s changing ethnic makeup, aging population, and increasing obesity and sedentary lifestyles will lead to unprecedented rates of diabetes. And costs associated with diabetes will skyrocket. The Canadian Diabetes Association calls it an impending health care “tsunami.”

Finding new and better ways to manage the coming tidal wave is critical, says Downey. “It’s important for people with diabetes to educate themselves about their condition, to monitor and control it, and to have access to expert advice and guidance. The challenge is to balance those needs with the ever-spiraling costs of health care.”

Downey and colleagues in the UK and at the University of Calgary, the University of Lethbridge and Alberta Health Services are looking to the Internet for solutions. They have developed an interactive, web-based counselling and management tool for people newly diagnosed with type 2 diabetes (the most common adult form).

The site allows patients to connect with health care providers and other patients in the study, post questions, schedule appointments and access extensive educational resources.

To test the effectiveness of the website, three groups were compared: a group who managed their blood hemoglobin through face-to-face meetings with health care providers, a group who used the interactive website, and a group who had access to a static website with information about diabetes but no interactivity.

The team found a significant difference between the three groups. “We were astonished—and heartened—to discover that those who used the interactive website to attend virtual appointments with clinicians had the best results—better even than those meeting face-to-face,” says Downey.

“Because we were able to collect so much information from the website, we now have a chance to dig deeper,” she says. “My students are analyzing how people learn in an electronic environment and search for information, and about differences between the way men and women use the site.”

This type of intervention could allow people who are newly diagnosed with diabetes or other chronic diseases to get the education they need to manage their conditions, says Downey.

“Right now we’re replicating the diabetes study with the National Health Service in the UK, and are in the planning stages of a similar website to support people with pulmonary disease. “Better management leads to fewer complications and fewer visits to primary health care providers,” she says. “It should save our health care system millions.”