



THE KELOWNA DIABETES PROJECT: Community Partnerships for Better Health

Dr. Andrew Farquhar knows from personal experience how helpful it is to get your A1C readings as soon as possible. A diabetic himself, he sympathizes with patients who must see their doctor to get those results. "That's got to change," says Dr. Farquhar. And in Kelowna, it *is* changing. Farquhar is part of an experiment in the Central Okanagan, where diabetes patients are receiving their test results from the community lab by mail, simultaneous with their doctor. Sometimes before. Welcome to the Kelowna Diabetes Project.

Dr. David Cameron heads Client Services at Valley Medical Laboratories (VML) in Kelowna, where the idea for the project was born. A family physician for five years, Cameron came to appreciate a patient's need to monitor their own personal data. He uses the 'car' analogy to make his point: "Guy goes in for an oil check. Mechanic checks the dipstick, wipes it clean, and says, 'See you next time.' 'Hold on," the driver says, "you didn't tell me how my oil is?' If you're the driver, you want to know, for the health of your car. Why should it be any different for your own health?"

Dr. Duncan Innes is co-owner of VML, and he must have been harbouring similar thoughts in 2001 when he was sitting on The Guidelines and Protocol Advisory Committee (GPAC). The Health Ministry was under the usual pressure to keep costs down, and wanted to focus on 'disease management'. In other words, prevent chronic diseases from reaching the acute stage. GPAC was open to any ideas. Dr. Innes responded with an idea for diabetes. He suggested letting community labs identify people with the disease. Armed with a registry, the lab then takes over the responsibility of getting the patient in for testing, by mailing them reminders every three months.

"It's so simple, yet so brilliant," says Andrew Farquhar, who admitted that a few local doctors were cynical. "They assumed the lab was inventing a 'make-work' project for itself. But they were only encouraging compliance with the CDA-recommended testing schedule for diabetics." Furthermore, VML was offering to finance the mailing campaign, themselves – at a cost of nearly \$25 per patient per year. With over 5000 diabetics in the Central Okanagan – you add it up.

To explain why something so simple might be highly effective, David Cameron refers to the folly of human behaviour. "Doctors normally send patients away with instructions to visit the lab, according to the CDA recommendations. But here's the problem – if you have to take a medication four times a day, okay, you'll do it. One or two a day, probably easier. One a week, better yet. Once a month, okay, better mark it on the calendar. Once every 3 months – *we forget!*"

Louise Schmidt has been a diabetic for over twenty years. She compares many adult diabetes patients to unsupervised children. "They ignore what's good for them," she says, putting it politely. "Adults behave the same; their discipline falls apart."

Here, in a nutshell, is how the Kelowna Diabetes Project helps keep the discipline going:

The lab identifies diabetics, and informs the family physician. If the patient agrees to register in the project, the doctor submits a standing order for appropriate tests. At each laboratory visit, the participant is given an appointment for their next test date. If they fail to show up, they're sent reminders. In addition to regular lab reports, physicians receive a list of their patients who

haven't yet registered, and who appear to have diabetes on the basis of lab results (fbs, rbs, A1C) done in the preceding six months.

Seven family physicians have been serving as an advisory group. Their patients have been receiving their own results by mail within two weeks of a new A1C test. The reports include the A1C results, plus systolic blood pressure, LDL cholesterol, and risk ratio, as well as target levels and advice on the importance of regular eye examinations.

Over the life of the project, Andrew Farquhar has seen his patients become more involved in their own health, which in the case of diabetes, is critical. "Managing diabetes is a never-ending juggling act," he says. "Stress, drugs, menstruation, alcohol, lack of sleep – they all complicate the issue. It's almost impossible to establish the right balance. But when patients understand what's happening to them, they feel empowered. The goal now should be to get the results directly to patients of *all* the doctors participating in the project. That has to be the next step."

Starting in January, 2006, the patients of all 121 doctors participating in the Kelowna Diabetes Project will be getting their results directly from the lab. Those 121 doctors represent 96% of family physicians in the Central Okanagan. Last year, 80% of their diabetic patients showed up on schedule for two A1C tests, which is the frequency recommended by the CDA. That compares with only 40% of known diabetics in British Columbia. The real proof of the project's success, however, is in the improving trends in A1C and LDL cholesterol results, as the following chart indicates.

Kelowna Diabetes Project: A1C and LDL Results					
Percentage of Tests by Participation Status and Year					
	Year	2002	2004	2002	2004
	Results	Participants		Non-participants	
A1C	< 7%	53%	65%	54%	57%
	> 8%	19%	11%	21%	16%
LDL	< 2.5	33%	49%	35%	38%
	> 3.5	23%	16%	25%	22%

"The project has been an absolute success," says Farquhar, who is convinced of the connection between achieving CDA targets and the prevention of more acute complications. And that adds up to cost savings in the provision of health services to this segment of the population in the long term.

"The big lesson learned from the project," says David Cameron, "is that any sort of reminder has a positive impact. For instance, if a patient is due for a test at the end of October and doesn't show up, the patient's card remains in the index, which generates a reminder letter. November, another letter. December, a letter to the doctor. Then one final reminder before the patient is removed from the registry.

"I hear patients call this an 'awesome' innovation," says Farquhar. "I hear people outside the Kelowna area say, 'I want in.'"

Louise Schmidt is glad she's in, because, as she puts it, "Further down the road, I won't have the same magnitude of problems. The situation can only get better." She points out, however, that you have to *want* to be helped. "If you don't show up for your tests, who's going to force you? For me, though, the project has made it very easy."