# Genetics Education Boosted Provider Confidence

*Primary care physicians who took the course were more likely to refer patients appropriately.*

BY KATE JOHNSON

A 6-month genetics educational initiative significantly improved the confidence and competence of family physicians, according to the findings of a small study.

"Primary care providers are going to be increasingly involved in the delivery [of genetics services]. There's a huge literature out there that we're deficient in. We have to be able to assess risk. We have to know when to refer. We have to provide counseling and follow-up after test results. And we are probably increasingly going to be asked to tailor our preventive care, medication choice, and treatments to people's individual genetic profiles," said Dr. June Carroll, the Sydney G. Frankfort Chair in Family Medicine at Mount Sinai Hospital and the University of Toronto.

The study randomized 125 primary care physicians to an educational intervention (61 physicians) aimed at improving primary care genetics skills, or to a control arm (64 physicians), that received the educational material at the end of the study.

Participating physicians came from both rural and urban practices in the province of Ontario.

The intervention involved a 1-hour workshop conducted by a genetics counselor and a family physician, and a portfolio of primary care–appropriate genetics "tools," such as genetics pearls, red flags, risk-triage cards, and tables outlining possible consequences of genetic test results.

The most exciting aspect was access to an information service called "Gene Messenger," according to Dr. Carroll. "Our team scanned the newspapers every day during the time of the trial, and we looked for any big headlines or articles about a new genetic test or a genetic disorder. We then very rapidly developed a critical review of that disorder or test, and came up with bottom-line recommendations for primary care," she explained.

The one- to two-page reports were written by a genetics counselor, with input from geneticists and family physicians, and were e-mailed or faxed to study participants every 2 weeks during the 6 months of the study.

"We produced 16 of these reviews over the course of the project. They were as evidence based as possible, although sometimes we did have to use expert opinion. And they were fully referenced," she said.

Study participants were assessed 1 month before and 6 months after the intervention for the primary outcome of the study, which was the appropriate intention to refer a patient for genetic counseling. Secondary outcomes looked at the participants' perception of the difficulty in making a decision and their self-rated confidence in a set of 11 core genetics competencies, as defined by the National Coalition for Health Professional Education in Genetics.

All participating physicians also answered the following three questions about hereditary breast and colorectal cancer:

- Is there paternal inheritance of the BRCA mutations? (Answer: yes)
- What percentage of breast cancer patients have a BRCA mutation? (Answer: fewer than 10%)
- What percentage of people with the HNPCC (hereditary nonpolyposis colorectal cancer) gene will get colorectal cancer? (Answer: more than 50%)

These are the "big ticket items" in genetics that family physicians need to know in order to advise their patients, she said.

Compared with physicians in the control arm, those in the intervention arm showed a statistically significant improvement from baseline in their appropriate intention to refer patients, based on a set of 10 clinical vignettes (7.8 of 10 vs. 6.4 of 10 for controls).

In addition, self-reported confidence was significantly higher among physicians in the intervention group (43 of 55, compared with 34 in the control group).

"We saw an increase across all 11 items of family physician core competencies in genetics," said Dr. Carroll. For example, physicians were more confident eliciting genetic information from a family history; doing risk assessment and deciding who should be offered referral; discussing risks, benefits, and limitations of genetic testing; knowing where to refer; providing psychosocial support for those who have had genetic test results; providing management and following people who have had genetic test results; and reassuring patients who are at low risk. Handling all of these areas is "going to be a big job for us in the future," she said.

Yet despite their increased confidence, physicians in the intervention group scored no better than controls on the first two knowledge questions. The percentage of correct answers "was low for two of the questions, and a large percentage said they weren't sure," said Dr. Carroll.

The group hopes to expand the intervention to include a wider range of conditions, and to distribute the material to more physicians. "It would be ideal to have one center that was developing these reviews and recommendations in response to the media and new discoveries, and having them disseminated widely so that family physicians could get timely information to share with their patients about new genetic information," she said.

The Gene Messengers are being published by Canadian Family Physician and can be seen at www.cfp.ca/misc/collections.dtl. Educational materials from the project can be seen at www.mtsinai.on.ca/FamMedGen.

The study was funded by the Canadian Institutes of Health Research, and Dr. Carroll reported having no conflicts of interest. ■

# Walgreens Poised to Enter Diabetes Care in Four U.S. Cities

BY ALICIA AULT

Walgreens, the nation's largest drug store chain, is dipping a toe into diabetes care by offering education and counseling in four metropolitan areas.

The company's Optimal Wellness program is based on the North Carolina Center for Pharmaceutical Care's diabetes project and also draws on a Walgreens pilot that was developed by the drug store chain and Harvard's Joslin Diabetes Center.

The program initially will be offered in Indianapolis, Phoenix, Albuquerque, and Oklahoma City. These areas were chosen partly because of the large number of diabetic residents, said Dr. Jay Rosan, senior vice president of health innovation at Take Care Health Systems, a Walgreens company.

Dr. Mack Harrell, chair of the socioeconomics and member advocacy committee for the American Association of Clinical Endocrinologists, said the Walgreens program could be helpful but that AACE believes that any assistance, education, or counseling should be supervised by physicians.

"I'm in favor of people getting all the education they need," Dr. Harrell said in an interview. But, he added, "what we've learned from a number of recent studies is that the degree of glycemic control has to be individualized. You have to know the patient, know whether they have comorbidities that put them at higher risk, and decide what degree of control is acceptable."

These nuances are beyond the capacity of a nurse practitioner and reinforce the need for a supervisory physician, he said.

Dr. Rosan emphasized that the nurse practitioners in the Optimal Wellness program will not offer treatments, and that physicians indeed will be relied upon as primary care coordinators and supervisors.

The program is being rolled out in concert with major insurers. The insurers, who pay a fee to Walgreens, will identify diabetic patients for the chain. When patients go to Walgreens for supplies or a prescription, pharmacists will tell them about the program's availability and then attempt to enroll them.

**'Our intent here is to make certain that this is not a fragmentation of the care.' If the primary caretaker is an endocrinologist, the counselor will reach out to that physician.**

If the store has a retail clinic, a nurse practitioner will offer counseling; otherwise, the pharmacist will conduct the sessions, Dr. Rosan explained. Both the pharmacists and the nurses have received training through a Joslin program certified by the Accreditation Council for Pharmacy Education.

The aim is to give patients four 30- to 60-minute sessions over a year-long period, with the potential of up to 12 interventions. Patients will pay nothing or a small copay for the sessions, Dr. Rosan said.

After each session, the counselor will fax, e-mail, or call the patient's primary care physician with information. "Our intent here is to make certain that this is not a fragmentation of the care," said Dr. Rosan. If the primary caretaker is an endocrinologist, the counselor will reach out to that physician. For those who do not yet have a designated primary care physician, the pharmacies will make referrals.

Dr. Harrell also expressed reservations about Walgreens' potential conflict of interest. "The pharmacy has a certain secondary gain from having the patient in there," he noted. For instance, the pharmacy could promote supplies or treatments that favor the pharmacy's bottom line but aren't necessarily the best fit for the patient.

Dr. Rosan acknowledges that there's an opportunity, at a minimum, to fill more prescriptions. It also expands Walgreens' growing role as a multiservice provider and gives it a chance to burnish its brand. "If we can help people get better outcomes, we think they'll have a tendency to use Walgreens more than other stores," he said.

But the program may also help improve the nation's health if more diabetics take responsibility for managing their own care, he added.

Optimal Wellness won't be available to the uninsured, at least not initially. Walgreens is courting pharmaceutical companies to subsidize that effort. Walgreens' diabetes education effort is likely to expand nationally sooner rather than later. Many insurers are interested in the Optimal Wellness program, he said. ■