# The Aboriginal Diabetes Initiative – tackling type 2 diabetes in Canada

**Amy Bell** 

In 2005, the Government of Canada provided a renewed investment of 190 million CAD over five years to maintain and enhance the Aboriginal Diabetes Initiative. The main goal of the Initiative is to reduce type 2 diabetes and its complications through a range of culturally relevant health promotion and prevention services, delivered by trained health service providers and diabetes workers. Supported by Aboriginal Diabetes Initiative funding, Aboriginal communities across Canada are working to prevent and manage type 2 diabetes. Amy Bell reports.

According to 2007 population figures, there are approximately 805,000 Registered Indians, 50,000 Inuit and 389,000 Métis in Canada. Diabetes rates among Indigenous people in Canada are about four times the national average; some 20% of First Nation adults have been diagnosed with the condition. The rise in obesity among children has been of increasing concern in recent years, as described in studies in a number of regions, including northern Manitoba,

Northwestern Ontario, Kahnawake (among Mohawk communities), and James Bay (among Cree communities).

# History of the Aboriginal Diabetes Initiative

Originally, the Aboriginal Diabetes Initiative was a component of the Canadian Diabetes Strategy, which was launched in 1999. The Initiative aimed to increase awareness of type 2 diabetes and reduce the incidence of complications among Indigenous peo-

ple throughout the country. Between 1994 and 2005, it became clear that a more comprehensive approach was required to better address the rapidly growing rates of type 2 diabetes in Indigenous communities.

In the first phase of the Aboriginal Diabetes Initiative, several successes were noted. Culturally appropriate, locally developed programming was seen as a critical factor in increasing participation in preventive activities,



such as cooking classes, where people learned to prepare locally sourced, traditional foods. Mobile screening initiatives in Alberta and British Columbia demonstrated the effectiveness of screening for diabetes complications in rural and remote areas. A study in British Columbia found that the programme was cost-effective.

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Culturally specific, participatory diabetes prevention models were implemented in communities like Sandy Lake (Manitoba) and Kanawake (Quebec). In partnership with Tribal Councils, First Nations organizations, Inuit community groups and Provincial and Territorial governments, the Aboriginal Diabetes Initiative currently delivers programmes and services to more than 600 communities throughout Canada. The Initiative delivers these programmes and services in two 'streams':

- The First Nations On-reserve and Inuit in Inuit Communities component (FNOIIC) funds community-based and culturally relevant projects involving diabetes screening and treatment, health promotion and prevention.
- The Métis Off-reserve Aboriginal and Urban Inuit Prevention and Promotion component (MOAUIPP) funds primary prevention and health promotion projects in urban centres.

MOAUIPP projects are funded based on a peer-reviewed Request for Applications process. Approximately 60 MOAUIPP projects were funded between 2005 and 2009.

The second phase of the Aboriginal Diabetes Initiative has four key objectives:

- to expand the depth and breadth of health promotion and diabetes prevention activities
- to improve access to screening and treatment services
- to enhance capacity for the delivery of effective diabetes programming by training community diabetes workers and health professionals, and by establishing regionally based multidisciplinary teams to support communities

to enhance collaboration with provinces, territories and other partners in the delivery of diabetes services.

The Initiative is based on the health promotion elements of the Ottawa Charter, as well as Canadian and international research into programming for diabetes prevention. Its work follows the evidence-based recommendations laid out in the Canadian Diabetes Association Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada.

The various components of the Aboriginal Diabetes Initiative combine to form a comprehensive programme built around the individual needs of people with diabetes. Its four central areas of activity are: primary prevention and health promotion; support for screening and treatment services; capacity-building and training; research and surveillance, evaluation and monitoring.

# Primary prevention and health promotion

Primary prevention and health promotion is the largest component within the Aboriginal Diabetes Initiative. Activities vary from one community to another, and include walking clubs, weight-loss groups and fitness classes, community kitchens and gardens, and a range of activities for children in schools. Aboriginal Diabetes Initiative personnel working with local schools have developed healthy food policies. An important consequence has been the removal from many schools of vending machines that sell sugarsweetened soft drinks and high-sugar, high-fat snacks to children.

Community-based initiatives include traditional activities such as berry picking, picnics, dancing, and games. These have important social benefits and also enable communities to preserve and share valuable traditional knowledge.

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Some communities have chosen to invest in treadmills and stationary bicycles in order to increase options for physical activity; many, in order to meet growing demand, add new apparatus to their fitness centre each year. Partnerships are of particular benefit to fitness activities: community members using school facilities outside school hours, for example, or community-based police officers and others acting as coaches.

A great deal of creativity is evident in the community programming as health workers seek to engage more and more people in activities. The well-known formats of games and television programmes have been adapted to become effective educational tools. How to be a Diabetes Millionaire, for example, has become very popular in many communities. Visual aids, such as puppet shows, sketches and other interactive activities and materials, are used to demonstrate the benefits of healthy foods or the effects of diabetes. Cookery classes for all ages employ a range of approaches to highlight various health-promoting methods for preparing local foods.

According to an analysis of administrative records, approximately 3,900 activities were held in First Nation and Inuit communities over a two-year period. There were around 94,000 participants in the wider diabetes prevention and health promotion activities; over 13,000 people were screened for type 2 diabetes.

### Support for screening and treatment services

Type 2 diabetes screening strategies are either population-based (some or all of the community is screened) or

Community-based activities enable communities to preserve and share valuable traditional knowledge.

opportunistic (people with diabetes are identified when they visit a clinic). The population-based approach provides good coverage of the population, including those not seeking healthcare, and thus is more accurate. However, it requires more resources compared to the opportunistic approach, which is carried out during clinical encounters and can be used to compile information in clinic-based diabetes registries.

The Aboriginal Diabetes Initiative supports increased and regular screening for the early diagnosis of diabetes complications using both of these approaches, and provides education and support for people living with diabetes and their family members. The goal is to increase diabetes selfmanagement and establish links in order to improve the coordination and integration of services.

Screening is carried out by mobile units, local healthcare providers and through partnerships with neighbouring services.

Currently, there are three mobile diabetes screening programmes in place, in Northern British Columbia, Alberta and Manitoba. In other regions, screening is carried out through local healthcare providers. Some communities have formed partnerships with neighbouring provincial healthcare services to increase screening opportunities. The Prince Albert Grand Council in Saskatchewan, for example, has a partnership with services in neighbouring regions that has resulted in improved testing for gestational diabetes.

### Capacity-building and training

This component includes regional training for healthcare providers and community diabetes prevention workers. By 2010, over 300 workers will be trained as community diabetes prevention workers, with education on culturally relevant health promotion a key element in their preparation. Community diabetes prevention workers act as a focal point for diabetes prevention activities and work in partnership with healthcare professionals and other members of their community.

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The training programme for community diabetes prevention workers has been offered in many regions with considerable success. The majority of students who begin the training complete it successfully, and go on to take valuable newly acquired knowledge and skills into their communities.

# Research and surveillance, evaluation and monitoring

Within this component of the Aboriginal Diabetes Initiative, there are several priorities. These include the following:

- establishing partnerships with appropriate research agencies and organizations to jointly fund priority research
- supporting the Canadian First Nations Diabetes Clinical Management Epidemiologic (CIRCLE) Study to determine the quality of diabetes healthcare in 20 First Nation communities

- supporting research on the incidence and prevalence of diabetes in Aboriginal communities in Nova Scotia and Alberta
- supporting evaluation studies and monitoring of preventive programming at the local, regional and national levels.

In summary, the Aboriginal Diabetes Initiative encourages communities to address their own needs, building on their strengths and drawing on their traditions in order to help community members prevent diabetes where possible and offer support to help manage the condition effectively when it occurs. First Nation and Inuit communities are innovative in their approaches to tackling diabetes, forming strong partnerships where needed, employing local knowledge and working together to reduce the burden of type 2 diabetes.

### Amy Bell

Amy Bell is a senior policy advisor in the Chronic Disease and Injury Prevention Division, Community Programs Directorate, First Nations and Inuit Health Branch, Santé Canada Ottawa, Canada.