

THE DIABETES Communicator

Summer 2018

EDITORIAL

Diabetes and Canada's Indigenous Peoples: The Journey to Healing and Wellness

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Welcome to this issue of *The Diabetes Communicator*, the first issue dedicated to Canada's Indigenous Peoples. Diabetes rates have risen and continue to rise for the Indigenous Peoples of Canada (1). This issue addresses some of the challenges faced by Indigenous Peoples living with diabetes, as well as some of the diabetes initiatives in Canada.

As diabetes educators, we strive to provide culturally safe and appropriate care to all people in our care. At times, this

requires us to look inward and reflect upon our own attitudes and beliefs. This insight can assist us in thinking about our role as diabetes educators. The writers who contributed to this issue shed light on historical factors and the social determinants of health. The key to better health outcomes is to acknowledge and incorporate indigenous culture into health care. We hope this issue is helpful in your learning about, caring for, and working with Canada's Indigenous Peoples. The following are highlights from this issue.

Chief Robert Joseph's introductory article is an insightful perspective on the health inequities between Indigenous and non-Indigenous Peoples. Chief Joseph encourages us to recognize the rights of Indigenous Peoples under international law and to embrace reconciliation as indicated in Canada's Truth and Reconciliation Report. We extend our deepest gratitude to Chief Joseph for his heartfelt address to our professional community.

CONTINUED ON PAGE 18

Editorial Note: *The Diabetes Communicator* follows the 18th edition of *The Canadian Press Stylebook*, which uses the term Indigenous Peoples (sometimes referred to as Aboriginal) to include three groups: First Nations, Inuit and Métis. First Nations people in Canada are comprised of status and non-status members. Status members qualify under the Indian Act. For further details about these terms, see <https://indigenousfoundations.arts.ubc.ca/terminology/>.

In This Issue

From the Co-Chairs	2	On the Road with the Southern British Columbia Mobile Diabetes Team	8	Colonization of Indigenous Foods	14
Indigenous Peoples with Diabetes Face Access Challenges	3	Indigenous Wellness and Food Systems	9	Culture as the Foundation for Diabetes Care and Health Promotion in a Haudenosaunee Community	16
Canada's Indigenous Peoples: Historical Perspective, Truth and Reconciliation	4	First Nation Organization Tackles the Diabetes Epidemic in the Manitoba Region	10	Integrated Patient Engagement in Diabetes Research	17
Putting the Guidelines into Practice	6	Point-of-Care Testing to Assess Glycated Hemoglobin	12	Leadership Forum 2018	18

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A Diabetes Canada Professional Section Publication

**DIABETES
CANADA**

FROM THE CO-CHAIRS

Call to Action: A Diabetes Strategy for Canada and Looking Forward with Guideline Dissemination and Development

Shelley Jones, RN, B.Sc.N., CDE; Peter Senior, MBBS. Ph.D.
Co-Chairs, Professional Section National Executive



We hope everyone is enjoying a nice summer filled with warm weather, sunshine, family and lots of opportunities for outdoor activities.

In early May, your Professional Section Executive spent a weekend meeting with Chapter and Special Interest Group Chairs and staff from Diabetes Canada. During this meeting, we were treated to a presentation from Jan Hux, President and Chief Scientific Officer of Diabetes Canada, highlighting a new focus for the organization centring on the concept of having a “population impact” with a strategy to prevent, care and cure. This message of “prevent, care, cure” speaks to each of us who volunteers with the Professional Section and challenges us to lend our voices as partners with Diabetes Canada in promoting excellence in diabetes care. By adopting a strategy that focuses on a population-impact approach, we will be serving approximately 11 million Canadians impacted by diabetes.

We also heard a presentation from Kimberly Hanson, Director of Federal Affairs at Diabetes Canada, who outlined Diabetes Canada's 360° approach to a Canadian Strategy that will involve input from many patient advocates, stakeholders and people living with diabetes. You can learn more about this at www.diabetes.ca/how-you-can-help/advocate/canadian-strategy-and-diabetes-360-target.

One topic of interest during this program was the statistics involving people in lower-income groups in Canada. This group not only has a greater incidence of diabetes but also has higher rates of emergency visits and amputations. It is also significant to note that one-third of people in this group report skipping medications due to choices between therapy and other things like food or rent. You and your Professional Section Chapter can advocate for this group by lobbying local provincial and federal representatives for improved access and support for evidence-based treatments and programs by promoting government adoption of the 360° Canadian Strategy for Diabetes.

Canada is a leader in the treatment and management of diabetes through the development of evidence-based clinical practice guidelines. With the launch of the 2018 Clinical Practice Guidelines, we will soon be turning our attention to the work and processes needed to move forward with continued updates and revisions. In fact, the call for nominations from the Professional Section Executive for a new CPG Chair and a new position of CPG Vice-Chair went out in May. We will have more on these positions and others that are being voted on over the summer when we meet in Halifax, N.S., this fall at the 21st Professional Conference & Annual Meetings. We are looking forward to seeing you there!

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ASK THE EXPERT

Indigenous Peoples with Diabetes Face Access Challenges

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The high rates of diabetes and its associated complications among Indigenous Peoples have been documented in numerous studies and reports. The *Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes*

in Canada (CPGs) include a chapter entitled “Type 2 Diabetes and Indigenous Peoples” (1). Rather than reiterating the rates that are devastating to our communities, I would like to share a reality specific to access to care and support for First Nations individuals with type 2 diabetes who live on-reserve.

First Nations individuals living with diabetes face many challenges that are compounded when we take into account the struggles related to access. With the complexities of diabetes, diabetes educators play an important role in increasing awareness, providing education and supporting individuals with clinical management of diabetes. An important component of education includes self-monitoring of blood glucose (SMBG). The CPGs indicate that monitoring is most effective when combined with an education program (2). However, for individuals who live on-reserve, existing policies impede access to an educator or a multidisciplinary team – policies such as transportation for the client to attend services off-reserve, or travel restrictions for regional health authority professional(s) to visit communities. Policy improvements and resources are required to address and improve the inequitable access to diabetes education programs.

Supporting people with diabetes includes providing education related to lifestyle changes, such as healthy eating, increasing physical activity and reducing stress. In many First Nations communities, access to healthy food is an issue, and what is available may not be affordable. Unless the root causes are addressed in areas such as food insecurity, physical environments (adequate housing and access to clean drinking water), and employment and income, among other determinants of health, there will continue to be significant health disparities for First Nations populations.

To make a significant impact on diabetes within the First Nations populations, not only do we need to improve access to educational programs, we need to explore the interpretation of existing policies and practices that cause

additional jurisdictional barriers for Indigenous Peoples who seek support in managing their diabetes. All levels of government need to discuss meaningful collaboration, and must work together to address the challenges and gaps that often impede service providers in working together as we should. The Truth and Reconciliation Commission of Canada identified 94 calls to action. The 19th call to action states (3):

“We call upon the federal government, in consultation with Aboriginal peoples, to establish measurable goals to identify and close the gaps in health outcomes between Aboriginal and non-Aboriginal communities, and to publish annual progress reports and assess long-term trends. Such efforts would focus on indicators such as: infant mortality, maternal health, suicide, mental health, addictions, life expectancy, birth rates, infant and child health issues, chronic diseases, illness and injury incidence, and the availability of appropriate health services.”

We can no longer continue on the same path and expect different results. Let us look beyond our respective silos and make meaningful changes for future generations.

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Canada's Indigenous Peoples: Historical Perspective, Truth and Reconciliation

Chief Dr. Robert Joseph, O.B.C., O.C.

Hereditary Chief, Gwawaenuk First Nation, Ambassador for Reconciliation Canada,
Order of British Columbia Recipient, Order of Canada recipient, B.C.



Indigenous Healing

The discourse between Indigenous and non-Indigenous Peoples is not always on the same level, causing significant inequities in health-care delivery and services.

This troubling pattern will only worsen unless

we change the narrative to include the collective experiences and relationships that were impacted by residential schools and European colonialism. There is a dire need to discuss these issues and our history to stimulate progress and improve health as well as social and economic conditions for Indigenous Peoples.

As indicated in Canada's Truth and Reconciliation Report (1), there is a direct correlation between Indigenous Peoples' and Canadians' histories; federal, provincial and territorial policies; and current health and social conditions for Indigenous Peoples.

These conditions have been driven by a deep layer of racism and discriminatory policies in our country for more than 150 years where (1):

"...the central goal was to eliminate aboriginal peoples as distinct legal, social, cultural, religious and social entities, allowing the government to divest its legal and financial obligation to Indigenous Peoples.

"Lands were seized, movement was restricted, languages were banned, spiritual leaders were persecuted, spiritual practices forbidden, and families were torn apart to destroy the social and political institutions of Indigenous Peoples, and to disrupt and prevent the transmission of cultural values and identity from one generation to the next.

"Indeed, the very establishment of Residential Schools can best be described as a cultural genocide that has and continues to have a resounding impact across generations of Indigenous Peoples."

These policies and ongoing discrimination and racism have resulted in major gaps in the health and well-being of Indigenous Peoples compared with other Canadians.

Today, Canada ranks fifth on the Human Development Index of the United Nations. But if judged solely on the economic and social well-being of Indigenous Peoples, we would rank 48th (1).

Indigenous Peoples account for four per cent of the total population, but nearly 25 per cent of the incarcerated population (1).

Indigenous Peoples are more than twice as likely to live in poverty, nearly twice as likely to have diabetes, six times more likely to suffer alcohol-related deaths, more than three times more likely to suffer drug-induced deaths and, tragically, have suicide rates that are nearly twice as high as the overall Canadian population (1).

In addition, their life expectancy is three to six years shorter (1). These statistics are both tragic and eye-opening, and demonstrate the staggering gaps between the health and well-being of Indigenous Peoples and all other Canadians.

It is very difficult for people with diabetes in our communities to embrace the medicine that health-care providers bring when so many of Indigenous Peoples live constantly with hopelessness, despair and marginalization.

To address these gaps, we must embrace reconciliation as a core value, learn from the past, and develop relationships to work together to focus and align our work, and to plan together, to hold each other up, and to support each other to respond in the right ways. We must engage in a discussion that transforms our understanding of each other, to see each other differently, and to recognize our common humanity. And, we need to have a deeper appreciation of our shared history so we can truly and deeply apply ourselves to improving the health status of Indigenous Peoples in this country.

To start, this involves addressing several calls to action, including government recognition that the current state of Indigenous Peoples' health is a direct result of past policies (see Calls to Action #18 to #24 in Canada's Truth and Reconciliation Report) (1).

It also involves and requires new approaches, new perspectives and new relationships. Despite the power of Western medicine to treat and heal disease, there are limitations.

There are underlying conditions and social issues that influence the acceptability, appropriateness and overall effectiveness of medical treatment, and approaches that solely rely on Western medicine have only had a modest impact on Indigenous Peoples' health. So, we must approach Indigenous Peoples' health issues differently.

These approaches require increased emphasis on cultural safety, investment in, and a focus on, relationships, and recognition of the incorporation of traditional culture, values and healing methods in patient care.

Cultural safe care requires health-care providers to examine their attitudes and perspectives about the people they serve, who, like everybody else, want to have a sense of dignity and to be respected and seen. When this happens, patients will respond in new ways to treatment requirements, and will be empowered to maintain and manage their health. Furthermore, this type of care will support the development of caring relationships between providers and patients, which may be the most important thing we can do to shift the dynamic of success right now. These relationships, when built on respect and honour, increase trust and understanding, and empower patients to be involved in their health care, to own and be accountable for their health condition, and to take care of themselves in the ways they can. Relationships are the cornerstone of inclusivity, and are essential to support systems, paramount to networking, and conducive to the development of best practices, supporting innovation, outside-the-box thinking and patient empowerment.

New approaches to care also involve a holistic approach to diabetes care in communities, and the incorporation of other, non-medical forms of support as well as traditional culture, values and healing methods in patient care. We are learning that best practices for Indigenous Peoples' wellness involve a range of services in addition to services from mainstream health care. They involve several different care providers in community services, integrated to achieve better outcomes for patients, and involve the input and incorporation of Indigenous Peoples' ways,

including greater recognition, respect for and inclusion of traditional ways of knowing, healing and living.

There are many ways that Indigenous Peoples see the world. Their world views are rooted in the sanctity of creation and their connection to the environment, to the world around them, to the animals, the birds and the fish in the seas. We are all one. If we believe that, we begin to exercise that respect for this notion, and then Indigenous Peoples are going to be healthier, more empowered, more connected and more inspired. This will overcome the impact of the residential schools and reignite the notion of humanity, self-respect and value in Indigenous Peoples.

We are in a new era when it comes to indigenous health. We are recognizing the impacts of European colonialism and our shared history, and are searching for new ways to move forward together to make a difference. In this journey together, relationships are important, empowerment is important, trust is important, integration of services is important, inclusivity is important, and strong networks, strong families and strong community support are important and instrumental to improving the health and well-being of Indigenous Peoples. These things do not cost money, but elevate the spirit of patients and communities, and demonstrate that they are valued and that they belong and are connected to all of us. Through these connections, we can begin to understand each other and find the benefits of being human and acknowledging each other, of being compassionate, caring and loving towards one another.

Subsequent polls following the Truth and Reconciliation Report have indicated that more than eight in 10 Canadians support reconciliation.

We can do this!

Reference

1. Truth and Reconciliation Commission of Canada. Calls to action. Winnipeg, Man., 2015. Available at: www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls_to_Action_English2.pdf. Accessed April 18, 2018.

Want to Contribute an Article to *The Diabetes Communicator*?

All interested authors are invited to submit their articles to *The Diabetes Communicator*. Please refer to the author guidelines prior to submission: www.diabetes.ca/publications-newsletters/the-diabetes-communicator.

Note that all articles will undergo peer review prior to acceptance.

Putting the Guidelines into Practice – Our work Is *YOUR* Work, and We Need Your Help!

A Call From the Guideline Dissemination & Implementation Committee

Noah Ivers, MD, Ph.D., CCFP; Catherine Yu, MD, FRCPC, M.H.Sc
Co-Chairs, Guideline Dissemination and Implementation Committee

In this first of a four-article series, Noah Ivers and Catherine Yu share their raison-d'être – introducing you to the exciting work of putting guidelines into practice, and sharing the overarching vision and theme for dissemination.



The 2018 *Diabetes Canada Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada* represent a monumental accomplishment, involving tens of thousands of hours of volunteer work by 135 health professionals across the country. Importantly, the guidelines were developed by the Steering and Expert Committees

We know that change is not easy. It's not easy for our patients who live with diabetes, and it's not easy for us in our practice when we are used to managing patients in a certain way. It's one thing to be aware of the guidelines. It's quite another to put them into practice. For guidelines to lead to better outcomes for patients, we need to move from awareness, to agreement, and then to adoption and adherence. But even the most well-intentioned people may struggle to turn their intentions into action. Can we help them (and each other) as we collectively aim to improve diabetes outcomes?

In this first article, we provide an overview of some of the key messages in the dissemination of the guidelines. In future articles, we will expand on this overview, zeroing in on each of the key messages and describing some of the relevant tools that we hope will help with implementation.

with the participation of informed people with diabetes to ensure that their views and preferences informed the development process and the recommendations, as well as the development of key messages using lay terms directed at people living with diabetes. Thus, the guidelines provide recommendations for the management of diabetes that cover a broad range of situations informed by rigorous review of the evidence.

However, guidelines do not self-implement. The massive contributions by volunteer health professionals across the country would be for naught without a concerted effort toward dissemination and implementation. We now ask for your help, as members of the Diabetes Canada community, in this effort.

Who are we, and why are we bothering with all this? We are a family physician (Ivers) and an endocrinologist (Yu) who act as co-chairs of the Diabetes Canada Clinical Practice Guideline Dissemination and Implementation Committee. This committee has more than 50 members representing the full range of relevant disciplines, as well as people living with or affected by diabetes, from across the country. We do this because we believe in the potential for all of us working together to find ways to deliver evidence-based care in a patient-centred manner.

The ABCDES³ of Diabetes Care

Providing care concordant with the guidelines requires conversations about opportunities to:

- reduce the risk of complications (Key Message 1)
- ensure safety (Key Message 2) and
- support self-management (Key Message 3)

The revised acronym ABCDES³, incorporating the key messages above, was developed as an aid to facilitate comprehensive assessment and action by any member of the health-care team (Table 1).

Some Guideline Tools (a Teaser):

On the guidelines website (www.guidelines.diabetes.ca), you can find educational slide kits, videos and case studies, a quick reference guide, health-care provider tools organized by key message, as well as resources for people with diabetes in a variety of languages. In addition, both iOS and Android apps are available.

Many health-care provider tools available on the guidelines website and also in the app offer “interactive” clinical

Table 1: ABCDES³

		GUIDELINE TARGET (or personalized goal)
A	A1C target	A1C ≤7.0%; if on insulin or insulin secretagogue, assess for hypoglycemia and ensure driving safety
B	BP target	BP <130/80 mmHg; if on treatment, assess for risk of falls
C	Cholesterol target	LDL-C <2.0 mmol/L
D	Drugs for CVD risk reduction	ACEi/ARB (if CVD, age ≥55 with risk factors, OR diabetes complications) Statin (if CVD, age ≥40 for Type 2, OR diabetes complications) ASA (if CVD) SLGT2i/GLP1ra with demonstrated CV benefit (if have type 2 DM with CVD and A1C not at target)
E	Exercise goals and healthy Eating	150 minutes of moderate to vigorous aerobic activity/week and resistance exercises 2-3 times/week Follow healthy dietary pattern (i.e. Mediterranean diet, low glycemic index)
S	Screening for complications	Cardiac: ECG every 3-5 years if age >40 OR diabetes complications Foot: Monofilament/Vibration yearly or more if abnormal Kidney: Test eGFR and ACR yearly, or more if abnormal Retinopathy: yearly dilated retinal exam
S	Smoking cessation	If smoker: Ask permission to give advice, arrange therapy and provide support
S	Self-management, stress, other barriers	Set personalized goals

A1C, glycated hemoglobin; ACEi/ARB, angiotensin-converting enzyme inhibitor / angiotensin receptor blocker; ACR, albumin/creatinine ratio; ASA, acetylsalicylic acid; BP, blood pressure; CV, cardiovascular; CVD, cardiovascular disease; DM, diabetes mellitus; ECG, electrocardiogram; eGFR, estimated glomerular filtration rate; LDL-C, low-density lipoprotein cholesterol; SLGT1i/GLP1ra, sodium glucose cotransporter 1 / glucagon-like peptide-1 receptor agonists

decision support. These help you identify ways to use the recommendations for particular patients. For example, the interactive tool entitled “Reducing Vascular Risk” (guidelines.diabetes.ca/reduce-complications/risk-assessment) asks you to input selected information about your patient and, then, indicates which medication the guidelines would recommend. This tool provides you with a way to implement the “D” in ABCDES³. For “A”, the interactive tool entitled “Pharmacotherapy for Type 2 Diabetes” (www.guidelines.diabetes.ca/reduce-complications/pharmacology-t2) provides clinical decision support regarding the guidelines’ recommendations when considering adding the next antihyperglycemic medication class. If people with diabetes are taking medications that can cause hypoglycemia (i.e. insulin or insulin secretagogues), the guidelines recommend counselling regarding safe driving. A handout that you can give to such patients is now available on the guidelines website to help implement these recommendations (www.guidelines.diabetes.ca/cdacpg/media/documents/patient-resources/drive-safe-with-diabetes.pdf).

People with diabetes benefit when they have a range of health professionals in their care team. We need all team members, along with the people who have diabetes themselves, to be “on the same page.” This was the impetus for an ABCDES³ tool that we hope people will “share to improve their care” (www.guidelines.diabetes.ca/docs/patient-resources/my-diabetes-care-not-just-about-blood-sugar.pdf). We hope people with diabetes will take this tool with them when they visit their primary care clinicians, including their pharmacist, nurse, dietician, etc., to help keep things on track and identify key action items.

Next Steps

Our next article will provide a deep dive into Key Message 1: reducing the risk of complications.

Put the Guidelines into Practice

Start working with others in your region to find innovative ways to put the key messages and relevant tools into practice! Have questions or suggestions regarding ways to implement the guidelines? Please be in touch with the guidelines dissemination and implementation team: guidelines@diabetes.ca.

Get the Diabetes Canada Clinical Practice Guidelines App

This free mobile app is designed for your smartphone and tablet to incorporate the professional health-care tools, clinical practice guidelines chapters, slide decks and narrated slide presentations.

The DC CPG App is available for iOS from the App Store and Android OS from Google Play.

On the Road with the Southern British Columbia Mobile Diabetes Team

Dann Swann, RN, CDE, CHN

Seabird Island Indian Band, Agassiz, B.C.



Imagine flying in a four-seater float plane into a remote Indigenous Peoples community on the coast of British Columbia, or driving down a logging road over a mountain into a valley full of lush old-growth forests, rivers

and wildlife. Or how about encountering elk, bears and even a bull moose that thinks he is a cow? In fact, he is known as “Cowboy” because he visits this area every year and hangs around with a herd of cattle. This may sound like a National Geographic adventure television show, but it is not. This is a typical work week for the Seabird Island Mobile Diabetes Team when they are on the road.

The team consists of four people who provide diabetes education, blood tests and eye care services to indigenous communities throughout the lower part of the province and in some communities on Vancouver Island. The team consists of two nurses, a vision technician and a coordinator who all consult with an endocrinologist and an ophthalmologist.

This program started in 2009 when the team was given a GMC Yukon XL, some laboratory and ophthalmology equipment, and were told to make it work. The mandate was to provide diabetes services, education and vision screening to on-reserve Indigenous Peoples in approximately 85 communities across the province at no cost to them. The team's funding now comes from the First Nations Health Authority because of the Triparte Agreement that was signed in 2007 when First Nations in British Columbia decided to take greater control over their own health care. Part of that agreement was to look at ways to deal with the epidemic of type 2 diabetes in First Nations communities in a culturally sensitive way.

The team travels to communities by truck or sometimes must fly in if the community is inaccessible by road. As a team, we transport sophisticated laboratory equipment consisting of two Piccolo chemistry analyzers, two Siemens diabetes care analyzers, and other diabetes care-related equipment. Also along for the ride is a Topcon non-mydratric retinal camera, a Reichert Tono-Pen, and various other equipment and accessories. The nurses can do a complete lipid panel and measure liver function, estimated glomerular filtration rate (eGFR), and urine albumin-to-creatinine ratio (ACR) as well as glycated hemoglobin (A1C). Before doing

these tests, the nurse does quality control tests on the analyzers so that accurate results can be guaranteed.

When the team arrives in a community, the equipment is set up and prepared for consultations with up to 10 clients per day. Each examination, including blood work, blood pressure readings and diabetes education, takes approximately half an hour or more, depending on the complexity of the case. Obtaining the blood sample is relatively easy and only involves a capillary fingertip blood sample for A1C, lipid and kidney panels. It takes 15 minutes to obtain the lipid and kidney results, and less time for the A1C and ACR. The nurse shares any abnormal results with the client and recommends that they see their general practitioner for follow up. Following the clinic visit, a report is produced (completed online), indicating where there are recommendations for possible treatment changes. These recommendations are reviewed by the endocrinologist, and the report is faxed to the client's general practitioner for follow up once everything has been reviewed.

After the client is finished seeing the nurse for their bloodwork, they see the vision technician for his/her eye examination. The eye examination starts with a quick visual acuity check and eye pressure readings. The client's eyes are then dilated and retinal photos are taken to determine if retinopathy or other eye diseases are present. These photos are then sent to the ophthalmologist for assessment. If treatment is required, this information is sent to the client's general practitioner for implementation.

In the nine-year history of this program, the team has had close to 2,000 client visits, most of which were people living with pre-existing diabetes. Most clients return in the following years to see the team. The team then reviews any changes that may have occurred to their treatment, recommends ways to improve their glycemic control and praises them for changes they may have made.

A screening component has been added to the program that involves identifying pre-diabetes or new diagnoses of type 2 diabetes for high-risk individuals identified by the community health staff. The service provides a safe alternative for clients who feel uneasy leaving their communities to have blood tests performed. This is also more convenient for clients living in remote villages who would have to travel great distances to get bloodwork done.

Over the years, the team has seen many success stories, and are seeing improved outcomes from the community visits. As time moves forward, the team hopes to continue this valuable service, and will continue to work to improve the lives of people with diabetes and to prevent new cases.

Indigenous Wellness and Food Systems: An Old Solution to a New Problem

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The concept of nutrition transition describes dietary and lifestyle shifts underpinned by changes in global economies, trade patterns, technology, politics and culture (1). Modern food systems excel in the production of food energy, while new food processing technologies have made edible plant oils and refined sweeteners cheaper and more available in greater quantities, with more places to put them. Grain-derived sugar and oils are now ubiquitous in processed and long shelf-life foods. More people are living more sedentary lives in cities, which has brought about new population health risks in the form of chronic diseases, including type 2 diabetes. One of the many adverse health outcomes of nutrition transition for Indigenous Peoples is a prevalence rate for type 2 diabetes three to five times higher than the general population.

For Indigenous Peoples, these changes have occurred rapidly, and often violently, through the processes of colonization. Diverse, seasonal diets rich in lean game and fish, as well as wild plants harvested through activities in which every member of the family, clan or tribe had a role, have been partially and, in many cases completely, replaced by modern diets. For people on low incomes living in remote areas far from well-stocked markets, this means that accessible food is often that which is processed, energy-dense, nutrient-poor and lacking in diversity.

As a social determinant of health, food security is especially significant because traditional indigenous food systems are about so much more than what is on the plate. Participation in traditional food and healing systems is central to Indigenous Peoples' perspective on health and wellness. This perspective is relational, meaning that the wellness of individual people is interconnected not only with that of family and community members, but also animals, plants and the spiritual world. Indigenous food systems evolved over thousands of years to maintain a state of equilibrium between humans and the natural and spiritual worlds. Think, for a moment, about the effects of climate change on human health, and the idea of interconnectedness becomes quite tangible, as evidenced by drought, floods and emerging diseases. When things are out of balance, human health is at risk.

Since the first contact with European settlers, which is a relatively short time in the thousands of years Indigenous Peoples have inhabited this continent, food systems have come under extreme pressure. Historically, food and health policies towards Indigenous Peoples in Canada have served to suppress indigenous knowledge and practices (2). Examples of policies impacting Indigenous Peoples along food security

and health pathways included the appropriation of land and resources that resulted in widespread starvation, the withholding of food and medicine in cruel residential school experiments, and using social benefits and child protection interventions to weaken and disperse communities and families. Alienation from family, community and traditional food ways, healing practices and medicine has affected more than just nutrition and physical bodies; it has impacted spiritual, mental and emotional wellness (3).

These are among the reasons the disproportionate burden of diabetes and other cardiovascular diseases among Indigenous Peoples is highly unlikely to be reduced simply by dietary or nutrition interventions. Conventional behaviour-change approaches have shown little success in reducing the incidence of chronic disease among Indigenous Peoples, often because they are culturally irrelevant, fail to address food security challenges, and completely miss the importance of the social context of food (4). Food is seen as medicine because it has the potential to heal the body, but, in the relational world view, this potential exists only when our relationships with each other and our natural and spiritual worlds are included in the healing process.

Although these ideas do not translate well into European or other knowledge systems, it should be apparent in any world view that being an active part of indigenous food systems could have holistic health benefits. In addition to adding to dietary diversity (5), there are benefits from healthy activities around harvesting and preparation, and better mental health. Traditional practices are associated with culture and language, which are important aspects of self-determination and sovereignty (6).

"Land-based" health programs, where traditional food, medicine and healing practices are learned and practised as therapeutic interventions, are widely hosted by Indigenous Peoples. These programs play an increasingly important role in trauma healing, addiction recovery and suicide prevention (7). Indigenous food and healing systems are important places for action on reconciliation and self-determination (8). Many Indigenous Peoples have already undertaken measures to improve their wellness by improving nutrition and food security, rebuilding food sovereignty (control over food systems), and revitalizing traditional food and medicine knowledge.

These efforts still face many challenges. Deliberate suppression of cultural practices, including residential schools and the "60s scoop", have interrupted learning pathways; severed social ties have left communities with

few active knowledge keepers. Yet many indigenous communities are deeply committed to the revitalization, transmission and translation of traditional knowledge and medicine and their associated protocols. As health-care professionals, supporting these efforts begins with reflection on our obligations under the Truth and Reconciliation Calls to Action (9). These include recognizing the rights of Indigenous Peoples under international law, closing the health equity gap between Indigenous and non-Indigenous Peoples' communities, respecting unique health needs, and providing adequate funding for the kinds of holistic healing centres needed to address the physical, emotional, spiritual and mental harms inflicted by residential schools. It means recognizing, elevating and supporting Indigenous Peoples' healing knowledge and practices, bringing more Indigenous Peoples into the ranks of health-care professionals, and ensuring widespread cultural competency.

Collectively, our current state of nutrition, health and wellness is the product of nutrition transition and its adverse effects. We have become dependent on a food system that increasingly revolves around intensive, unsustainable production methods that threaten biodiversity and drive climate change. Much of modern food production is removed from social and cultural contexts, and there is little respect shown to the animals who die so we can live. We consume fewer home-prepared foods, while diverse, healthy diets become more and more expensive. Food is not the glue in family and social cohesion that it once was, and unique food cultures are disappearing. The reconnection of food, culture and land is an important step in the healing and health promotion of Indigenous Peoples (10), but the relational world view and holistic approach to food may hold some important wisdom for all of us.

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First Nation Organization Tackles the Diabetes Epidemic in the Manitoba Region

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Currently, type 2 diabetes remains a challenge and contributes to poor health among First Nations peoples (1). With rates of 50% and 40%, respectively, for First Nations women and men over the age of 60 years, the burden remains high, and increases with age (2). More alarming is the increasing number of First Nations children affected by this condition (3). Evidence indicates that First Nations peoples living with type 2 diabetes use services at rates of up to four times that of other populations (4). This, along

with earlier age at onset and the high rates of complications (5), gives emphasis to the urgency to take action.

In 1999, the Manitoba First Nations Diabetes Leadership Council (MFNDLC) was mandated by the Assembly of Manitoba Chiefs to address the growing epidemic of diabetes that resulted in The Manitoba First Nation Diabetes Strategy: A Call to Action (6). The strategy identified five priority areas to address the diabetes epidemic: Prevention and Promotion; Care and Treatment; Gestational

Diabetes; Research, Surveillance/Evaluation; and Policy/Infrastructure. The Care and Treatment component led to the development of the Diabetes Integration Project (DIP).

DIP is a mobile diabetes care and treatment model developed to provide services on-reserve to support First Nations adults living with type 2 diabetes. DIP currently has three teams delivering services in 20 First Nations communities throughout Manitoba. Each team travels to the communities approximately four times a year to hold diabetes clinics that run over two or three days.

The DIP Model of Care is unique because it uses a non-deficit, anti-racist, anti-oppressive approach to diabetes care and treatment services through an Indigenous Peoples' worldview lens. It is a made-for-Manitoba First Nations intervention, and its focus is on their strengths and a belief that First Nations individuals and communities can harness their own resources to improve the lives of those affected by diabetes. A First Nations client-centered approach instills personal change through strength-based interventions aimed at preventing or delaying the complications of diabetes.

Basic Foot Care

The MFNDLC, along with the First Nations Health and Social Secretariat of Manitoba's Diabetes Integration Project, worked collaboratively to develop a solution to address the lack of access to basic foot care and the high amputation rates. A proposal entitled, "The First Nation Basic Foot Care Program: A Solution to Reduce Diabetic Foot Complications and Amputation Rates" was approved by Health Canada's First Nations and Inuit Health Branch in June 2017, and \$19 million in funding will be provided over four years to support the delivery of basic foot care services in all 63 First Nations communities in Manitoba.

Kidney Health – FINISHED Project

The First Nations Community Based Screening to Improve Kidney Health and Prevent Dialysis (FINISHED) Project (2012-2015) is the result of a successful partnership between the Diabetes Integration Project and the Manitoba Renal Program to screen for, triage and treat chronic kidney disease (CKD) in more than 2,000 First Nations members in two Tribal Councils in Manitoba. This health initiative provides rural and remote First Nations adults and children (>10 years) with access to comprehensive screening for CKD, hypertension and diabetes, in addition to real-time risk prediction for CKD, counselling and appropriate referrals to primary care or nephrology teams based on the client's risk profile.

The FINISHED Project led to the successful five-year Strategies for Patient-Oriented Research proposal entitled, "CAN-SOLVE CKD – Optimal Approaches to CKD Case Finding In Indigenous Communities," which was co-led by Dr. Adeera Levin, University of British Columbia, and Dr. Paul Komenda, Manitoba Renal Program (7-10).

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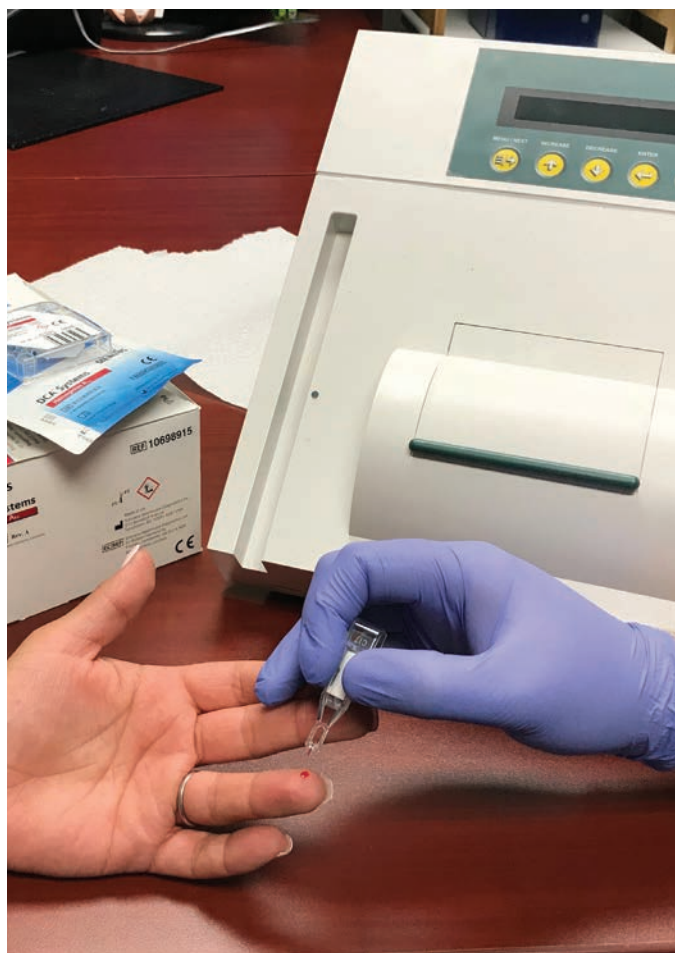
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TECH WATCH

Point-of-Care Testing to Assess Glycated Hemoglobin: A Useful Tool

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less invasive, more timely, and can help reduce any range of pre-existing geographic, cultural, institutional or financial barriers people with diabetes may encounter in accessing health care (4); this is particularly the case for First Nations populations. POC results can be generated in just six minutes, while laboratory-performed A1C testing may require anywhere between two to three appointments (doc-lab-doc) and, oftentimes, months between these points of access. These factors do not bode well for some of the most vulnerable in our society. It is also well known that delays in tightening glycemic control, particularly early in diabetes, can lead to any array of immediate or long-term health implications – micro- and/or macrovascular (5). When used effectively to guide interventions, POC results have been shown to decrease mean A1C, when compared to pre-POC introduction (2,6-8), and even years later (9). To this extent, immediate access to POC A1C testing has also been found to facilitate more timely intensification of diabetes therapy, a primary goal when A1C values are above target (10,11). An extensive review of data from 1999 to 2016 summarized the evidence supporting the implementation of POC A1C testing. The authors concluded that POC A1C testing increases follow through with recommendations, improves clinical outcomes, facilitates improved patient education/motivation and contributes to cost savings (2). POC A1C testing enables patients to get their results immediately and provides an opportunity to understand and act on their results sooner. These important factors should not be ignored.

Point-of-care (POC) testing to assess glycated hemoglobin (A1C) has gained interest in recent years. While some sceptics remain, there is indeed compelling evidence for POC A1C testing to strengthen the standard of diabetes care in many settings (1,2). POC A1C testing has been found to improve access to care, ownership of results, and the capacity of patients and health-care teams to make more timely decisions surrounding individual glycemic control.

More Timely Access and Action

In my experience as a nurse using POC A1C testing in First Nations communities, there is no question that most clients appreciate and prefer the POC option versus the traditional laboratory; and why wouldn't they? Research exploring patient acceptance of POC would support these observations (2,3). Simply stated, A1C via POC testing is

What about Accuracy?

Health-care professionals often question the accuracy of POC A1C testing versus that of a laboratory. In this regard, blind acceptance of any POC device is not a good practice. While some studies have found small margins of error with POC A1C results (12), laboratory-generated A1C results have also found margins of error (11). Furthermore, head-to-head comparisons of A1C results from fingerstick versus venipuncture testing are difficult to compare for many reasons. This is why a quality monitoring program to pre-evaluate any device (to ensure it meets specifications from the start) is prudent in order to produce clinically meaningful results (13). When such monitoring is employed, POC A1C performance characteristics are equivalent to those employed in a central laboratory and, in some cases, are better (14).

A vast number of Canadians with diabetes are not meeting glycemic targets (5). POC A1C testing represents a means by which patients' access to care, and understanding of diabetes can be improved to better reach individualized glycemic targets.

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ADVERTORIAL



By Huda Rashid, RD

As an ethnic food enthusiast, South Asian meals are some of my favourite dishes to prepare. Onions, spices, and the type of oil used are some of the key ingredients in these dishes.

Many traditional South Asian meals use ghee for frying and sautéing. But for those making food choices to try to better manage triglycerides, how can we enjoy South Asian dishes and not sacrifice the flavour? *Dietitians of Canada* suggest using less ghee and as an alternative, choosing an unsaturated oil¹ – heart-healthy, versatile, and affordable – Canadian canola oil is a great substitute.

Here are three ways to include canola oil in South Asian dishes:

Sautéing Spices

Want to add more flavour to South Asian dishes? Use 1-2 teaspoons of canola oil and sauté your spices. Gently frying spices in oil will help deepen their flavor. Sauté cumin seeds, cinnamon sticks, green cardamom, cloves, peppercorns, mustard seeds and/or coriander seeds just until it smells nice and toasty. Try sautéed cumin seeds mixed with plain 0% Greek yogurt for a delicious side dish.

Cooking Curries

Canola oil contains heart healthy fats and is low in saturated fat. This makes canola oil a perfect base to make delicious curries. Use canola oil to cook onions until golden brown and then add sautéed spices, tomatoes, an array of vegetables and lean sources of proteins to create a delectable curry!

Shallow Frying

Pakorras (fritters made with chickpea flour) and samosas (savory pastries with spicy potato or meat filling) are often deep fried, absorbing a lot of fat. Alternatively, shallow frying means cooking food in oil with a depth that reaches about half of the thickness of the food with the food touching the bottom of the pan. Canola oil with its high smoke point of 242°C can be used to shallow fry samosas and pakoras, using less oil while still creating a crisp and browned crust.

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Colonization of Indigenous Foods: The “Whitification” of the Original Food of Indigenous Peoples in Canada

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Since the ‘whiteman’ has come to our land they have ‘whitified’ the food that we eat, white flour, white sugar, white lard, white milk, white salt, and white baking soda.

– Tom Porter, Mohawk Elder, 1972

As a Nêhiyaw (Cree) from Northern Manitoba, I heard Elder Porter talk about food and health in Morley, A.B., and I wanted to learn more about original foods. I use the term “original foods” instead of “traditional foods” because traditions can change from generation to generation. In listening to Elders and community people, and from reading the literature, four historical events can be attributed to the change in dietary patterns, which in turn, impacted physical activity and the spiritual and/or emotional connection Indigenous Peoples have with food. The events include the following: European contact, the treaty process, the Indian Act and residential schools, each of which will be discussed. The outcomes of changing food patterns include an increase in chronic diseases such as type 2 diabetes and obesity.

For thousands of years, many distinct indigenous cultural groups from different geographic regions in Canada lived off the land, water and sky prior to the arrival of the Europeans (1). Elders speak about how food is a gift from the Creator, and that it gives good health; food was viewed as medicine, and all food was shared among everyone. When Europeans came to North America, they brought food that was different, which Indigenous Peoples ate willingly, not thinking that it would make them unhealthy. In stark contrast, settling Europeans viewed food as a method to distinguish wealth from poverty; in this sense, food had the capacity to create a hierarchy (2).

The European invasion that would change the food patterns of Indigenous Peoples began in the 17th century when 1,000 ships arrived for fishing and fur trading along the Atlantic coast (3). Indigenous Peoples traded fur for the Europeans’ agricultural staples, such as wheat, corn, beans, beef and pork, and the Europeans usurped lands for farming (3,4). The natural habitats of animals, fish and plants moved or changed, and the main food sources for Indigenous Peoples were in limited quantities (4). Eventually, Indigenous Peoples, who migrated to where their food sources moved, were forced to live a sedentary lifestyle through treaty negotiations.

Canada began with Peace and Friendship Treaties followed by 11 land cessions (or signed treaties) with Indigenous Peoples, from Treaty 1 in 1871 to Treaty 11 in 1921 (3). The first five treaties provided farm supplies to change indigenous societies from nations of hunters and gatherers into farmers (5). Although laid out in the treaties, in many cases, the equipment, seed and oxen promised were never received (6). When Indigenous Peoples did farm after 1881, the Canadian government prohibited the commercial sale of unregulated agricultural indigenous produce (6,7). Ernest Tootoosis, from Cut Knife, Sask., said in a conversation (August 1976) that “The land was useless; I don’t know how they expected my grandfather to farm on that land.”

Although treaties did guarantee some hunting and fishing rights, it only included rights to land not used for settlement, lumbering or mining (5). There were provisions for rations in case of famine; however, there was no immediate distribution of food unless the indigenous agent could observe starvation (5,8). Emergency food rations were in the form of tea, sugar, pork and sometimes flour, and the food rations were frequently used to coerce reluctant Indigenous Peoples into signing treaties (8). Five years into the treaty negotiations, the first Indian Act was legislated in 1876.

The purpose of the Indian Act of 1876 (IA-1876) was to do away with the tribal system and assimilate Indigenous Peoples (9). The IA-1876 defined who was an indigenous person, where women who married a non-status member were no longer considered a status member (10). Margaret Lavallee, Anishinabe Elder, stated in a conversation (April 2008) that Indigenous women were an integral part of food because they hunted smaller animals when the men were out hunting larger game; they planted and harvested crops, and they gathered and picked greens, herbs and medicines.

The IA-1876 also set out instructions regarding the sale of indigenous land, and the government sold licenses to various companies (11). With land dwindling, medicines, herbs and small game were depleted, and large game moved farther away. IA-1876 also had a pass system,



from 1886 until the 1930s, which regulated Indigenous Peoples' hunting and gathering outside the reserve, and restricted Indigenous Peoples from farming (12). In 1889, Canada's government officials agreed to residential schools as part of the treaty negotiations and the Indian Act.

Like Eastern Indigenous Peoples, the Indigenous Peoples in the West saw schools as a means of preparing their children for the new way of life that lay ahead (5). The 2015 Truth and Reconciliation Report states that "the allotted funding per student was rarely enough, and students were expected to provide unpaid labor to support all daily functions of the school" (13). In many cases, children had no contact with their immediate or extended families; thus, they had no family members who could teach them about harvesting, hunting and trapping original foods.

Original foods were viewed by missionaries, educators and doctors as being diseased and inferior; in residential schools, teachers taught children to dislike their own foods and inculcated them with the poor eating habits of a non-indigenous institution (13).

Conclusion

Indigenous Peoples have undergone a significant nutritional transition whereby original foods and associated physical activities have changed, resulting in an increased incidence of type 2 diabetes and other chronic diseases. History shows that the original diet before European colonization was healthy and high in protein, good fats and nutrients (1). The original food practices maintained an active lifestyle and the indigenous cultural identity (3). Original foods benefit Indigenous Peoples' well-being, health, leisure activities, closeness to nature, spirituality, sharing, community spirit, pride and self-respect, economy, and the education of children (13).

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Culture as the Foundation for Diabetes Care and Health Promotion in a Haudenosaunee Community

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In the Haudenosaunee community of Six Nations of the Grand River Territory in Ontario, the provision of diabetes care and health promotion activities is shifting to a model in which culture is the foundation of health. Services offered to those with diabetes, or who are interested in preventing diabetes, seek to support their physical, mental, spiritual, and emotional health. In addition to a diabetes education team (two registered nurses, one registered dietitian and one social worker), clients have access to traditional medicines, a traditional wellness coordinator and language classes. To provide care for the whole person (and respect heritage, food and physical activity), programming has been shifting to incorporate foods consumed before European colonization and types of physical activity performed by ancestors.

The development of a Haudenosaunee food list served as a starting point for this shift. The food list is a valuable resource for health-care providers and community members because it helps highlight foods consumed in the original territories of the Six Nations and serves as a starting point for how to add them to any diet. The food list was originally used for a three-month challenge in 2015, in which participants tried to eat only foods from the list for three months. Community enthusiasm and success in this challenge led to a desire to examine how exactly these foods change the health of those consuming them. In 2017, a clinical dietary pilot study was conducted by Six Nations Health Services, in partnership with McMaster University, to investigate the cardiometabolic effects of consuming foods exclusively from the list for three months, while being supported by fellow participants and community members through sharing circles and social events (results pending).

Rather than hosting another challenge, the food list is now used daily in counselling sessions, cooking classes and catering at community events. This allows community members to gain exposure to cultural foods and learn how to incorporate them into meals they already enjoy. For example, lyed white corn is known as the main ingredient in corn soup, but cooking classes feature the corn in salads, breakfasts and desserts, which broadens the use of this Haudenosaunee staple. Monthly cooking classes are an opportunity to try new foods at no cost, learn cooking techniques, connect with fellow community members, learn about the nutritional benefits of foods, increase food literacy, share food-related stories, and experience how shared meals can bring people together. Those seeking

more can join Ogwa:kwi:yo:, which is an adaptation of the FoodFit program conducted in collaboration with Community Food Centres of Canada. This 12-week program is a place where participants share and learn cultural and nutritional wisdom, complete 30 minutes of physical activity, and cook a meal together. Positive outcomes from the autumn 2017 pilot program included increased vegetable consumption and decreased fasting blood glucose in participants with diabetes (personal communication via program evaluation forms, December 2017).

As a registered dietitian, I inform clients of the nutritional qualities of food while exploring their current food literacy, beliefs and practices. Did they go hunting? Did they plant seeds every spring with their grandmothers? Each client is a rich source of knowledge and experience. By demonstrating respect for their history, we build rapport, promote an appreciation of food and foster whole-person health, which has many layers. With culture as the foundation of health, we can help community members connect with one another and with their identity, which can boost confidence in making positive changes for overall health. Improved glycemic control often follows.



Image courtesy of Arlana Harrison

Integrated Patient Engagement in Diabetes Research: Perspectives from the iCARE Advisory Group

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Type 2 diabetes (T2D) is increasingly diagnosed in adolescents, and rates continue to rise, particularly in First Nations youth living in Manitoba. This disease is associated with high rates of albuminuria in adolescents, and progression to kidney failure can occur in early adulthood (1). The Improving Renal Complications in Adolescents with Type 2 Diabetes through Research (iCARE) study is a Manitoba-led prospective cohort study of youth (10 to 18 years old) living with T2D, and aims to identify the risk factors associated with early-onset kidney injury. The connection between kidney and mental health is also being explored, which is a critical priority identified by the iCARE patient advisory group.

The iCARE advisory group, which started in 2015, is currently made up of seven youth with T2D and six caregivers who are predominately from First Nations. This group meets four times a year to talk about research and health-care priorities. Jackie McKee, an Ojibwe woman of Irish descent, lives in Waywayseecappo First Nation, Manitoba. As a co-chair of the patient advisory group, she understands the impact of living with T2D first hand: "It all started when my son was diagnosed two months before his 13th birthday. I've been very familiar with type 2 diabetes in my family. My grandmother and mom both had it. I was diagnosed myself five years ago."

For Jackie, being a part of this group has provided an opportunity to have a voice within diabetes research: "Being with this advisory group has given me a forum to say how I feel, my concerns, and issues with diabetes. But the biggest thing is that I now feel like I have a voice. Mental health is something that the researchers are now focusing on within their study. To me, mental health support is just as important as the medicine."

"As a group, we've looked at the types of questions they now ask in clinics to find out more about people's current mental health [status and] support, and have provided advice about how they should be asking patients these questions during their visits at clinic. Now, we're talking about ways to increase support for patients."

The biggest take-away message for Jackie has been the severity of renal disease associated with youth-onset T2D:

"The biggest thing I've learned from iCARE is the increased risk kids with type 2 diabetes have in terms of kidney problems by the time they're in their 30s. It scared the hell out of me because that's where I see my son [is] heading. Kidney problems equal dialysis, in my opinion, and a shortened life expectancy."

"iCARE provides youth with the opportunity to share their experiences and feelings with living with this disease. As adults, we can forget that the youth have valuable first-hand knowledge and can make a significant contribution to type 2 diabetes research."

While the study is ongoing, mental health has already emerged as an important clinical risk factor impacting self-management and complications. The iCARE advisory group has made an impact on clinical care by advocating for an elder to provide spiritual support to patients and families. They created a video (2) on how it can feel to live with T2D, and are currently working on a booklet, developed by youth for youth, to assist with managing this disease. The study has also begun to recruit youth across Canada to identify the determinants of T2D on a national scale, with the goal of having targeted prevention and intervention efforts for youth-onset T2D in the future.

References

1. Dart AB, Sellers EA, Martens PJ, Rigatto C, Brownell MD, Dean HJ. High burden of kidney disease in youth-onset type 2 diabetes. *Diabetes Care*. 2012;35:1265-71.
2. iCARE. The realities of living with type 2 diabetes: Facts and fallacies. Available at: <https://www.youtube.com/watch?v=L9yxAkPFnjM&t=224s>. Accessed April 18, 2018.

Leadership Forum 2018

Susie Jin, RPh, CDE, CPT, BCGP

Pharmacy 101, Cobourg, Ont.; Diabetes Canada Professional Section Executive,
Co-Chair Professional Interest Groups



Held on May 5 and 6 in Toronto, Ont., Diabetes Canada's 2018 Leadership Forum brought together the Professional Section Executive, the Chapter and Special Interest Group Chairs (or a representative thereof), and Diabetes Canada staff and leadership, including CEO, John Reidy, and President, Jan Hux, for an outstanding weekend of collaboration and professional development.

Over the two days, delegates heard from Diabetes Canada about its newly launched guidelines and received updates on activities and programs, and attended presentations from diabetes researchers and educators currently working in the diabetes community.

Action Items from the Leadership Forum

- Educating professional members and promoting Diabetes Canada's population impact strategy (prevent, care, cure)

- Engaging Chapters and Special Interest Groups to support dissemination and implementation activities of the *Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada*
- Collaborating with Diabetes Canada's regional teams to build on and grow Chapter activities

Thank you, Diabetes Canada, for supporting and engaging your volunteers through this forum.

For anyone who might be interested in joining this incredibly fun group, please contact either your Diabetes Canada Chapter or Special Interest Chair, or email professional.membership@diabetes.ca.

EDITORIAL...CONTINUED FROM PAGE 1

Anita Crate points out the numerous challenges and barriers Indigenous Peoples living in First Nation communities experience when they access care and diabetes education. Mary Cranmer-Byng describes the highlights of a 12-week program in Southern Ontario, where indigenous culture is respected as the foundation

of health. This program provides access to traditional practices and medicines and to nutritional wisdom along with physical, mental, spiritual and emotional care.

Moneca Sinclair and Angela MacIntyre both explore the historical and cultural factors behind the higher prevalence of type 2 diabetes in Indigenous

Peoples compared with the general Canadian population. Angela focuses on the concept of nutrition transition and its relationship to adverse health outcomes, as well as the social determinants of health. Moneca focuses on the colonization of traditional food and the barriers to healthy eating.

Three authors report on the success of their mobile diabetes clinics serving Indigenous Peoples in First Nations communities. Dann Swann shares his experience working and travelling with the Seabird Island Mobile Diabetes Clinic, which brings diabetes care and services to communities in Southern and Coastal British Columbia. Caroline Chartrand reflects on the development of the Diabetes Integration Project, a mobile diabetes care and treatment model that provides services in First Nation communities in Manitoba. She shares the factors leading to the development of the First Nations Community Based Screening to Improve Kidney Health and Prevent Dialysis (FINISHED) Project, which screens for and treats chronic kidney disease. Matthew Summerskill of the Mobile Diabetes Telemedicine Clinic, which serves many rural and remote indigenous communities in Northern British Columbia, reviews the accuracy and advantages of point-of-care testing to assess glycated hemoglobin. This point-of-care testing has been found to improve access and clinical outcomes.

The Improving Renal Complications in Adolescents with Type 2 Diabetes through Research (iCARE) advisory group – Jackie McKee, Allison Dart, Brandy Wicklow and Leanne Dunne – report on the iCARE research study to identify risk factors associated with early-onset kidney disease of predominantly Indigenous youth living with type 2 diabetes. The insight shared by these young people has led to the emergence of mental health as an important clinical risk factor.

Most importantly, Diabetes Canada released the highly anticipated new version of the Clinical Practice Guidelines on April 9, 2018! Noah Ivers and Catherine Yu of the Guideline Dissemination & Implementation Committee write about putting the guidelines into practice and share the overarching vision and theme for dissemination.

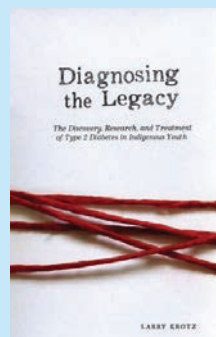
We urge you to read the Clinical Practice Guidelines chapter titled “Type 2 Diabetes and Indigenous Peoples” (1), and we thank all the contributors to this issue of *The Diabetes Communicator* for sharing their knowledge and expertise.

Reference

1. Crowshowe L, Dannenbaum D, Green M, Henderson R, Hayward MN, Toth E. Diabetes Canada 2018 clinical practice guidelines for the prevention and management of diabetes in Canada: type 2 diabetes and Indigenous Peoples. *Can J Diabetes*. 2018;42(Suppl 1):S296-S306.

Diagnosing the Legacy:

The Discovery, Research, and Treatment of Type 2 Diabetes in Indigenous Youth



In the late 1980s, pediatric endocrinologists at the Children's Hospital in Winnipeg (Man.) began to notice Indigenous youth from two First Nations in northern Manitoba and northwestern Ontario coming to clinics with what looked like type 2 diabetes, which was,

until then, a condition only seen in adults. These young patients were just the tip of the iceberg. Over the next few decades, more children would confront what was turning into not only a medical, but also a social and community, challenge.

Through dozens of interviews, the author, Larry Krotz, shows the impact of type 2 diabetes on the lives of individuals and families, as well as the challenges caregivers face diagnosing and then responding to the complex and perplexing disease, especially in communities far removed from the medical personnel and facilities available in southern Canada.

The book includes a foreword by Frances Desjarlais, and an afterword by Heather Dean, Jonathan McGavock, Michael Moffatt and Elizabeth Sellers.

To order a copy, visit the University of Manitoba Press here:

www.uofmpress.ca/books/detail/diagnosing-the-legacy

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