DIABETES EDUCATOR SECTION
SECTION DES ÉDUCATEURS DU DIABÈTE

Canadian Diabetes Association

THE DIABETES
Communicator

Summer 2015

In This Issue

EDITORIAL

Childhood Diabetes: A Growing Concern

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Elaine M. Cooke

Melanie Snider

Our focus this issue is pediatrics. Research suggests that both type 1 and type 2 diabetes are increasing worldwide in youth (1), and Canada was found to have one of the highest incidence rates in the world for type 1 diabetes in children younger than 14 years of age (2). In 2008-2009, the Canadian Chronic Disease Surveillance System reported 3,287 cases of newly diagnosed diabetes (including both type 1 and type 2) among Canadians aged one to 19 years, bringing the total number of cases in children and youth to 25,693 (representing a prevalence rate of 0.3 per cent) (3). One British Columbia study estimated that approximately 90 per cent of the cases among children and youth aged one to 19 years were of type 1 diabetes, and 10 per cent were of type 2 diabetes in 2006-2007 (4).

Type 2 diabetes in children is on the rise with the increasing prevalence of childhood obesity. It poses unique and complex challenges as outlined in the article by Tracy D. Hoilett on page 17.

Have you ever wondered what the impact a diagnosis of diabetes has on the child and his or her family? Laura Wilson (diagnosed at a young age) gives you a first-hand look (page 10) into how it affected her life; on page 13, Sheri Boutilier provides insight into how the whole family starts a "life with diabetes" when a child is diagnosed.

For those of you with children, do you remember the anguish and concern you had when you first sent your child to school? Think of how many more concerns you would have if your child has diabetes. The school support now guaranteed to children with diabetes is outlined by Joanne Lewis' article (page 4) on the Canadian Diabetes Association's (CDA) *Standards of Care for Students with Type 1 Diabetes in School.*

The joy of going to camp became a reality for children with type 1 diabetes in 1953 when the CDA established its first diabetes camp, Camp Banting, in eastern Ontario (5). The CDA now has 12 "D-camps" across Canada. When children attend camp, they gain a new level of independence in managing their diabetes, and they feel empowered to continue the healthy practices they learn at camp (5). On page 11, learn about one healthcare provider's perspective, namely Nola Kornder, at the Saskatchewan camp and be inspired to volunteer at a camp near you.

When kids leave high school and camp behind them, transitioning to adult diabetes care is often a challenge, and Saima Murtaza-Vahed offers some sound advice for helping your patients during this difficult time (page 14).

Carbohydrate counting is an integral part of diabetes management for both children and adults on insulin. And there's an app for that! On page 19, Debbie Reid gives us a review of two apps that might meet their needs.

With the rise in pediatric diabetes, will we see even more cases of cardiovascular disease? As we all know, cardiovascular disease is the leading cause of death among people with diabetes. Alice Cheng gives an overview of the CDA's 2013

CONTINUED ON PAGE 5

The newsletter of the Diabetes Educator Section of the Canadian Diabetes Association

Election for the Diabetes Educator Section National Executive and 2016 National Annual General Meeting Delegates

June 1 – 30, 2015

Wow, we have a fantastic group of Diabetes Educator Section (DES) members who are running for positions this year! Here are your candidates. More information on each candidate will be available online when voting opens on June 1. The positions with only one candidate will be filled by acclamation.

Submitted by Your 2015 Nominations Committee
Jan Cochrane, RN, BSN, CDE (Chair)
Michelle Corcoran, RD, CDE
Nancy Frank, BS Pharm, CDE
Susan Harris, RD, BA.Sc., CDE
Armit Malkin, M.Sc., RD, CDE
Molly Ryder, B.Sc. Hon F/N, RD, CDE

Diabetes Educator Section National Executive

CHAIR-ELECT
POSITION TERM: 2015-2017

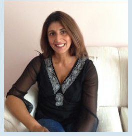
Role: understand the roles and responsibilities of the chair and be able to assume the chair role when necessary. Liaise with local chapters to determine needs, issues and strategies for success. Liaise with the nominations committee and the DES national advocacy representative. Participate in the annual general meeting and conference planning committee and as a member of the Canadian Diabetes Association (CDA) board of directors.

Candidate:

Shelley Jones, RN, B.Sc.N, CDE

DIRECTOR OF MEMBERSHIP
POSITION TERM: 2015-2018

Role: identify strategies to recruit, retain and engage members of the DES and increase awareness of the DES, the benefits of membership and the diabetes educator role in the diabetes team. Support, promote and disseminate all activities of the special interest groups. Facilitate DES membership participation in CDA publications (*Diabetes Dialogue*, *Diabetes Current,* social media, *Canadian Journal of Diabetes* and *The Diabetes Communicator*).



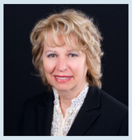
Candidate:

Rema Sanghera, MA, RD, CDE

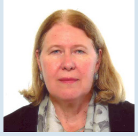
DIRECTOR OF QUALITY
POSITION TERM: 2015-2018

Role: as part of the national DES executive team, this director supports the Standards for Diabetes Education in Canada and the Standards Recognition Program, participating in program review. This person also acts as a liaison for the Dissemination and Implementation Committee and with the CDA for review of partnership programs.

Candidates:



Fran Hensen, RN, B.Sc.N., MAL/Ed

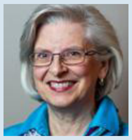


Gail MacNeil, RN, B.N.Sc., M.Ed, CDE

2016 National Annual General Meeting Delegates

Role: represent DES as voting delegates at the CDA National Annual General Meeting. After the National Annual General Meeting, report back to the DES membership about activities and lessons from the meeting.

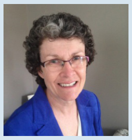
British Columbia



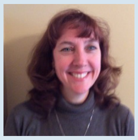
Louise Lefebvre, RD, CDE

Ellen Kirk-Macri, RN, CDE

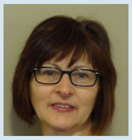
Maritimes



Bev Harris, P.Dt., CDE

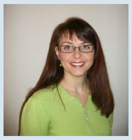


Sue McGrath Terry, RN, MN, CDE



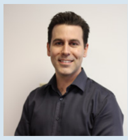
Mary Cheeseman, RD, CDE

Prairies



Carlene Schmaltz, RN, CDE

Ontario



Glen Chenard, RN, B.HSc., CDE, CCHN(C), CVAA(C), CHPCN(C)

Quebec

Sondra Sherman, P.Dt., CDE

NOTE

Online voting will be open from June 1 – 30, 2015. A link will be sent to all DES members. Please vote!

Good luck to all the candidates!

The Diabetes Communicator
Summer 2015

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DIABETES EDUCATOR SECTION
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FROM THE CHAIR'S DESK

Passion Was in the Air! Vision 2020

Lori Berard, RN, CDE
Chair, Diabetes Educator Section

Connect. Inspire. Transform. The Canadian Diabetes Association (CDA) held its annual general meeting on April 24 to 26, 2015, in Toronto, Ontario, and, yes, you could feel the passion in the air. As with many events over the last two years at the CDA, this meeting was new, creative and informative. With a new CDA branding apparent, the focus of the week was to connect, inspire and transform, not only for the three days that we were together, but as an association moving forward as one family and one CDA.

The CDA annual general meeting has historically been held with the professional conference, but with the change in fiscal year end, the meeting now needs to be in April to approve the financial statement. The Diabetes Educator Section (DES) has always had five delegates at the meeting, and three years ago, we were asked to change to having those delegates voted on by our membership, instead of assigned. Several members of the DES executive were in attendance as guests of CDA. There were also DES members at the meeting who were regional delegates. We had the opportunity to meet as a group to discuss key takeaways from this meeting for our section. Thank you to all the DES members who participated in the meeting.

This meeting was informative, energetic and collaborative. On Friday evening, I was able to present to the board, the senior management and the general delegates of the meeting about the roles and responsibilities of the DES, along with Dr. Ronald Sigal, who presented on behalf of the Clinical and Scientific Section. This was a first for the professional sections — to be able to talk about their commitment to the association — and it was certainly appreciated by all.

Saturday was a day filled with understanding all the different programs and services CDA offers, as well as volunteer engagement, corporate partnerships, fund raising (National Diabetes Trust) and the areas of research and guideline development. Each room we rotated through was staffed by incredibly enthusiastic members of the CDA staff and they were delighted to present their goals and visions. This weekend created over 100 ambassadors for the CDA. Passionate, knowledgeable and committed ambassadors, side by side with staff, regional volunteers, board members and professional members, we were provided with vision 2020.

Connect — knowing the people. Inspire — understanding the vision. Transform — changing the lives of people with diabetes. Reach out to your local regional offices to learn how you can get involved. Together we are stronger, together we are one CDA. Hold onto your hats, it is going to be an exciting ride!

Speaking of exciting rides, once again it is election time for our DES national executive as well as the DES delegates to the annual general meeting. Please take the time to review the candidates as they are highlighted in this edition. More importantly, please take the time to vote!

Connect. Inspire. Transform. Vision 2020 — one family, one CDA. Hope you all have a great summer! The best is yet to come!

ERRATUM

In the Spring 2015 issue of *The Diabetes Communicator,* Table 1 in the article titled "Geriatric Pearls: Practice Points In Caring for Elderly Persons with Diabetes" was published with an incorrect heading. The correct heading for the table is "Frailty and dementia stage." We apologize for the error.

Updating the Canadian Diabetes Association's *Standards of Care for Students with Type 1 Diabetes in School*

Joanne Lewis, RD, CDE
Diabetes Education, Canadian Diabetes Association, Toronto, Ont.

Students living with diabetes have the right to be full and equal participants in school and all school-related activities without the fear of being excluded, stigmatized or discriminated against.

In 2013, the National Advocacy Council (NAC) crafted an updated Canadian Diabetes Association (CDA) position/policy statement regarding kids with diabetes in school. The new statement replaced the 2002 policy entitled, *Children in School*. Recognizing the need to increase advocacy activity related to kids with diabetes in school, NAC decided to update the Association's 2008 *Standards of Care for Students with Type 1 Diabetes in School*. NAC led the task of enhancing the 2008 document to ensure that it reflected CDA's new position statement. The updated document is now the *Guidelines for the Care of Students Living with Diabetes at School.*

Members of the Diabetes Educator Section (DES) Pediatric Interest Group were invited to assist with updating this important document. Their expertise was an incredible help to the group and to the process. The working group comprised NAC members, DES Pediatric Interest Group members and CDA staff. Regular meetings were held over the course of several weeks to complete the revision.

The diabetes care team (DCT) comprises the student living with diabetes, his or her parents/guardians, school personnel and healthcare providers. The purpose of the guidelines document is to acknowledge and help clarify the essential roles and responsibilities of the DCT as to the care of students living with diabetes at school.

The goals of the document are as follows:

- To enhance the health, safety, emotional well-being and participation of each student with diabetes by providing information and guidance to the DCT regarding the student's diabetes management.
- To protect students with diabetes from stigma and discrimination by promoting a positive, caring and inclusive learning environment through enhanced communication, education and cooperation among all members of the DCT.
- To promote a positive sense of self and belonging and help each student with diabetes feel empowered to manage their diabetes effectively during school hours.
- To ensure each student with diabetes is not excluded from any school activities because of diabetes, unless indicated otherwise in the student's individual care plan (ICP).

Major Changes

The following list highlights the major changes to the previous version of the document:

- Greater attention to daily management
- Address kids with type 2 diabetes, not only type 1
- Ensure guidelines match the new position statement
- Include components of an ICP
- Address treatment of hyperglycemia
- Replace the reference to *standards* with the term *guidelines*

The guidelines are divided into the following sections: 1) communication and education, which incorporates the components of an ICP and ongoing communication; 2) daily management, which addresses the areas of medication administration, blood glucose monitoring, physical activity, nutrition/food and physical activity, sports and extracurricular activity, and treatment and emergency response to hypoglycemia and hyperglycemia, and 3) a glossary of terms.

The document supports the partnership among home, school and the diabetes healthcare team. Each of the above sections includes a description of the roles and responsibilities of parents/guardians and students, as well as those of school personnel and healthcare providers where appropriate. Given the seriousness of the condition, each member of the DCT must be clear and confident in their roles and responsibilities in the care of students living with diabetes.

School Personnel

School personnel, with the assistance of other members of the diabetes team, are responsible for providing appropriately trained staff to administer all the care that a child with diabetes needs. Schools need to provide appropriate space and opportunities for the students to manage their daily diabetes-related needs. As stated in CDA's position statement, "schools should permit students living with diabetes to monitor their blood glucose, administer insulin and treat hypoglycemia and hyperglycemia conveniently and safely wherever and whenever required." School personnel should be trained to recognize emergency situations and to respond appropriately, according to the student's ICP. School personnel should also be trained to administer glucagon in the event of a severe hypoglycemic reaction.

Healthcare Providers

Healthcare providers are called on to act as a resource for the school in order to provide, or arrange for diabetes education and training and to assist with the development of the student's ICP as needed. An ICP allows all full-time staff and supply staff to have the information needed to provide daily diabetes care/emergency plans, such as timing and type of medication, frequency of blood glucose monitoring and the target range, and prevention of hypoglycemia, as well as details of a daily communication plan among the student, parents/guardians and school.

Ongoing communication between members of the DCT and updates of the ICP are crucial components of the guidelines.

The working group's draft document was reviewed by the DES executive and a number of internal and external stakeholders (for example, parents and members of the Canadian Paediatric Society). A number of enhancements were made as a result of the excellent feedback received. The CDA board approved the document in July 2014. As a companion to the CDA's 2013 position statement, the guidelines document was launched with the Kids in School public awareness and advocacy campaign in the fall of 2014 in tandem with the launch of the International Diabetes Federation's global Kids and Diabetes in Schools (KiDS) project and an information package offering resources to teachers, children and parents.

Thank you to members of the NAC, the DES Pediatric Interest Group, the DES executive and other reviewers for your assistance and for giving your time and expertise to enhance the lives of students living with diabetes in school.

A copy of the *Guidelines for the Care of Students Living with Diabetes at School* can be accessed at: www.diabetes.ca/getmedia/173678f6-1a4a-4237-bd55-aa7ba469a602/guidelines-for-students-in-school.pdf.aspx.

A copy of the position statement can be accessed at: www.diabetes.ca/about-cda/public-policy-position-statements/students-living-with-diabetes-at-school.

Now Available: The Updated Standards Recognition Program Manual!

We are pleased to announce that the updated Standards Recognition Program (SRP) Manual is now available online at http://www.diabetes.ca/standardsrecognitionprogram.

With the release of the new SRP manual, the Canadian Diabetes Association and the SRP Committee look forward to working with diabetes education programs across Canada by providing essential tools that assess quality of care and services. We hope this application process is more accessible now that these tools are available online. We are also proud of the new SRP logo selected by our Diabetes Educator Section (DES) membership through a voting competition (refer to page 13) that engaged over 250 DES members. The winning design will be recognized across the country as a formal indicator of high-quality, self-management education and best practices in line with the Clinical Practice Guidelines.

To learn more about the program and the logo, please refer to page 8.

EDITORIAL...CONTINUED FROM PAGE 1

guideline recommendations and point-of-care tools for vascular protection on page 6.

And, lastly, a quiz. Where in the world can you find $90 worth $350? See Rema Sanghera's article (page 19) to find out.

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What's New in Vascular Protection

Alice Y.Y. Cheng, MD, FRCPC
Division of Endocrinology and Metabolism, Department of Medicine, University of Toronto, Mississauga, Ont.

Since 2003, the Canadian Diabetes Association's Clinical Practice Guidelines (CPGs) (1) have placed vascular protection as a management priority for people with diabetes. Ten years later, the 2013 CPGs continue to support the same message and the theme of vascular protection remains one of the key themes for dissemination and implementation (2). The reasons for this are obvious — cardiovascular disease is the leading cause of death among people with diabetes and there are effective strategies to lower that risk. The landmark STENO-2 studies demonstrated the effectiveness of a multidisciplinary, multifactorial approach (control of glycemia, blood pressure, lipids, use of an angiotensin-converting-enzyme [ACE] inhibitor and acetylsalicylic acid [ASA]) to reduce the risk of cardiovascular events by 53 per cent over eight years (3) — a benefit that persisted even in the five-year observational phase (4) — resulting in a number needed to treat of only 5 for all-cause mortality over 13 years.

For the 2013 CPGs, the components of vascular protection that are recommended remain the same, but the notable changes are the following:

1. Clearer criteria for the use of vascular-protective medications (an ACE inhibitor or an angiotensin II receptor blocker [ARB], statins, ASA)
2. Improved "packaging" of vascular protection for dissemination and implementation with the "ABCDEs"
3. User-friendly, practical, point-of-care interactive online tools for healthcare providers and patients

Criteria for Use of Vascular-Protective Medications

Statins

Statins are recommended for use in a person with any of the following (irrespective of baseline low-density lipoprotein–cholesterol [LDL-C] level):

1. End-organ damage (microvascular or macrovascular disease)
2. Age ≥40 years
3. Diabetes >15 years and age >30 years
4. Warrants therapy based on the 2012 Canadian Cardiovascular Society dyslipidemia guidelines

ACE Inhibitor or ARB

ACE inhibitors or ARBs are recommended for use in a person with any of the following (irrespective of baseline blood pressure, if safe to do so):

1. End-organ damage (microvascular or macrovascular disease)
2. Age ≥55 years

ASA

ASA should not be routinely used for primary prevention of cardiovascular disease, and may be used in the presence of additional cardiovascular risk factors or for secondary prevention in people with established cardiovascular disease.

Women of Childbearing Age

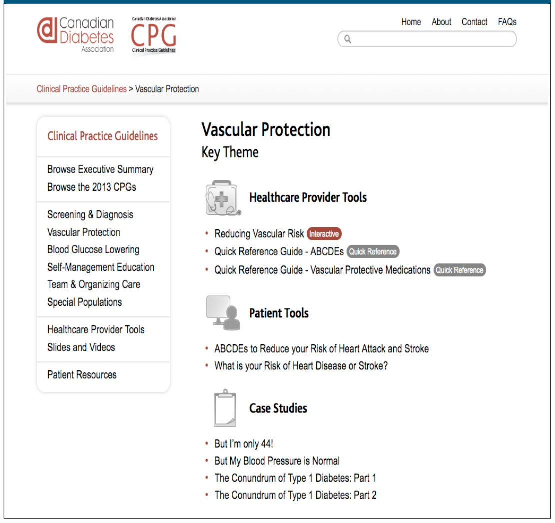
Of note, statins cannot be used in pregnancy and, therefore, should only be used in the presence of reliable contraception among women of childbearing age. ACE inhibitors or ARBs cannot be used in the second and third trimesters of pregnancy and their use in the first trimester is controversial.

The "ABCDEs"

Although the components of vascular protection are no different than what was recommended in the past, the "packaging" of the information has been altered to simplify the message and the implementation. Healthcare providers and people with diabetes are being asked to consider their "ABCDEs."

A A1C: optimal glycemic control (usually ≤7 per cent)
B Blood pressure: optimal blood pressure control (usually <130/80 mm Hg)
C Cholesterol: LDL-cholesterol ≤2.0 mmol/L if decision made to treat
D Drugs: vascular-protective medications if appropriate (even if baseline blood pressure or LDL-C is already at target)

Figure 1: Vascular protection theme page (guidelines.diabetes.ca/VascularProtection.aspx)



Clinical Practice Guidelines > Vascular Protection

Clinical Practice Guidelines
Browse Executive Summary
Browse the 2013 CPGs
Screening & Diagnosis
Vascular Protection
Blood Glucose Lowering
Self-Management Education
Team & Organizing Care
Special Populations
Healthcare Provider Tools
Slides and Videos
Patient Resources

Vascular Protection
Key Theme

Healthcare Provider Tools

- Reducing Vascular Risk Interactive
- Quick Reference Guide - ABCDEs Quick Reference
- Quick Reference Guide - Vascular Protective Medications Quick Reference

Patient Tools

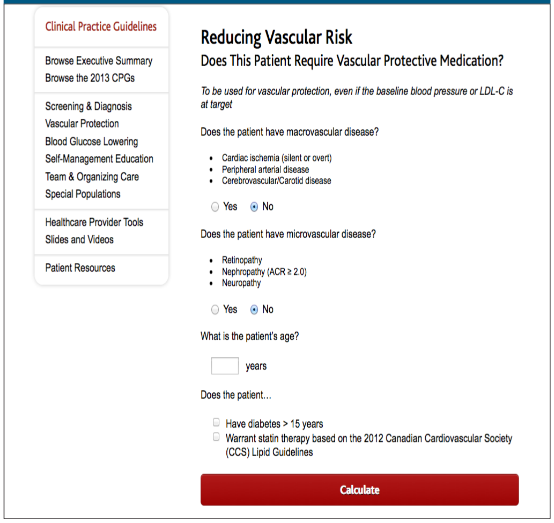
- ABCDEs to Reduce your Risk of Heart Attack and Stroke
- What is your Risk of Heart Disease or Stroke?

Case Studies

- But I'm only 44!
- But My Blood Pressure is Normal
- The Conundrum of Type 1 Diabetes: Part 1
- The Conundrum of Type 1 Diabetes: Part 2

A ACE inhibitor or ARB
S Statin
A ASA if indicated
E Exercise/eating: regular physical activity, healthy eating, achievement and maintenance of healthy body weight
S Smoking cessation

Figure 2: Reducing vascular risk health-care provider tool (guidelines.diabetes.ca/VascularProtection/RiskAssessment)



Clinical Practice Guidelines
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Blood Glucose Lowering
Self-Management Education
Team & Organizing Care
Special Populations
Healthcare Provider Tools
Slides and Videos
Patient Resources

Reducing Vascular Risk
Does This Patient Require Vascular Protective Medication?

To be used for vascular protection, even if the baseline blood pressure or LDL-C is at target

Does the patient have macrovascular disease?

- Cardiac ischemia (silent or overt)
- Peripheral arterial disease
- Cerebrovascular/Carotid disease

○ Yes ● No

Does the patient have microvascular disease?

- Retinopathy
- Nephropathy (ACR ≥ 2.0)
- Neuropathy

○ Yes ● No

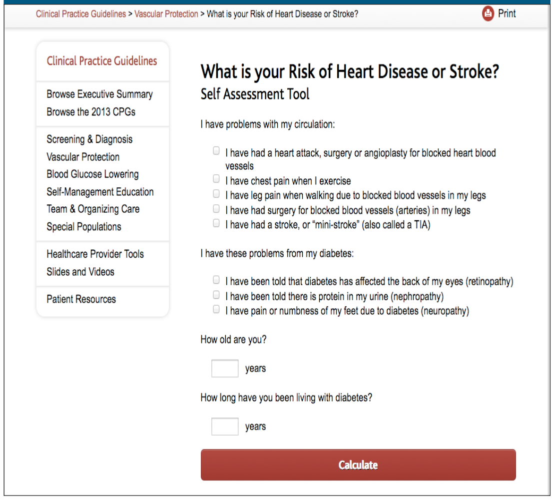
What is the patient's age?

☐ years

Does the patient…

☐ Have diabetes > 15 years
☐ Warrant statin therapy based on the 2012 Canadian Cardiovascular Society (CCS) Lipid Guidelines

Figure 3: Patient self-assessment tool for vascular protection (guidelines.diabetes.ca/VascularProtection/SelfAssessment)



Clinical Practice Guidelines > Vascular Protection > What is your Risk of Heart Disease or Stroke?

Clinical Practice Guidelines
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What is your Risk of Heart Disease or Stroke?
Self Assessment Tool

I have problems with my circulation:

☐ I have had a heart attack, surgery or angioplasty for blocked heart blood vessels
☐ I have chest pain when I exercise
☐ I have leg pain when walking due to blocked blood vessels in my legs
☐ I have had surgery for blocked blood vessels (arteries) in my legs
☐ I have had a stroke, or "mini-stroke" (also called a TIA)

I have these problems from my diabetes:

☐ I have been told that diabetes has affected the back of my eyes (retinopathy)
☐ I have been told there is protein in my urine (nephropathy)
☐ I have pain or numbness of my feet due to diabetes (neuropathy)

How old are you?

☐ years

How long have you been living with diabetes?

☐ years

Online Tools to Implement Vascular Protection

Under the leadership of Dr. Catherine Yu, the Dissemination & Implementation Committee has been working tirelessly to create ways to translate the information in the CPGs into user-friendly, practical tools to actually effect changes in practice. As part of that program, the guidelines.diabetes.ca website was created and is the online presence for these CPGs. In addition to housing the full document, slides and videos, each of the key themes of the CPGs has tools created for healthcare providers and patients — both paper based and interactive — as well as short case studies that highlight key points. The various tools for vascular protection are shown in Figure 1. To help utilize the criteria for who should get vascular-protective medications, the tool entitled "Reducing Vascular Risk" was created (Figure 2), which only requires the answers to five short questions to help you decide if your patient should be on vascular-protective medications, and, if so, which one(s). This can be completed at point of care with the patient's involvement. Alternatively, there is a similar interactive tool (Figure 3) designed for people with diabetes to use, titled, "What is your Risk of Heart Disease or Stroke?", which allows for self-assessment with four questions, and which then suggests a conversation with their healthcare team about vascular-protective medications that might be right for them. For those who prefer paper-based tools, there are Quick Reference Guides and Algorithms in PDF format that are downloadable and printable. In addition to these tools, the case studies are worth visiting, because they reinforce some of the main teaching points by using short, interactive vignettes. All of this can easily be accessed at guidelines.diabetes.ca/VascularProtection.aspx on your desktop computer, laptop, smartphone, tablet or any other Internet-enabled device.

Summary

Vascular protection remains a management priority for people with diabetes through a multifactorial approach to treatment that can be summarized as the ABCDEs. At guidelines.diabetes.ca, one can find interactive tools for both healthcare providers and patients to help implement the important components of the ABCDEs, thereby improving the health of people with diabetes everywhere!

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Standards Recognition Program Revisited

Shelley Jones, RN, BScN, CDE

Director of Quality, Diabetes Educator Section

Over the past three years, I have enjoyed the opportunity to work with an amazing team reviewing and revising the Standards for Diabetes Education in Canada and the Standards Recognition Program. The Standards for Diabetes Education in Canada serves as the foundation for assessment of diabetes education programs in Canada, and the Standards Recognition Program provides a template for benchmarking and continuous quality improvement, leading to the promotion and enhancement of services provided for people living with diabetes.

Standards Recognition Program
2015–2020
Certified by the Canadian Diabetes Association/Diabetes Educator Section

The updated standards document was presented in Winnipeg at the 2014 conference, and I am pleased to announce the launch of the new Standards Recognition Program manual and logo in the spring of 2015. Both of these documents are now available for free at http://www.diabetes.ca/standardsrecognitionprogram. Hard copies can also be purchased for $29.99 at orders.diabetes.ca.

Diabetes education programs that apply for review and that are granted recognition status from the Diabetes Educator Section of the Canadian Diabetes Association will be recognized at the Canadian Diabetes Association/Canadian Society of Endocrinology and Metabolism Annual Conference, awarded a certificate and will be able to display the Standards Recognition Program logo for a period of five years on letterhead and promotional and/or program materials, identifying it as a program of excellence in the delivery of diabetes self-management education and support. Guidelines for the application process are included in the Standards Recognition Program manual, and the deadline for notification of intent to apply is December 1. I encourage all diabetes education programs across Canada to download or purchase a copy of these important tools and showcase the outstanding work they are doing for people living with and affected by diabetes in their communities by participating in the Standards Recognition Program.

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My Story

Laura Wilson
Hanover, Ontario

I am a 28-year-old woman who was diagnosed with type 1 diabetes in August of 1989. Since I was very young that summer, I could not adequately communicate how I felt. Luckily my mom, being a nurse, picked up on my symptoms and took me to the hospital, where I was diagnosed at only two years old. I spent two weeks in the hospital, and when I left, my life was never the same.

Over the years, my diabetes care has changed dramatically. When I was a child, I got two insulin shots a day and had to eat at set times. I don't remember this phase, but I know it was hard to maintain. As a teenager, I was on a sliding scale and then an insulin-carbohydrate ratio; therefore, I did not need to eat as often or be as regimented. Managing my diabetes became flexible, allowing me to concentrate on dealing with typical teenage behaviour.

Although I could have been on it earlier, it wasn't until I was 21 years old that I started using an insulin pump. I was really hesitant to try a pump; I was resistant to having anything attached to me and wasn't ready for the change. Little did I know how quickly I would love it! I am glad I waited until I was ready, because I was more mature and receptive to the change. I was able to focus on establishing a new routine and building the pump program. The most dramatic change was shifting from having four to six insulin injections a day to only needing one site inserted every three days. My main disappointment with my new pump system was that I still had to test my blood sugar five to 10 times a day. At the time, I tried a continuous glucose monitor and didn't like it. I have decided to try it again and I have a new pump and sensor arriving in a few days. I am hoping that the new technology will make it easier to use, and I know I will benefit from constantly observing my blood sugar levels, because I can treat them as needed.

Since I was diagnosed at such a young age, I do not know what life would be like without this disease. On the one hand, when diagnosed, I didn't have to stop eating my favourite desserts, sweets or high-sugar products because at two years old, I had never had favourites. On the other hand, all my life I have had to watch what I eat to help maintain my blood sugar. At times, I have had to eat when I wasn't hungry, or not eat when I was hungry. Carbs had to be part of every meal; if I had low blood sugar levels, I ate carbs; if I was exercising, I ate carbs; if my blood sugar was not in range, I ate carbs. It has taken me a long time to get out of the habit of eating more than I needed. Thankfully, the insulin pump has enabled me to have better control with activity and with managing the carbs that I do eat.

I work very hard to take care of my diabetes because in the back of my mind I continue to worry about complications. I am well aware that I have had diabetes for 26 years, which is taxing on my body. I am healthy and work toward staying healthy, because the complications are vast and scary. Circulation issues, vision loss and more serious matters, like kidney problems, heart attack and stroke, are possible complications from having diabetes. I hate to think about the difficulties that could affect my life, but they are realities that I may have to face. Having control over my blood sugar levels and maintaining a healthy lifestyle are what I need to focus on to try and prevent complications.

Living with diabetes is not easy, but I am lucky. I have always had an extremely supportive family and group of friends. Before I was independent, my parents made arrangements and had strategies worked out so I could live a life unhindered by diabetes. I went to camp, had sleepovers and played sports. When I was older, I went away to college, worked away from home in western Canada and went on vacations.

A life with diabetes is all I know; however, I will never let this disease define me. There is way more to me than diabetes. I have lived my life like a normal child, teenager and adult, and I plan to continue doing so in the future. I am married now, working on my career, and want to have children in the near future. I am a regular Canadian woman — just one living with type 1 diabetes.

Call for Applications 2015

The *Canadian Journal of Diabetes* (CJD) editorial board is seeking new board members. CJD promotes the sharing and enhancement of knowledge to advance the prevention, management and cure of diabetes and related diseases. The journal publishes original research articles and expert reviews ranging from basic sciences to clinical applications, education, public and population health, and health policy.

Board members serve an initial 3-year term and may be reappointed for an additional term of office.

Please find further information and the application form here: http://www.diabetes.ca/cjd.

The deadline for applications is August 15, 2015.

Is Working at a Diabetes Camp in Your Future?

Nola Korndner, RN, CDE; Member, Camp Interest Group
Saskatoon Health Region, Saskatoon, Sask.

You've been a diabetes educator for a few years now. Much of your practice is with clients who have type 1 or type 2 diabetes. However in the last few years, you've been asked to see some children with diabetes "to support them." Yikes, you say; I'm not comfortable seeing children with diabetes; they see the pediatric team. But you'd like to be able to support the children in your community and work with the team that supports them. "Hmmm… you think to yourself. How could I acquire more skills, knowledge and confidence?" Here's a possible opportunity!

I've been a nurse with the Saskatchewan Children's Camp for over 30 years. The camp is one of 12 diabetes camps, or D-Camps, run by the Canadian Diabetes Association. D-Camps vary in length, from a few days to weeks, as well as overnight or day camps. The day-to-day operations of the camps differ across the country, as does the mixture of healthcare providers at each one. Each year, camps recruit healthcare providers, aiming for a mix of new staff and veterans. Our camp offers a staff visitor day so you could see what your role would be while at camp.

Seeing children at camp perform the tasks of diabetes on a daily basis has taught me more than I can truly appreciate when I'm doing my day-to-day work. Diabetes requires patience, resilience, math skills and so much more. And seeing children apply these skills is truly inspiring. So, assisting to organize, and then attending, the camp has become my dose of inspiration each year! I'm fortunate that I have a supportive manager and colleagues who fill in for me. Arranging for ongoing office support while you attend to camp duties is a must when contemplating a stint of a week or more.

Hopefully, I've convinced you by now that this might be a great way to increase your confidence in working with children and to also "get a dose of yearly inspiration." Need more? How about the opportunity to work with a multidisciplinary team?

Camp is a unique opportunity to see a team orchestrate a symphony of care around children with diabetes. All team members have a unique role.

Campers at the Saskatchewan Children's Camp

Across the country, roles and responsibilities differ. At Camp Jean Nelson in Alberta, there is an insulin adjuster role, in addition to the physician, nurse and dietitian roles. Some camps have night patrol, which is designated staff who check and treat low blood sugar levels all night. Generally, each camp has nurse and dietitian positions as well as a medical director with resident, fellows or pediatricians. There can also be students of different disciplines. Many are former campers. In most of the camps across Canada, orientation for the counsellors is held the day before camp begins.

I'll describe how the Saskatchewan camp functions; however, each camp is different in how they do their daily jobs.

The daily rhythm of the camp is based on the needs of the children. Arrival day is always hectic. Information sent in by the parents prior to camp is reviewed so that routines can begin. New campers and their parents are usually a little nervous — often, the parents more so than the children! Each child sees the physician to review their insulin routine; the nurses take the child's supplies and other medication, and the dietitians review the child's food system. The new campers require extra time and reassurance as they check in, but the old-timers just want to get it done quickly! Each camper's supplies are stored in Ziplock bags and bins for each cabin. Organization is key! The first time that insulin is given on arrival day is organized chaos; however, "safety first" dictates

2014 Saskatchewan Children's Camp staff

that everything is done with care. By the time the final evening check is completed, and the welcoming campfire is over, campers and staff are settling into the rhythm of camp.

Then it's up early the next day with blood sugar checks, insulin administration and ingestion of those much-needed carbs for a busy day. At our location, 65 campers come to a cabin four times a day, boys to one cabin and girls to another. One group comes in at a time. One to two campers sit with a healthcare professional. At the table are a pediatric endocrinologist or pediatrician, a pediatric resident and two nurses. The camper and the medical staff person do the routine together — "What's my blood sugar? How many carbs? What am I doing for the morning, and how much insulin should I take?" Once those decisions are made and insulin supervised, it's down to the dining hall.

At the dining hall, the campers are greeted by our dietitians and the food buffet lineup. The dietitians on our team work with the food service personnel at camp to ensure that the diabetes routine is followed and the meals and snacks are balanced for growing and active kids. We have two dietitians at our camp, plus an intern. Much planning occurs before camp begins — review of the menu plan; orientation for the food service staff and then ongoing supervision of the diabetes routines. Before each meal, the dietitians write out the menu for the meal with the carb counts attached and post it at the cabins. As the campers come through the buffet lineup for meals and snacks, the dietitians are there to guide, teach and problem solve with the campers and counsellors. This allows the campers to know their choices. The medical team meets twice a day, and our dietitians contribute what they've learned as the campers go through the lineup. There's lots of tweaking and problem-solving to do at camp. The counsellors quickly learn how to carb count, and the dietitians support their efforts.

Meanwhile, camp goes on! Cabins plan their day around activities — two time slots of one hour each in the morning and the same in the afternoon. They can choose between sports; boating on Lake Manitou; arts and crafts; swimming in the indoor pool; a cabin activity; horseback riding or a trip into Watrous. Blood sugar checks and treatment of lows by counsellors can occur during or in between these activities. One night is spent sleeping in a tent. Otherwise, campers sleep in cabins that are well-equipped with bathrooms and showers.

There are lots of jobs for the nurses between the routine four-times-a-day insulin sessions. Jobs include site changes for pumpers; treatment of minor ailments; keeping up with record-keeping; monitoring the supplies; troubleshooting with counsellors and the list goes on! Meetings are held with both the girls' team and the boys' team, twice daily with the doctors and nurses. At each, there is a review of blood sugar patterns to date, and anticipated changes are discussed. The evening usually is a game of Turkey Hunt; a variety show or the favourite, the Final Banquet and dance. Physicians and nurses meet after the last blood sugar check, designating who will need their blood sugar checked during the night. Night patrol operates after "lights out" to check blood sugar levels and treat lows. There are two night patrollers, who are usually nursing students. The doctors take turns each night to be on call for night patrol. Occasionally, there are also medical emergencies and illnesses to manage during the night.

It's not all work at camp — there are times for breaks. This year, our staff was treated to a pontoon ride on the lake with a swim in salty Lake Manitou!

As the days progress, you can see the confidence building in the campers — after the first time they have given themselves an insulin injection; as they decide about doses and their effectiveness; as they gain the knowledge and understanding that everyone around them is doing the same thing. To know that you have contributed to this is very satisfying.

When camp has ended, after friendships have been made and the parents pick up their children, you'll often see their new-found self-confidence bubbling out as the children tell their parents what they did at camp that week.

If you are interested in working at a D-Camp, visit www.dcamps.ca or make an inquiry with the team at the camp closest to you.

House of Carbs: Season One

Sheri Boutilier
Kitchener, Ont.

Seven years, six months and two days. That is how long our family has been living with diabetes. I say "our family" because that is what diabetes really is — a family disease. Although it is my nine-year-old son who has type 1 diabetes, it affects the entire family.

It was October 12, 2007, when I decided to take my two-year-old son to the walk-in clinic because he had an unquenchable thirst and was wetting his crib every night for a solid week. I finally decided to get him checked, because what I believed to be some sort of virus was not getting any better. Had I done any research online, like typing in his symptoms, I might have been more prepared for my baby's diagnosis. But I was not prepared at all, having both a toddler and a four year old to chase around all day.

Besides, I didn't really think his symptoms were much to worry about anyway. It was just that they weren't going away. So off to the clinic we went.

I felt a little silly, describing his symptoms, "unquenchable thirst," "frequent urination," especially as I looked around the very crowded clinic with visibly ill people, thinking "we really shouldn't be here." In the examination room, a nurse came in to do what she called a blood glucose check, and she proceeded to prick my baby's finger, which sent him into hysterics. As she was leaving, she looked at the meter and said, "I'm just letting you know that the reading is high." I had no idea what that meant, but for the first time, I became a little concerned and felt my stomach fall a little. Maybe this wasn't going to be a case of the doctor sending me home with antibiotics for some sort of infection.

The doctor came into the room, holding the meter the nurse had used on Matthew and I still remember his words, "I'm afraid your son has juvenile diabetes." There must be some mistake. Please let this be a mistake. Maybe, because he called it juvenile, this was a type of diabetes he could outgrow. Nope.

He's a lifer and will depend on insulin for every minute of every day, for the rest of his life. Without it, he will die. This was so very far from the "antibiotics go home and get some rest" outcome I was expecting. In that instant, our whole life changed. Our whole family changed.

Matthew was admitted to the hospital immediately, and we reluctantly began our crash course into life with diabetes. We were inundated with information: given books to read, binders to study, papers to sign. It was sinking in that my adorable, sweet little baby boy has a horrible disease that, if we don't do all the things we are told to do correctly, we could kill him. With all the information and training we were given over the course of the hospital stay, this is what I took away from it. 1) If I give him too much insulin, I will kill him; 2) If I give him too little insulin, I will age his organs at warp speed, and he will die of complications; 3) If I balance his whole life just perfectly — food, exercise, stress, illness, sleep, then he may be okay, but maybe not. When Matthew was finally discharged from the hospital, I remember crying because I didn't want to be sent home alone with such a huge responsibility. I wanted the doctors and nurses to come live with us. We couldn't do this without them. I was probably going to cause my child's death. This was a big deal!

At first, life with diabetes was a huge burden. Nothing seemed easy anymore. Counting carbs sucked!

I felt like I was in Grade 6 math class all over again. If 1-3/8 cups of Rice Krispies is 33 carbs and you only eat 3/5 of a cup of Rice Krispies, at what point do the two trains pass each other? Leaving the house was a chore. Do we have the meter and strips, needles and tips, juice boxes? How was he ever going to be able to go to a birthday party? A sleepover? Camp? University? Before Matthew was diagnosed, my husband and I were talking about having baby number 3. After the diagnosis, I felt that type 1 diabetes had already become my third child. I couldn't possibly have a baby and control diabetes. I wanted to give it my full attention, and felt bringing a baby into our lives would distract me from taking care of

Standards Recognition Program Logo Competition

Thank you to all Diabetes Educator Section members who participated in our exciting Standards Recognition Program (SRP) logo voting competition! We are happy to announce the 25 winners that were randomly selected out of the 250+ participants in the competition. Each winner has received a hardcopy of the SRP manual to help them get started on their program application.

Congratulations to:

Calysta Adams
Joyce Arsenault
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Joan Canavan
Karen Cassidy
Kendra Chan
Rachelle Charlebois
Margaret Corcoran
Olga Dmytrisin
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Dale Mayerson
Toba Miller
Eureka Nakai
Linda Simpson
Crissy Stavrakov
Shaunlee Vautour
Kari Verhoog
Jia-Wei Yuen

Matthew's diabetes and that wouldn't be fair to either child. Getting up for nighttime checks every single night at 3 a.m. was a huge adjustment, but so necessary, as I often caught a low or high blood sugar level that needed immediate attention. You quickly realize that this disease takes no breaks — not even during sleep.

Fast forward seven years, six months and two days. Life with diabetes can still be a burden but you really enjoy the days it isn't. There are times when we have such good control of Matthew's diabetes that I think I should be flown around the world on private jets giving seminars on how to manage diabetes because I am such a natural at it. Then the diabetes laughs at me and says, "Oh yeah? Watch this!" and it pulls the rug from under me and I'm back to the reality of diabetes and its unpredictability. Seven and a half years living with diabetes and our family is living the new normal for us. Fortunately, Matthew can't remember what life was like before diabetes. And frankly, I can't either.

Transition into Better Care

Saima Murtaza-Vahed, M.Sc., RD, CDE, CPT
Trillium Health Partners, Mississauga, Ont.

Becoming an adult, leaving high school, going away to university or college, and/or starting a full-time job are all part of the challenges that young adults face. Young adults with type 1 diabetes also face the added pressure of having to develop relationships with new healthcare providers at a different adult diabetes centre, and of starting the process of managing their diabetes all by themselves.

One study showed that only 18 per cent of young people over 19 years of age are achieving their recommended glycated hemoglobin (A1C) targets (1). What are the reasons for this inability to reach A1C targets?

The teenage brain: research done over the past 10 years has shown that the prefrontal cortex of the teen brain is not fully developed until they reach their mid-20's. Because the prefrontal cortex curbs impulsive behaviour, this leaves teens easily influenced by their environment and unable to fully assess risk. This has a profound impact on how transitioning type 1 individual's will handle their diabetes during these years. It can result in them living in the moment, meaning there's less chance they will look ahead to prevent complications (2).

Even after you take into account the impact of the regular teenage brain on behaviour, there are also other factors that make the transition to adulthood with diabetes more challenging.

Patients with anxiety, depression or attention-deficit disorder have an added load to carry that can make managing the day-to-day burdens of diabetes even harder.

With the amount of work involved in being in school, holding a part-time job or living independently, coupled with testing blood sugars, taking insulin, dealing with hypoglycemia and hyperglycemia, and going to appointments, it is no wonder many young adults end up struggling with diabetes burnout.

Even the most well-intentioned family can have problems during the teenage years. However, having systemic family issues can derail the teenage ability to self-manage their diabetes. At our clinic we have seen families where the parents are overly involved with their young adults' diabetes care. As a result, the young adults struggle more and they run the risk of falling into a pattern where rebellion and rejection of nagging defines the way they handle diabetes.

Having a bad experience with a low blood sugar level can end up creating a cycle of anxiety. These patients no longer feel safe, and are terrified of going low. As a result, they are more likely to override their insulin pump, to keep their blood sugar levels high to feel safe, to test their blood sugar every hour, and to feel the effects of their anxiety spill over into other areas of their life.

Starting over with a new healthcare team at an adult diabetes centre also poses challenges. This can be even more profound if there isn't an awareness of how to successfully transition these young type 1 individuals over to a new adult centre.

We all know of young adults who transition successfully while maintaining good control of their diabetes. What can diabetes educators do to help those teens who struggle with the transition to adult life?

Develop a Relationship with Your Young Adult

If we can get to know them and really understand what makes them tick, we will have insight into how to help them find the motivation to take care of themselves. The best way to get to know them is to be curious and non-judgmental. Get to know their interests, what their career plans are, what kinds of sports they like, where they go on vacation and what kinds of books they read. Studies have shown that the healthcare professional and patient relationship highly influences the emotional experience of the disease and the way patients gain control over it (3).

Change the Way They Think About Their Appointments

It is hard for anyone with type 1 diabetes to come in and see all their high or low blood sugar levels highlighted so we can discuss how to prevent them. Surprise them by pointing out what they are doing well! Get them to think differently about the purpose of their appointment. Explain that these appointments are designed to give them a space to talk about their diabetes with someone who will not judge them, who knows how hard it is to have diabetes and who will be a resource for them if they need help. We can give them all sorts of ideas, but they get to decide which ideas work for them.

Ask Them About Their Goals

Is excellent diabetes control their goal? Based on their current life and stage, coping with exams and part-time jobs, they may be content with their current control, even if it is not at a target A1C of seven per cent. Understand that testing, looking for blood sugar trends and perfect carb counting is a lot of work and, depending on life circumstances, may not be the most important thing on their list at this time. In focus groups and surveys, patients have stated that healthcare professionals need to be more appreciative of the difficulties of living with type 1 diabetes (4), and they need to understand that persons with type 1 diabetes "can't always be dialed in to taking perfect care of their diabetes."

Make More Excuses for Them Than They Would Make for Themselves

This concept can change the way you talk to all your patients. Rather than giving people permission to not take care of their diabetes, hearing excuses from you can actually lessen the defensiveness people feel when talking to a healthcare professional. Removing judgment from the interaction makes it more likely that they will stop and reflect on what they want to do differently.

Ultimately You May Just Need to Be Patient

We have many examples of young adults who are managing their diabetes well especially given all the changes they are experiencing in their lives. However, young adults just need time to mature. If we can develop a relationship with them and keep them coming back by providing a positive and non-judgmental environment, then they may just "get it" by the time they are 24. The hope is that having a good relationship with their educator will make it easier for them to reach out when they are in trouble, or when they are ready to improve the way they manage their diabetes.

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Type 2 Diabetes in Youth

Tracy D. Hoilett, RNBN, CDE
Diabetes Education Resource for Children and Adolescents, Winnipeg, Man.

With the rising incidence of type 2 diabetes in youth, pediatric diabetes centres across Canada are facing unique and complex challenges. Once only considered an "adult disease," we are witnessing the rise of type 2 diabetes in youth globally (1). According to a national Canadian Pediatric Surveillance Program study published in 2010, the incidence of type 2 diabetes in children under the age of 18 is 1.54 per 100,000 (2). However, in Manitoba, where the highest rates of type 2 diabetes in youth can be found, the incidence was 12.5 per 100,000 children per year (2). The lowest rates in Canada were seen in Saskatchewan with 0.4 per 100,000 per year (1). By 2010, the incidence in Manitoba had risen to more than 20 children per 100,000 per year (1). The results of the national surveillance study revealed that 44 per cent of youth with type 2 diabetes are Aboriginal, 25 per cent Caucasian, 10.1 per cent African/Caribbean and 10.1 per cent are of Asian descent (2). Those with mixed ethnicity, Hispanic or Middle Eastern backgrounds comprised the remaining 8.4 per cent (2). In this cohort, 58 per cent were female and the mean age at diagnosis was 13 years of age (2).

Risk Factors

Being a member of a high-risk ethnic group or having a first- or second-degree relative with the disease increases the risk of developing youth-onset type 2 diabetes (2). Additional risk factors include impaired glucose tolerance, signs of insulin resistance (acanthosis nigricans, polycystic ovarian syndrome, hypertension and dyslipidemia) and the use of atypical antipsychotic medications (3). As well, exposure to diabetes in utero, as a result of either maternal pre-gestational or gestational diabetes, has also been associated with the development of type 2 diabetes in youth (1). The increasing prevalence of childhood obesity also contributes to the rates of youth-onset type 2 diabetes (2,4). Early detection and treatment of diabetes is essential for the prevention of metabolic decompensation or diabetic ketoacidosis, as well as other complications, which may have earlier presentation and be more aggressive (3,5).

> “44 per cent of youth with type 2 diabetes are Aboriginal, 25 per cent Caucasian, 10.1 per cent African/Caribbean and 10.1 per cent are of Asian descent.”

Screening and Diagnosis

The guidelines for screening currently used in Manitoba mirror that of the Canadian Diabetes Association Clinical Practice Guidelines (3), except for the recommended screening age. In Manitoba, screening for type 2 diabetes is recommended for children ≥7 years of age, every two years, if they meet two or more of the following criteria:

- Member of a high-risk ethnic group
- First- or second-degree relative with type 2 diabetes
- Obesity (BMI ≥95th percentile for age)
- Exposure to diabetes in utero
- Presence of acanthosis nigricans, hypertension, dyslipidemia or polycystic ovarian syndrome
- Impaired glucose tolerance
- Use of atypical or other antipsychotic medications (Manitoba Diabetes Care Recommendations, Prevention, 2010)

Although the diagnostic criteria for diabetes in youth are the same as in adults, the method used to confirm the diagnosis varies slightly. In children, glycated hemoglobin is not recommended as a method to diagnose type 2 diabetes (3). Rather, a fasting plasma glucose or a two-hour 75 gram oral glucose tolerance test is preferred (3).

Obstacles to Treatment

Social issues, such as childhood poverty, and rising rates of childhood obesity make overcoming barriers a priority at diagnosis. For example, in Manitoba, 71 per cent of the youth with type 2 diabetes live in remote northern areas (6). This

creates obstacles, such as timely access to healthcare, barriers to communication and transportation, as well as issues of food security.

Management and Treatment

The approach to treatment requires an interdisciplinary healthcare team to partner with youth and their families, and primary healthcare providers (4). Aggressive lifestyle interventions and behavioural change should be family focused, with an emphasis on physical activity and healthy balanced eating for the entire family (6). Dietary assessment should include availability of healthy food choices, family income, eating patterns and intake of sugar-containing beverages. The aim is elimination of all sugary beverages and portion control at meal times based on the Canada Food Guide recommendations (7). A minimum of 60 minutes of moderate to vigorous physical activity daily should be encouraged (8). Sedentary screen time, which contributes to decreased activity, should be limited to less than two hours per day (8).

The glycemic and A1C targets are the same for youth with type 2 diabetes as they are for adults, and the frequency of blood glucose monitoring will depend on the method of treatment (3). Due to the lack of evidence regarding safety and efficacy of anti-hyperglycemic agents in children, these medications have not been approved by Health Canada for use in children (3). However, there is some evidence regarding the use of metformin, which has been shown to reduce A1C in youth with type 2 diabetes by one to two per cent (9). In children with an A1C ≥9 per cent, the use of insulin has been shown to be both safe and effective and may be weaned in some patients once glycemic stability has been achieved (10).

Young people with type 2 diabetes are at risk for the classic microvascular and macrovascular complications associated with diabetes. Therefore, routine screening for comorbidities should be performed as per the Canadian Diabetes Association Clinical Practice Guidelines for youth with type 2 diabetes (3).

Transition

The transition from pediatric to adult care can be particularly challenging for youth with type 2 diabetes. Coordination of care is difficult in Manitoba due to geographic barriers and the complex medical issues often faced by this population. In 2010 in Manitoba, the Maestro2 program was created to work with youth, their families and community partners to facilitate transition of youth into adult care (11).

Conclusion

The incidence of youth-onset type 2 diabetes is a relatively new phenomenon, and evidence-based treatment options are still emerging. Management should be family focused, and healthcare providers must ensure that at-risk youth are identified and screened appropriately. Early detection and treatment is essential for the prevention of complications and comorbidities

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Renew Your Diabetes Educator Section Membership Today!

Rema Sanghera, MA, RD, CDE
Director of Membership, Diabetes Educator Section

If you are a Canadian Diabetes Association (CDA) Diabetes Educator Section (DES) professional member and reading this article, you are likely well-versed with the benefits of membership that you enjoy. In that case, read no further and simply click on the renewal link here: www.diabetes.ca/membership.

In my role as DES director of membership, I am frequently asked, "Why should I join the DES?" My response is, "Why not join the DES, with all that it has to offer?"

Membership benefits include:

1. Earning credits toward your Canadian Diabetes Educator Certificate by participating in DES activities.
2. Regular communications to keep you informed through Diabetes365 on TimedRight.
3. Members-only access to the new and improved CDA website.
4. Participation as a volunteer on committees, such as marketing, the standards recognition program, nominations, awards and the national DES executive (calls for volunteers are put out from time to time on Diabetes365).
5. Involvement at the local level as a chapter executive or as an active member (start your own chapter; meetings can be great for networking, education and socialization).
6. Joining a professional interest group for $10 and connecting with like-minded professionals.

As a DES member, realize significant savings on:

1. Print subscriptions of the *Canadian Journal of Diabetes*, *The Diabetes Communicator* and *Diabetes Dialogue* – worth $250 annually.
2. The annual CDA/CSEM conference – worth $100.
3. Applications for over $20,000 in awards, grants and scholarship – worth $10 per member.
4. CDA literature/ education materials (coming soon).

When the costs and benefits provided by a DES professional membership are compared to other diabetes educator sections worldwide in the developed world, ours are the lowest at $90! Want to find out more about this analysis? Contact us at des@diabetes.ca.

A Carb Counting App for Families with Toddlers to Teens

Debbie Reid, M.Sc., RD; Member, Pediatric Interest Group
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I'm new to using apps. Dare I admit to only getting a cell phone last November, knowing it would be essential in working with children newly diagnosed with type 1 diabetes?! And then the app shopping expedition began. It was like grocery shopping on an empty stomach — way too many items calling out to me. Clearly, a shopping list was needed.

I was looking for apps that provide the carb content of foods, and wanted the following deliverables:

- Visuals of realistic food portions
- Foods that families would look for
- Accurate carbohydrate (CHO) counts for foods
- Sound nutrition information at an appropriate literacy level
- Easy and fun to use; preferably available for both Android and Apple devices

Carbs and Cals came up to the mark reasonably well and *Calorie King*, although without visuals, also has many of the desired deliverables. Both are reviewed in the following tables.

Table 1
Carbs and Cals app

Device(s)/app cost	Food visuals and repertoire	Accuracy of CHO counts	How to use	Nutrition info shared
Android and Apple: $6.25 to $6.50	Thousands of food photos; multiple portions for many; useful for toddlers to teens. When portion is selected, the app displays weight or volume along with any four choices from carbs, calories, protein, fat and fibre.	Accurate as provided by dietitians, endorsed by Diabetes UK and regularly updated. Note: users need to subtract fibre to get available CHO.	Three icons for those using the app to count carbohydrates: **Setup** Nutrient view: select four choices from carbohydrates, calories, protein, fat and fibre. Database view: select United Kingdom, United States or Portugal. Weight/volume units: select g/mL or oz/fl oz. **Food** Alphabetical list of food categories, with individual foods also listed alphabetically ("Rice, Pasta & Grains" starts "brown rice, bulgur wheat, couscous, egg fried rice"). OR Search using the search box at the top of the screen. Note: even on the American setting, some foods are listed by the British name ("Frank" rather than "wiener"). **Meal** Allows user to enter foods in their meal/snack list and displays totals for four selected nutrients.	At the bottom of the setup page, users can access the Carbs & Cals Guide, which takes them to The Nutrients in our Food. This easy-to-read overview explains types of carbohydrates and their breakdown into sugar. It also discusses the roles of protein, fat, and soluble and insoluble fibres in the diet. *Carbs and Cals* is intended for many user groups, including those wanting to lose weight. Inclusion of a section promoting calorie counting is unfortunate, considering the increased risk of eating disorders in type 1 diabetes.

Table 2
Calorie King app

Device(s)/app cost	Food visuals and repertoire	Accuracy of CHO counts	How to use	Nutrition info shared
Apple: free	More than 50,000 foods. No photos but many portion options. Touch "portion bar": small, medium, large; then cup of the item displayed, including weights/volumes, for the option to enter a specific weight/volume.	Developed by dietitian Allan Borushek. Items under food categories appear to be based on the USDA nutrient database. Food brands and fast food chains info provided by owners; contains disclaimer that the information may not be up to date. Note: users need to subtract fibre to get available CHO.	Main menu choices: **Food Categories** Alphabetical list of subcategories (bars, breakfast cereals): foods within. **Food Brands** Alphabetical list of brands: foods under brands (many American). **Fast Food Chains** Alphabetical list: foods at chains (many American).	Disclaimer: the percentages of daily values listed for macronutrients and fibre are based on a 2,000 calorie diet; individual needs may be higher or lower; these values are recommended by a government body, not by *Calorie King.*

ATTN: DES MEMBERS

If you are an educator or health professional who works in education or at an education centre, we are pleased to announce that free issues of the *Diabetes Dialogue* are now available! The CDA would be happy to provide copies to your centre for patients who are interested in learning about new research, medical updates, nutrition, exercise, lifestyle management, volunteerism and advocacy, and helpful recipes and fitness tips.

To request free issues, please contact Denise Barnard at Denise.Barnard@diabetes.ca AND include the following: your name, address for delivery and desired quantity.

To learn more about the *Diabetes Dialogue,* please visit: http://www.diabetes.ca/publications-newsletters/diabetes-dialogue.

International Diabetes Federation

In 2015, the International Diabetes Federation (IDF), in partnership with the Canadian Diabetes Association (CDA), is bringing the World Diabetes Congress to Vancouver. The global diabetes community will convene from November 30 to December 4, 2015, to experience a cutting-edge scientific program.

The program, chaired by Dr. Bernard Zinman, is made up of six streams:

- Basic and clinical science
- Diabetes in indigenous peoples
- Education and integrated care
- Global challenges in health
- Living with diabetes
- Public health and epidemiology

Unn-Britt Johansson leads the education and integrated care stream. Johansson is a professor in the nursing science department at Sophiahemmet University and at the Karolinska Institutet, Department of Clinical Science and Education, Stockholm, Sweden. This stream will demonstrate up-to-date education tools for healthcare practitioners and people with diabetes. It will also introduce innovations in patient care and management.

Frequently Asked Questions

1. What will be the highlights of the education and integrated care stream?

This stream will answer the questions, “How can people with diabetes effectively manage their own care?” and “What is the role of healthcare professionals?” In response to these questions, the stream will be looking at a variety of education best practices, including the promotion of person-centred care, the management of hypoglycemia, eHealth and online learning as well as the challenges of education in vulnerable populations, including children and the elderly. The stream will also underline the importance of nutrition in diabetes management and prevention and the role played by epigenetics in the development of obesity. Experts in these areas will present their cutting-edge research gained through valuable experience in the field during interactive sessions and workshops. People with diabetes will present their perspectives and discuss the personal challenges they face in the day-to-day management of the disease.

2. How can people with diabetes effectively manage their own care?

Diabetes self-management education (DSME) is a critical part of care for all people with diabetes and for those at risk of developing the disease. At present, the majority of people with diabetes and pre-diabetes have no access to structured diabetes self-management education. DSME is vital because it allows the person with diabetes to take an active and empowered role in disease management and in the formulation of personalized care goals alongside a multidisciplinary and interdisciplinary healthcare team.

3. What is the role of healthcare professionals?

Care for patients with diabetes requires a coordinated and collaborative team working in partnership with the patient. A multidisciplinary and interdisciplinary team is necessary to provide the long-term support needed by individuals with diabetes and their families.

4. Who should attend the congress, and what can delegates expect from the experience?

Since diabetes is such an across-the-board issue, healthcare professionals, professional societies, politicians and policy-makers should attend the congress. Experts from the seven IDF regions will highlight examples of innovative strategies from all over the world, showcasing the latest research and current trends in education.

5. What was your motivation for becoming involved in diabetes education?

I find it so stimulating to interact with people with diabetes and to learn from their shared experiences. I feel that, together with the patient, I can make a difference in their lives. Furthermore, as a researcher I find it important to do research about diabetes education to expand my knowledge and increase my efficacy.

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