

## Special points of interest:

- A closer look at foot care services in our region
- Cultural Sensitive Diabetes Education –South Asian Background
- Evergreen funding for the Self-Management Program
- Document education around driving and diabetes
- Follow me on twitter @SarahChristilaw

## Inside this issue:

- Developing an Action Plan for Foot Care **1**
- Self-Management Program Continues **2**
- CPG 2008 - Foot Care Recommendations **2**
- Culturally Sensitive Diabetes Education –People with Diabetes of South Asian Background **3**
- Diabetes and Driving **4**
- Upcoming Events **4**

## Developing an Action Plan for Foot Care

For every 100,000 people living with diabetes, 540 were hospitalized for skin/soft tissue infections and 188 for amputations. The age-adjusted hospitalization rate for amputations was higher for Waterloo-Wellington compared to Ontario.

The economic costs associated with diabetes foot care are staggering. In Ontario, the total cost of treating chronic leg ulcers in 2005 was estimated to be \$15,564,000. In 2007, the average cost of treating a diabetes foot or leg ulcer was \$8,000 compared to \$4,595 in 1998. There is evidence that people living with diabetes are more expensive to treat per complication event (Goeree, et al., 2009). O'Brien et al. (2003) reported that the first year direct cost of an amputation is approximately \$25,570 (2012 CAN\$) and increases with each additional amputation. Apart from amputation, treatment of wound ulcers and soft tissue infections is itself extremely expensive and O'Brien estimates each of these events to cost \$2,487.

The economic costs of diabetes foot complications may be reduced significantly with increased practice of preventive care measures. Researchers have suggested that approximately 49-85% of diabetes-related complications may be prevented through



regular foot exams, aggressive treatment of infections by health care providers, patient education, and careful glucose management (American Diabetes Association, 2004; Canadian Diabetes Association, 2008; International Diabetes Federation, 2003 & 2011).

Through the WWDRCC foot care inventory of services in 2011, it was identified that there is currently a gap in access to services and a knowledge level gap (i.e. proper assessment)

In order to address this gap a working group has been formed with representation from various stakeholders with the following preliminary objectives:

- To improve the frequency of foot care assessments at the primary care level
- To improve the knowledge level of all healthcare providers in diabetes foot care
- To improve the availability of wound care clinics for foot ulcers
- To reduce the visits to ER for foot ulcers

### References:

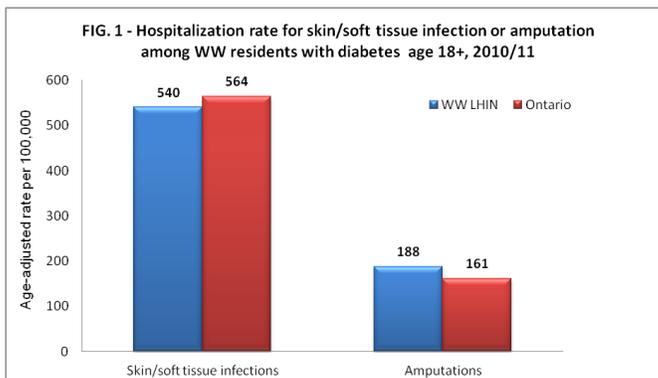
O'Brien J, Patrick A, Caro J. (2003). Costs of managing complications resulting from type 2 diabetes mellitus in Canada. *BMC Health Services Research* 3(7).  
 Canadian Diabetes Association. (2008). *Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada*. *Canadian Journal of Diabetes*; 32: Supplement 1: S1-S201.

Goeree R, Lim M, Hopkins R, Blackhouse G, Tarride J, Xie F, et al. (2009). Prevalence, total and excess costs of diabetes and related complications in Ontario, Canada. *Canadian Journal of Diabetes* 33 (1):35-45.  
 International Diabetes Federation. (2011). *IDF Diabetes Atlas*. Available at [www.idf.org/diabetesatlas](http://www.idf.org/diabetesatlas).

International Diabetes Federation. (2003). *International Consensus on the Diabetic Foot and Practical Guidelines on the Management and the Prevention of the Diabetic Foot*.

Ministry of Health and Long-Term Care. (2010). *Key Performance Measures for the Ontario Diabetes Strategy*. Health Analytics Branch.

Sibbald RG, Queen D. (2007). *Demonstration Project for Community Patients with Lower Leg and Foot Ulcer. Wound Care Canada*, 5 (1). Available at <http://cawc.net/index.php/public/facts-stats-and-tools/statistics/>





## Summary of Foot Care Recommendations, Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada (2008)

- Among individuals with diabetes, annual foot examinations should be incorporated as a component of diabetes management to reduce the risk of foot complications, by both healthcare professionals and patients.
- Foot examinations should be performed at more frequent intervals among patients at high risk of foot lesions and amputations.
- Healthcare providers' assessment should include structural abnormalities, neuropathy, peripheral arterial disease, ulceration, and evidence of infection.
- To avoid foot trauma, individuals at high risk of foot ulceration and amputation should receive education, professionally fitted footwear, smoking cessation strategies, and early referral to a specialist trained in foot care management in complications occur.
- Foot ulcers should be managed by a multidisciplinary healthcare team with expertise in foot ulcer management to prevent recurring foot ulcers and risk of amputation.
- Aggressive treatment is required for infection in a diabetic foot.

## Waterloo Wellington Self-Management Program



Good news WWSMP is here to stay! Funding by the MOHLTC has been approved for SM Programs for individuals with ongoing health conditions and Health Care Provider Self-management support. Programs will be continued to be offered throughout the WW region.

The Take Charge program in partnership with various organizations across the LHIN.

**Take Charge!** is a **FREE** workshop for people with on-going health conditions.

**Coming soon!** New Waterloo Wellington Self-Management Program Website

Each workshop runs once a week for 2½ hours, over six weeks.

[www.wselfmanagement.ca](http://www.wselfmanagement.ca)

Currently the program supports

## Champions for Self-management Support Training

May 30th of this year marked the graduation of several health care professionals in the region from the "Moving Towards Change" Self-Management Support program developed by the Behaviour Change Institute (Michael Vallis).

After the completion of the competency based training session, Dr. Shannon Currie will follow-up with your team/group or clinic to provide mentoring sessions to help you become confident in using the new skills.

creatively adapt these principles into their practices in order to fully develop their skills and train and support their colleagues.

Are you ready to attend?

**Save the date**  
**November 22nd and 23rd**  
**"Moving Towards Change"**  
**with Michael Vallis, Ph.D.**

This program is being offered twice a year by the self-management program and includes a 1.5 day (9.5 Mainpro M1) workshop facilitated by Michael Vallis (Ph.D.). The workshop focuses on 4 key behaviour change counselling skills - Relationship, motivation, behaviour and emotion management skills.

In order to continue to promote and support increased motivation to self-manage among people affected by a chronic disease, we need trained Champions across the LHIN.

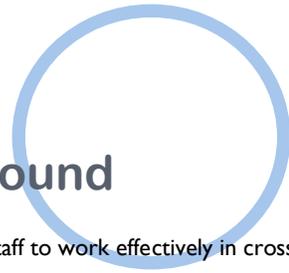
We are looking to identify "Champions" from these graduates and support them to

[Resource websites](#)

[www.selfmanagementtoolkit.ca](http://www.selfmanagementtoolkit.ca)

[www.improveselfmanagement.org](http://www.improveselfmanagement.org)





# Culturally Sensitive Diabetes Education – People with Diabetes of South Asian Background

“Cultural competence is a set of attitudes, skills, behaviours, and policies that enable organizations and staff to work effectively in cross-cultural situations. It reflects the ability to acquire and use knowledge of the health related beliefs, attitudes, practices and communication patterns of clients and their families to improve services, strengthen programs, increase community participation, and close the gaps in health status among diverse population groups.”<sup>1</sup>

South Asians are three to five times more likely to develop Type 2 diabetes than the general population. Having a medical condition such as diabetes is stigmatized and is often low on the value system ladder. This desire to uphold core values and maintain cultural pride may stand in the way of behaviour change. For example, it may be seen as disrespectful to not accept certain foods items or limiting use of salt may indicate that the person is of low socioeconomic status.<sup>2</sup>

South Asians are a linguistically and religiously diverse population whose behaviour is strongly influenced by cultural values. Often diabetes and pre-diabetes are not viewed as “serious” and changing their diet is the most difficult aspect of their care regimen.<sup>3</sup>

The following are some interesting tips for targeted diabetes education and management of diabetes in the South Asian community:

- Important to include a spouse and/or family cook in diet education<sup>4</sup>
- Important to recognize the woman’s role in fostering health in the household<sup>2</sup>
- To reduce stigma, identify champions from religious leaders to celebrities and incorporate awareness messaging in a focused media campaign.<sup>2</sup>
- Take advantage of existing cultural values to deliver health benefit messaging (i.e. success in school requires good physical health)<sup>2</sup>
- A model using plate division is better than a method that used sized comparison to the hands<sup>4</sup>
- Holidays and tradition of South Asians can make managing diabetes more difficult. Eating sweets, late evening buffets, and managing diabetes while fasting were of concern.<sup>4</sup>
- Incorporation of recipes and sample healthy versions of traditional foods<sup>3</sup>
- Many patients regularly visit their country of origin to buy medications at lower costs and continue taking these medications without regular follow-up by a Canadian doctor<sup>5</sup>

\*South Asian Diabetes Awareness Poster Attached\*

## Ramadan begins Friday, July 20<sup>th</sup>, 2012

Muslims who fast during Ramadan must abstain from eating, drinking, use of oral medications, and smoking; however there are no restrictions on food or fluid intake between sunset and dawn. Most people consume two meals per day during this month, one after sunset and the other before dawn

*Pre-Ramadan medical assessment (1-2 months before Ramadan)*

- Importance of glucose monitoring during fasting and non fasting hours
- Stop the fast if:
  - blood glucose reaches 3.9 mmol/L in the first few hours after the start of the fast or hypoglycemia 3.3mmol/L occurs
  - blood glucose exceeds 16.7 mmol/L
  - person experiences illness
- Meal planning to avoid hypoglycemia and dehydration during prolonged fast
- The appropriate meal choices to avoid postprandial hyperglycemia
- Advice on the timing and intensity of physical activity during fasting
- Advice on adjustments of medications (below)

*Recommended changes to treatment regimen in patients with type 2 diabetes*

Before Ramadan	During Ramadan
<b>Patients on diet and exercise</b>	Consider modifying the time and intensity of physical activity; ensure adequate fluid intake
<b>Patients on oral hypoglycemic agents</b>	Ensure adequate fluid intake
<b>Biguanide, metformin 500 mg, three times daily</b>	Metformin 1,000mg at the sunset meal, 500mg at the predawn meal
<b>TZDs, AGIs, or incretin-based therapies</b>	No change needed
<b>Sulfonylureas once a day</b>	Dose should be given before the sunset meal; adjust the dose based on the glycemic control and the risk of hypoglycemia
<b>Sulfonylureas twice a day</b>	Use half the usual morning dose at the predawn meal and the usual dose at sunset meal
<b>Patients on insulin</b>	Ensure adequate fluid intake
<b>Premixed or intermediate-acting insulin twice daily</b>	Consider changing to long-acting or intermediate insulin in evening and short or rapid-acting insulin with meals; take usual dose at sunset meal and half dose at predawn meal

Al-Arouj, M. et al., Recommendations for management of diabetes during Ramadan. *Diabetes Care* 2010;33:1895-1902

1. Cross et. al. 1989 and Lavizzo Mourney and Mackenzie 1996 as cited in Cultural Competence: A Journey, Bureau of Primary Health Care. Health Resources and Services Administration, US Department of Health and Human services, n.d.  
 2. South Asian Professional Network for Health Awareness. Action Plan to Advance the Health of South Asian Canadians. February 2012 <http://mysapna.org/>  
 3. Mitra, A. and Janjua, I. Diabetes in South Asian: Etiology and the Complexities of Care. *UBCMJ*. 2010. 2(1) 20-23  
 4. Mian, S.I., & Brauer, P.M. (2009). Dietary Education Tools for South Asians with Diabetes. *Canadian Journal of Dietetic Practice and Research*, 70:28-35  
 5. Sohal, P., Prevention and Management of Diabetes in South Asians. *Canadian Journal of Diabetes*. 2008;32(3):206-210  
 6. Based on the original work by Sadia Mian RD MSc CDE, with research Grant funding from the Canadian Diabetes Association (CDA). Revised as necessary by the South Asian Dietary Resource Working Group (CDA-2007). All content approved by the Canadian Diabetes Association, 2008.

# Diabetes and Driving

**Stand up**  
to Diabetes

## Waterloo– Wellington Diabetes Regional Coordination Centre

887 Langs Drive, Unit #11  
Cambridge, Ontario  
N3H 5K4

Phone: 519-653-1470 x255  
Fax: 519-650-3114  
E-mail: [kimb@langs.org](mailto:kimb@langs.org)

RCC site hosted by:



Interested in being part of the planning committee to help implement the 2013 guidelines in this region? Contact Sarah today by email at [sarahc@langs.org](mailto:sarahc@langs.org).

Our first task is to design a half day continuing education event for healthcare professionals in the region.

### All Drivers with Diabetes Agree to:

- Test your blood glucose and ensure it is above 5 mmol/L before driving
- Make sure your blood glucose is above 5 every 2 hours during driving
- At all times, keep fast-acting carbohydrates (i.e. glucose tablets or fruit juice) with you as well as in the vehicle
- Keep testing equipment and snacks nearby while driving
- Be alert for signs of hypoglycemia, which may include:
  - Feeling hungry
  - Feeling Faint
  - Sweating
  - Dizziness
  - Shakiness
  - Nausea
  - Palpitations
  - Headache
- If you feel like you are experiencing a low blood sugar while driving, immediately pull off the road and stop driving. Treat with fast-acting glucose followed by a snack. Only resume driving if your blood sugar is above 5 mmol/L after 45-60minutes
- Carry an ID that says you have diabetes
- See your doctor and other health care team members on a regular basis to ensure the following complications are not affecting your driving performance
  - Impaired sensory or motor function
  - Diabetic eye disease (retinopathy)
  - Nerve damage (neuropathy)
  - Kidney disease (nephropathy)
  - Cardiovascular disease (CVD)
  - Peripheral vascular disease and stroke

Patient Signature: \_\_\_\_\_

**Be a safe driver, consider the safety of your passengers, other road users and yourself!**

### Upcoming Events:

Creating Meaningful Partnerships for Improved Chronic Disease Management - This workshop has been designed to incorporate a "speed-dating" type atmosphere to facilitate creative partnerships to address the social determinants of health (a follow-up to last years Outreach planning day)

Thursday, August 16th, 2012  
Location: The Museum, Kitchener  
Time: 8:30AM– 4:00PM

**SAVE THE DATE!**  
2013 Clinical Practice Guidelines - Implementing Them in Your Practice

Wednesday, November 14th, 2012  
Location: TBD  
Time: 12:00PM to 4:00PM

Diabetes Expo for Patients and Caregivers  
(in partnership with the Canadian Diabetes Association)  
Let Your Patients Know Today

Saturday, November 17th, 2012  
Location: TBD

Michael Vallis, Ph.D. "Moving Towards Change" Self-Management Support Training for Health Care Providers—Registration fee \$75.00

Thursday, Nov. 22nd and Friday, Nov. 23rd  
Location: Fairview Mennonite Home, Cambridge