VOLUME 13
ISSUE 02

CLINICAL PRACTICE UPDATE IN
ENDOCRINOLOGY & DIABETES

Don't Put a Hold on your Health – Understanding the Urgency of Treating Diabetes Now

OREN STEEN MD, FRCPC
Endocrinologist, LMC
Toronto, Ontario, Canada

STUART ROSS MD, ChB, FRACP, FRCPC
Endocrinologist, LMC
Calgary, Alberta, Canada

Type 2 diabetes mellitus affects 9.3% of the Canadian population and is projected to rise to 12.1% by 2025[1]. The microvascular complications of diabetes (i.e. retinopathy, nephropathy and neuropathy) are well known. Amongst the most notable of macrovascular risks, people with diabetes (PWD) are at 2- to 4-fold higher risk of cardiovascular morbidity and mortality, according to the American Heart Association.

Pandemic; isolation; fear; restrictions! The end result? With the onset of the COVID-19 pandemic, many PWD have been postponing their appointments (in hopes of reducing their risk of developing COVID-19) with the intention of revisiting their diabetes care once the pandemic subsides. In fact, a recent online survey of 1,532 adult Canadians, including 492 participants affected with a chronic medical condition, revealed that amongst those affected 38% have been avoiding the health care system altogether during the pandemic lockdown[2]. Only 56% of patients visited a physician in-person, with another 66% opting for virtual/telephone appointments with their physician[2]. Even more troubling, 13% of patients with chronic medical conditions have neither visited their physician nor had a virtual/telephone appointment since the start of the pandemic[2].

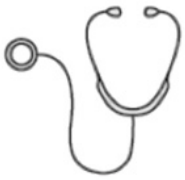
Canadians with a chronic condition are reluctant to seek proactive healthcare during COVID-19

Of 492 respondents to an online survey, who have been clinically diagnosed with a chronic condition (i.e. diabetes, arthritis, obesity, cancer, etc.):

38% are **avoiding the healthcare system** altogether during the pandemic lockdown

27% are **not comfortable seeing a physician in-person** during the pandemic

13% have not visited their physician since the start of the pandemic



only **56% have visited their physician in-person** during the pandemic

With an ongoing pandemic for more than a year and counting, the negative consequences of leaving inadequately controlled diabetes unattended cannot be overstated. Even if the PWD's main concern is developing COVID-19, like many others, poor glycemic control is a major risk factor for higher morbidity and mortality from SARS-CoV-2 infection[3]. Thus, advocating for an even stronger reasoning to optimize glycemic control during the pandemic. Our clinical strategy in people with chronic disease has always been prevention; not waiting until our patients present with urgent concerns before initiating treatment.

Delaying chronic disease management can result in patients becoming critically ill and create increased demand on our healthcare system.

Don't put your health on hold.

"Necessity is the Mother of Invention"

With the rapid adoption of virtual care at the start of the pandemic, there is no need for PWD to put their health on hold. Doctors' offices are striving to make in-clinic appointments as safe as possible by implementing various measures (e.g. universal masking for patients and staff, maintaining safe distancing of chairs in waiting rooms and offices, limiting clinic capacities, active screening questions, temperature checks, hand sanitizing, etc.). In reality though, most appointments have been occurring over the phone (with a small proportion over videoconference). A virtual diabetes appointment cannot replace all aspects of in-person. Taking blood pressure, measuring weight, and examining feet are not possible, only to name a few. However, much can still be accomplished during virtual appointment, including injection teaching needed to start insulin or GLP-1 receptor agonist. Many suspect that virtual care will be the 'new normal' and will continue to play a crucial role in health care even after the pandemic.

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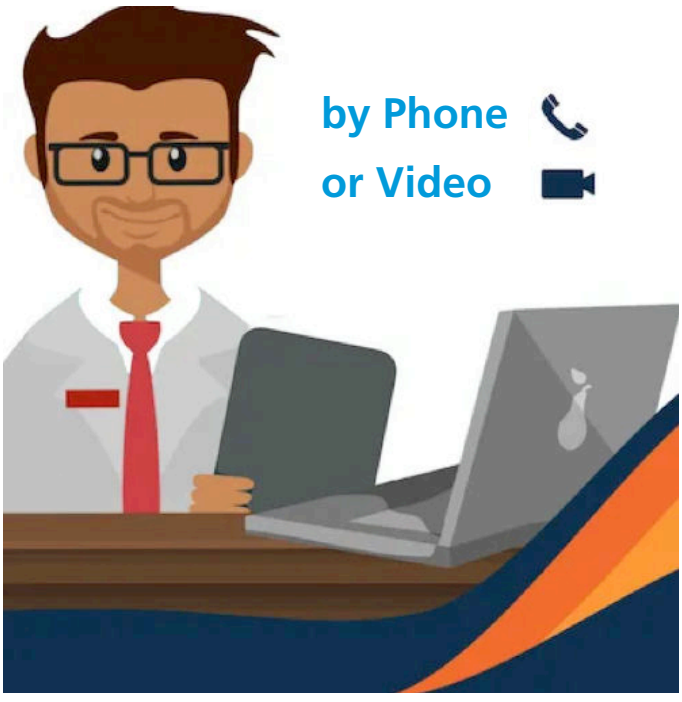
Tackling Technology & Virtual Care with Dr. Steen

Like many clinics, our clinic rapidly pivoted to virtual care at the start of the first wave of the COVID-19 pandemic. Though most of these appointments have been carried out over the phone, I have conducted a fair number of appointments through OTN (Ontario Telemedicine Network) videoconferencing as well. Overall, most patients have been quite satisfied with virtual appointments, and many have enjoyed the convenience of not having to leave their home or take time off work to travel to the clinic for their appointments. For PWD using continuous or flash glucose monitors with their smartphone, their blood glucose data can be accessed on the 'cloud' during their appointment. For patients who use glucometers for capillary blood glucose testing or a reader rather than a smart-



phone, our clinic has prepared patient handouts with step-by-step instructions on how to upload their reader to a special cloud-based system from home. Indeed, technological advancements have enhanced our ability to provide optimal virtual patient care.

Do virtual appointments work? Absolutely yes.

Once the province started reopening as case numbers steadily decreased during the first wave of the pandemic, I transitioned to a hybrid system of in-person and virtual care. There are certain instances where I will encourage an in-person assessment, assuming the patient is agreeable. For example, recommending an in-person visit for a PWD whose last foot examination was over a year ago. I have had several patients who prefer in-person appointments, while many others prefer virtual appointments. I, like many clinicians, have generally tried to stay flexible in accommodating my patients' preferences. Unfortunately, I have had quite a few patients who contracted COVID-19, mainly during the second and third waves of the pandemic. My hope is that with vaccinations ramping up, these cases will continue to become fewer and far between. For most of my PWD who have been largely avoidant of the health care system during the pandemic, I have still made a point to recommend they get their COVID-19 vaccines and also encourage not to delay seeking care for any acute or chronic medical issues.

The Evolution of Virtual Care with Dr. Ross

Do virtual appointments work? Absolutely yes. In Calgary, we have had a long experience with telephone and FaceTime appointments as our office sees many patients coming from western Saskatchewan, the eastern towns of British Columbia, and southern Alberta to the US border. Because of distance and weather concerns, patients always welcomed the opportunity to review aspects of their care virtually via phone or video. When cases started rising last March 2020 at the start of the pandemic in Canada, I changed my consultation process to entirely virtual and maintained that throughout the year. Our amazing support staff at LMC Calgary were able to accommodate all virtual appointments with patients, and it was extremely rare that a single appointment was missed. Perhaps the main downside of this process was the amount of time spent. So many patients and providers actually enjoyed this casual method of interacting leading to the risk of chatting for too long. Patients appreciated the opportunity to talk to us from the convenience of their home and were often accompanied by many family members who could join in with ease. Talking to patient's family members was also extremely helpful to me in determining where there were addtional concerns and how the family might be coping thus far. I was able to provide total care to all patients virtually, often with their concerns and questions answered the same day. As the pandemic restrictions hopefully ease, I would imagine that virtual care is here to stay. We will see the development of a hybrid of both virtual and in-clinic care that will lead to improved accessed and satisfaction for patients.

> "...a hybrid of both virtual and in-clinic care that will lead to improved accessed and satisfaction for patients."

In summary, PWD are encouraged to continue seeking care for their diabetes to reduce the risk of both COVID-19 and non-COVID-19-related morbidity and mortality. The versatility of providing in-person care safely by adhering to measures of physical distancing and universal precautions, and by also conducting virtual appointments ensures continuity of care for more of our patients. Pandemic or not, doctors remain fully committed to caring for our patients' chronic medical conditions, and if necessary, reminding them not to put their health on hold.

References

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Canadian Diabetes Prevention Program – We're Halfway There!

By: Harpreet S. Bajaj MD, MPH
(Primary investigator)

You're likely familiar with the quote **"Prevention is better than cure"**. But, when it comes to type 2 diabetes - Prevention is the ONLY cure!

The CDPP is COVID-19 pandemic friendly: All coaching sessions are done online/telephonically, with flexible, at-home convenience for participants to access the program at their own pace.

Launched in 2019, the Canadian Diabetes Prevention Program (CDPP) is Canada's first national diabetes prevention program funded in part by Public Health Agency of Canada (PHAC), co-developed by LMC Healthcare and Diabetes Canada, run in collaboration with Dynacare and McMaster University, and powered by INTERVENT online. It is not your average prevention program as it offers personalized coaching and individualized support that is delivered online in a proven (modeled on a United States Center for Disease Control and prevention [US CDC] program) and timed manner, with digital coaching sessions spread over 12 months to encourage long lasting health behavioural change. See Figure 1 for Who's Eligible and How to Refer.

To date, CDPP has already enrolled almost half of its target number of participants (sample size ≥ 2000) nationwide. Early results for CDPP (Figure 2a) among those enrolled with baseline pre-diabetes show an almost identical pre-diabetes remission rate as the US CDC program at 1 year. Notably, improvement across the broad spectrum of metabolic factors (BP, lipids, weight and even smoking cessation) has been observed with CDPP (Figure 2b), regardless of baseline level of risk factor classification. In addition, the implementation of this program has garnered positive comments from referring healthcare providers across Canada and garnered stellar satisfaction ratings from the CDPP participants themselves.

Figure 1

How it works

Who can participate?

1. Age ≥ 45 and BMI ≥ 30 (NEW CRITERIA), or;
2. Pre-diabetes: A1c 6.0 - 6.4%, **and/or** fasting glucose 6.1-6.9 mmol/L, or;
3. Those with diabetes risk factors (CANRISK)

Note: people with a diabetes diagnosis, on metformin, or on weight loss medication are not eligible.

Healthcare Provider Referrals / Self-Referrals

Health Care Provider Referras: NOTE CDPP
- Phone: 1.866.701.ENDO (3636)
- Fax: 1.877.LMC.APPT (562.2778)
- Email: referrals@lmc.ca
- Online: www. LMC.ca/referrals

Self-referral www.myintervent.com/canrisk

For More Information
www.LMC.ca/diabetes-prevention
prevention@lmc.ca

Figure 2a: Diabetes status at 12 month follow-up among prediabetes subgroup at baseline (n=43)

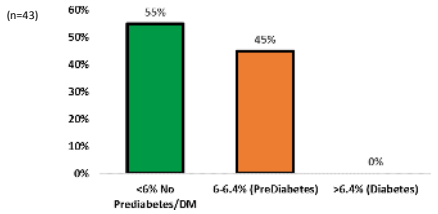
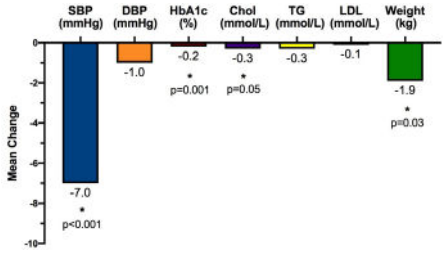


Figure 2b: Change in Baseline Risk Factors at 6-month Follow-up (n=135)



This CPU newsletter series is supported by pooled educational grants from multiple sponsors.