April 2014 Volume 1, Issue 3





# Vascular Risk Reduction: RxEACH Newsletter

# Spring into action!!!!!!!!

The RxEACH web portal has been in action for 3 months. Pharmacists have enrolled more than 100 patients already! There is a 3 way tie for the top total enrollment site: Medicine Shoppe #170 in Edmonton, London Drugs #38 in Lethbridge and Winter's Pharmacy in Drayton Valley! Each has enrolled 10 patients!!! The site that has enrolled the most patients since the last newsletter is London Drugs #38 in Leth-

bridge with 6 patients enrolled in the last 4 weeks! Congratulations and thanks so much for your hard work!

Over half of the participating

community pharmacy sites have not enrolled a single patient.

The deadline for enrolling your first patients is the end of April. If you haven't, you risk being dropped as a participant site in the study.

Start enrolling now to get your pharmacy's name on our MVP (Most Valuable Pharmacy) list!

# Where is the LDL?

The cardiovascular risk calculators require HDL and total cholesterol, but LDL is conspicuously absent. LDL is not directly measured in the lab, but rather, calculated from total cholesterol, HDL and triglycerides.

# Our Feature Pharmacist: Lonni Johnson

Lonni works at Winter's Pharmacy that is located beside a medical clinic in Drayton Valley. She enjoys curling, tap, jazz and cabaret dancing and travelling to dance competitions and shows with her daughter. Lonni has obtained her APA, administering drugs by injection, yellow fever designation and specializes in travel medicine and immunizations. Here is her story.

"Over the past few months, I have become more efficient in completing CACP's /SMMA's, thanks in part to our stellar technicians. As they fill prescriptions, they actively screen for patients who may qualify for CACP's, SMMA's and the study. To save time, I print lab results from NetCare and a

blank CACP/SMMA form before I check the patient's blood pressure. I find that taking the time to do a blood pressure reading and review lab results from NetCare or complete a comprehensive medication review often identifies patients who would benefit from a CACP and may be eligible for enrollment.

I have been specializing more in diabetes care, primarily because I see a greater need for an extensive pharmacist intervention with patients in my pharmacy. I monitor home glucose readings daily or weekly as needed, monitor blood pressure, order lab work, and help with menu planning, weight loss goals and exercise goals. I have found that my patients are eager to learn how to take proper care of them-

selves. I do a complete CACP, enroll them in the study, order a full lab panel (if it has not al-



ready been completed) and provide full counselling at this point. I have found I require about one hour for this complete assessment and I typically schedule these appointments. Not one patient has complained about having another appointment!

(Continued on page 2)



# Some statistics for the RxEACH study:

- > 121 patients enrolled as of April 11/2014
- > There are 23 weeks left for patient enrollment
- > 71 community pharmacy sites
- > 33 sites have enrolled patients

Inside this issue:	
Baseline labs required	2
Lanni's story	1,2
MVP list	3
Don't let April fool you	3
Background	4
Feature investigator	4

# 6 laboratory service providers in Alberta:

AHS Laboratory Services, Calgary Laboratory Services, DynaLife Dx, Covenant Health, Medicine Hat Diagnostic Laboratory, ProvLab



# The baseline lab results that are required

Once you have entered your patient's information into the web portal, they will be randomized to the advanced care group or usual care group. The next step is to conduct a baseline visit—preferably right away so the patient doesn't have to return again. The baseline visit includes a physical assessment, lab work, medical history and medication history.

Information gathered during your physical assessment of the patient includes:

- Weight
- Height
- Waist circumference
- Blood pressure

Several baseline lab tests are required. Previous lab results obtained through NetCare, a physician's office or laboratory are acceptable provided that the test was performed within the previous 3 months. The required blood tests for all patients includes:

- Fasting or random serum glucose
- HbA1c
- Fasting lipid panel
- Serum creatinine/eGFR
- Random urine ACR

Pharmacists who have been granted a PRAC-ID are able to order lab tests that they deem appropriate. Some reasons for requesting lab tests include monitoring patient's response to drug therapy, screening for an untreated medical condition, monitoring for adverse effects and ensuring that the drug and dose prescribed is appropriate

for the patient.

The pharmacist must consider and interpret lab data in the context of other patient-specific factors, be prepared to follow-up and take appropriate action if the lab test is outside the expected or normal range. It is always important to remember that the lab result represents a single point in time and the "normal" ranges are determined by epidemiological studies.

For further information, consider reviewing resources such as "Basic Skills in Interpreting Laboratory Data" edited by Mary Lee and published by ASHP. This is an excellent resource. For more information on the regulations regarding ordering lab tests, visit the ACP website on Ordering Lab Tests.

# Baseline lab tests:

Serum glucose
(fasting or random)
HbAlc
Fasting lipid panel
Serum creatinine
eGFR
Random urine ACR

# Lonni Johnson's story (continued from page 1)

My patients are happy to participate in the study. One patient in particular has come to the pharmacy and given me a hug because his blood pressure is well-managed, pain is controlled, has had no recurrence of gout in 3 months, and is currently narcotic free with normal kidney function. He feels like he has gained control of his life, his pain, and blood pressure. He typically comes in to the pharmacy every 2 weeks for a blood pressure check.

One of my favorite anecdotes involves a patient's wife who came to me crying that her husband was going to die because he wouldn't manage his diabetes properly. He worked too much, couldn't see a doctor regularly,

didn't take his pills properly, and ran out often. His siblings have had repeated diabetic comas. and she didn't know what to do. She asked if I would talk to him. I scheduled an appointment with him and we discussed the seriousness of what was happening. I completed a full assessment including lab work, completing a CACP, and collaborated with his physician to prescribe insulin. I counselled the patient and assisted with dosing titration. He has been enrolled in the RxEACH study and I continue to monitor his progress and blood work. His blood pressure is now below target of 130/80 mmHg and his fasting glucose has gone from above 20 mmol/L to between 6-7 mmol/L. He is following a diabetic diet and no longer drinks large quantities of soda. The patient reports feeling much better now that he is in control of his diabetes.

I have found that my patients overwhelmingly appreciate the care I provide. They know that they are being looked after and that they reap the health benefits of making healthy choices. We as healthcare providers can make a wonderful and amazing difference by just stepping in and assessing and monitoring our patients. The study's web portal format is extremely user friendly and easy to maintain; thereby, making my job much easier."

### **MVP** List

Listed are the community pharmacy sites who have enrolled at least one patient! To gauge how your site is doing, there are thirteen sites (indicated by a star) that have enrolled 5 patients or more!

Co-op Pharmacy, Rocky Mountain House \*
Costco Pharmacy #254, Grande Prairie
London Drugs #38, Lethbridge \*
Medicine Shoppe #170, Edmonton \*
Medicine Shoppe #328, Edmonton \*
Pharmacy Plus Ltd, Calgary
Pharmasave #345, Brooks \*
Pharmasave #325, Bonnyville \*
Rexall Pharmacy #7222, Blairmore \*
Roots & Berries Pharmacy, Maskwacis \*
Safeway Pharmacy #848, Edmonton
Safeway Pharmacy #864, Edmonton
Safeway Pharmacy #2730, Calgary
Save-On Foods Pharmacy #6642, Lethbridge \*

Shoppers Drug Mart #2300, St. Albert Shoppers Drug Mart #2318, Lethbridge \* Shoppers Drug Mart #2374, Edmonton Shoppers Drug Mart #2391, Calgary Shoppers Drug Mart #2448, Edmonton Shoppers Drug Mart #2450, Sylvan Lake Shoppers Drug Mart #310, Leduc Shoppers Drug Mart #321, Calgary Shoppers Drug Mart #357, Ponoka Shoppers Drug Mart #381, Edmonton Shoppers Drug Mart #385, Calgary Sobeys Pharmacy #1129, Calgary \* Stafford Pharmacy, Lethbridge Value Drug Mart, Peace River Walmart Pharmacy #1068, Peace River \* Walmart Pharmacy #1071, Vegreville Walmart Pharmacy #1144, Calgary Winter's Pharmacy, Drayton Valley \* Winter's Pharmacy North, Drayton Valley



Most Valuable Pharmacy



# We are on the web: www.epicore.ualberta.ca/projects/Rxeach.html

Cardiovascular disease (CVD) is the leading cause of death worldwide accounting for one third of the overall deaths every year. (1) Despite the drastic reduction in its recent rates, CVD is still one of the leading causes of death in Canada. (2) CVD also carries a financial burden on the Canadian economy with a cost of \$ 21 billion every year divided between loss of productivity and healthcare costs. (2)

Despite the risks associated with the major CVD risk factors and the treatment advancement, their prevalence is still substantial in North America. (3) Treatment gaps were also reported amongst such factors. (4,5) Leiter and colleagues (2013) reported that almost half of the patients with type 2 diabetes did not achieve their HbAlc or cholesterol target, slightly more than one third achieved their blood pressure targets and only 13% achieved the composite triple target. (6)

Community pharmacists are well positioned to identify patients at high risk for CVD, determine their CVD risk and assist in their disease management. The efficacy of pharmacists' intervention in chronic disease has been well demonstrated in the literature.

#### References:

- WHO. Cardiovascular diseases (2013). Available online from http://www.who.int/mediacentre/factsheets/fs3l7/en/accessed on 29-04-7013
- Heart and Stroke Foundation. Statistics (2013). Available online from http://www.heartandstroke.com/site/c.iklQLcMWJtE/b.3483991/k.3488/Statistics.htm. accessed on 29-04-2013
- Lim SS, Vos T, Flaxman AD et al. A comparative assessment of burden of disease injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the global burden of disease study 2010. Lancet. 2012;380:2224-2260
- Zillich AJ, Sutherland JM, Kumbera PA, Carter BL. Hypertension outcomes through blood pressure monitoring and evaluation by pharmacists (HDME study). J Gen Intern Med. 2005;20:1091-1096
- Al Hamarneh YN, Rosenthal M, Tsuyuki RT, Glycemic control in community dwelling patients with type 2 diabetes. Can Pharm J. 2012:145:68-69 el
- Leiter LA, Berard L, Bowering CK, et al. Type 2 diabetes mellitus management in Canada: Is it improving? Can J Diabetes. 2013:(37):82-89

#### VRR-RxEACH

Evaluating the effect of a community pharmacy-based case finding and intervention program in patients at high risk for cardiovascular events on reduction in estimated risk for major cardiovascular events.

Primary Investigators:

Dr. Ross Tsuyuki

Dr. Brenda Hemmelgarn

Dr. Charlotte Jones

Co-Investigators:

Dr. Yazid Al Hamarneh

Dr. Dunsi Aladele

Consultant Pharmacists: Carlee Balint Craig Curtis

# Investigator of the month: Charlotte Jones

Dr. Charlotte Jones, an endocrinologist and researcher in the field of chronic disease prevention, recently joined the UBC Faculty of Medicine Southern Medical Program (SMP) in Kelowna, British Columbia. Her research and clinical work focuses on increasing the awareness, detection, and control of cardiovascular disease (CVD) risk factors in diverse and at risk populations including those living in rural and remote locations, the elderly, ethnic minority groups, and aboriginal peoples.

She has a PhD in biochemistry from McGill University, Montreal;



Post-doctorate in cancer research at the Mayo Clinic; MD from University of Calgary; Endocrinology Fellowship from University of Calgary; and PhD from University of Calgary. Dr. Charlotte Jones works as an Associate Professor of Medicine and Director of Student Research with the SMP at University of British Columbia, Okanagan Campus. She is also working with the BC Medical Association and the Division of Family Practice in the Interior of BC.

Recently, Charlotte has initiated a physician telephone consult and diabetes telehealth service for Kamloops and remote surrounding areas.











Editor: Craig Curtis Contributor: Carlee Balint

Email any comments or questions to: RxEACH.ualberta@gmail.com

