A Publication of **Pharmacists Manitoba Inc.**

COMMUNICATION

The Voice of Pharmacists in Manitoba

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PHARMACISTS MANITOBA

APRIL / MAY / JUNE 2017
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EXECUTIVE MESSAGE

2017 has started off with three great member engagement opportunities: member feedback in January, member engagement with MLAs on March 21st, and our Annual Conference April 7th to 9th. Three great examples of membership value with Pharmacists Manitoba.

2017 has started off with three great member engagement opportunities: member feedback in January, member engagement with MLAs on March 21st, and our Annual Conference April 7th to 9th. Three great examples of membership value with Pharmacists Manitoba.

Strategic planning. Those two words quickly bring about feelings of apprehension as most people find the process boring, unconstructive, and difficult to understand the importance of. For us, strategic planning is an opportunity to grow, refresh and focus our approach and mandate. Over the past four years, we have kept to our strategic plan and monitored our achievements against our objectives. In November, we reviewed our strategic plan and were very pleased to see that what we intended to do and the results we were shooting for had been achieved or the groundwork has been firmly established.

On January 27th, the Board of Directors, Liaisons to the Board, and staff participated in our Strategic Planning Session. We solicited feedback from our members to help provide clarity to our analysis and discussions. We thank every member for their thoughtful contributions and recommendations.

Our updated strategic plan will be reviewed and discussed over the next few months and will be shared with our membership when complete. While we cannot predict the way our environment will evolve, we feel our improved focus on government relations and public affairs is timely. We believe our momentum is building. Our strategic plan, past achievements and feedback from members takes us to our next big event; Pharmacists Awareness Month.

To celebrate pharmacists and increase government awareness about pharmacist professional services, we will be hosting a Pharmacists Manitoba Reception with MLAs at the Manitoba Legislature on March 21, 2017 from 5:00 to 7:30 pm. We will combine an opportunity to meet and talk with MLAs with education about the benefit of pharmacist professional services.

To make this evening successful and continue to build on our momentum we are looking for volunteers to educate MLAs about comprehensive medication reviews, assessment and prescribing for minor ailments and preventative health services and point of care testing. If you are interested, please contact our office by email to info@pharmacistsmb.ca or call 204.956.6681 to sign up. One of our Board Members will get back to you with information and logistics about the evening.

As always, if you have any questions for us, please call or email. We enjoy talking with our members and learning from you. Connect with us in person at the Pharmacists Manitoba Conference April 7th to 9th, 2017. Details about the conference are in this journal as well as online at http://www.pharmacistsmb.ca/conference/home.html.

Sharon Smith
President

Brenna Shearer
CEO

2017 ELECTION TO THE BOARD OF DIRECTORS

The 2017 election to the Pharmacists Manitoba Board of Directors is underway. The Call for Nominations was mailed to all voting members of Pharmacists Manitoba on February 3, 2017. The deadline to submit completed nomination forms is 12:00 noon on Friday, March 3, 2017. The nomination form is posted online at: www.pharmacistsmb.ca.

The 2017 election to the Pharmacists Manitoba Board of Directors will be conducted **electronically** in accordance with the current Bylaws (effective April 21, 2015). Voting will commence on March 10th, 2017 and all eligible voting members will be able to cast their ballot on the Pharmacists Manitoba website. The deadline to cast ballots is April 4, 2017 at 5:00 pm.

NO PAPER BALLOT WILL BE MAILED

How to cast your electronic ballot:

- Voting members will receive an email from Pharmacists Manitoba that will direct them to a page on the Pharmacists Manitoba website where they will be required to login.
- Once logged in, voting members will be redirected to the **BigPulse** voting website where they will be asked to enter their first name, last name and Pharmacists Manitoba membership number. **When entering your membership number, blank spaces must be removed.** Once registered, members will have access to the ballot and be able to cast their vote.

Candidate biographies and photos will be posted online on the voting website. Voting members are able to login and review candidates' information as often as they like prior to casting their ballot but once the ballot has been cast it can not be changed. There are 4 open positions on the Board. When casting your ballot do not select more than four (4) of the candidates on the Voting List.

Members can access membership numbers for login purposes by logging into their profile on the Pharmacists Manitoba website. Members are encouraged to review their profile to ensure email addresses are current.

Reminders to access the online voting website will be circulated. Members are encouraged to read all communication circulated by Pharmacists Manitoba leading up to the election so you do not miss out on your opportunity to vote.

Inquiries should be directed to Pharmacists Manitoba at: info@pharmacistsmb.ca.

The College of Pharmacy is an institution that will create an educational environment that facilitates the integration of pharmacy scholarship in the areas of practice, research and service to effect optimal health outcomes for individuals and communities, and the advancement of the profession of pharmacy.

PHARMACISTS MANITOBA CONFERENCE

Shaping The Generations

APRIL 7th – 9th, 2017
RBC CONVENTION CENTRE

PHARMACISTS MANITOBA CONFERENCE

20+ SPEAKERS
15+ TOPICS

ASSINIBOINE PARK ZOO
GATEWAY TO THE ARCTIC WELCOME RECEPTION
APRIL 7TH

GALA DINNER & AWARDS PRESENTATION
APRIL 8TH

CPhM AWARDS LUNCHEON
APRIL 9TH

REGISTER ONLINE TODAY!
WWW.PHARMACISTSMB.CA

DELTA HOTEL RESERVATIONS

FRIDAY APRIL 7th
Assiniboine Park Zoo

7:00 pm **GATEWAY TO THE ARCTIC WELCOME RECEPTION**

Join us for a unique evening with your colleagues in the Sea Ice Passage under the pools that polar bears and seals call home. The venue is ours to enjoy for an evening of good conversation, food and spirits.

We are pleased to announce that The Honourable Kelvin Goertzen, Minister of Health, Seniors and Active Living will open the conference with welcome remarks at 7:00 pm.

Bussing will be available to all delegates from the Delta Winnipeg Hotel to the Assiniboine Park Zoo and back. Pick up at the Delta Winnipeg Hotel is at 6:45 pm sharp and the return bus will leave the Assiniboine Park Zoo at 10:00 pm.

Delegates MUST pre-register using our online registration form to reserve a spot on the bus.

Sponsored by SHOPPERS DRUG MART Loblaw pharmacy

SATURDAY APRIL 8th
RBC Convention Centre

8:00 am **PHARMACISTS MANITOBA ANNUAL GENERAL MEETING & HOT BREAKFAST BUFFET**

9:00 am **COLLEGE OF PHARMACISTS OF MANITOBA ANNUAL GENERAL MEETING**

10:00 am **WELCOME REMARKS**

HOT TOPICS & ISSUES FORUM

Open Discussion from the Annual General Meetings
Moderator: Sheila Ng, B.Sc. Pharm, Pharmacy Practice Instructor, College of Pharmacy, Rady Faculty of Health Sciences, University of Manitoba

Topic #1 Fentanyl Abuse: A Fatal Attraction
Speakers: Sheri L. Fandrey, B.S.P., Ph.D., Manitoba Addictions Knowledge Exchange, Addictions Foundation of Manitoba and Detective Sargent Michelle Bacik, Organized Crime Division, Clandestine Lab Unit, Winnipeg Police Service

Fentanyl abuse has reached crisis proportions across Canada. As fentanyl use continues to escalate, health care professionals need to be aware of the risks and harms associated with its use. This session will provide an overview of fentanyl pharmacology, including comparison with other opioids, how it is used, its addictive potential, and clinical presentation of overdose. We will also focus on emerging "designer" opioids, and the additional risks associated with these "super-potent" drugs.

Topic #2 Continuous Quality Improvement & Medication Incident Reporting: Lessons Learned from a Provincial Pilot Project
Speaker: Certina Ho, RPh, BScPhm, MISt, MEd, PhD, Project Manager, Institute for Safe Medication Practices Canada (ISMP Canada) Partner in the Canadian Medication Incident Reporting and Prevention System

This session will share lessons learned from a multi-incident analysis conducted by ISMP Canada on an eight-month provincial pilot project. It is designed for pharmacy professionals who would like to have an understanding of how continuous quality improvement can be achieved through medication incident reporting and analysis. Topics covered will include medication error prevention strategies and the benefits of medication incident reporting. Safety recommendations will be presented based on the medication-use process or workflow, which includes inventory management, receiving/shelving, prescription order entry, dispensing, compliance packaging, and patient counselling.

FRIDAY APRIL 7TH AND SATURDAY APRIL 8TH EVENTS

GATEWAY TO THE ARCTIC WELCOME RECEPTION

PHARMACISTS MANITOBA ANNUAL GENERAL MEETING

COLLEGE OF PHARMACISTS OF MANITOBA ANNUAL GENERAL MEETING

HOT TOPICS & ISSUES FORUM

10:45 am **REFRESHMENT BREAK WITH EXHIBITOR'S**

12:00 pm **EXHIBITOR'S BUFFET LUNCH + POSTER PRESENTATIONS + SPONSORS SPOTLIGHT**

1:30 pm **SESSION B: SOUND BITES**

Topic #1 Inhaled Respiratory Medication Devices: Taking it Back to Basics
Speaker: Kristine Petrasko, BScPharm, CRE, CTE, Regional Pulmonary Educator Regional Pulmonary Rehabilitation Program (WRHA), Deer Lodge Centre

Did you know that only about 9% of patients in Canada use their devices correctly? This is a very scary statistic. In this session, you will learn the fast tips & tricks that will enhance your performance as a pharmacist and ensure that your client is receiving the appropriate amount of inhaled medication from their devices.

Topic #2 Type 2 Diabetes in Children: The Manitoba Story
Speaker: Dr. Elizabeth Sellers MD MSc FRCPC, Associate Professor, Department of Pediatrics and Child Health, Max Rady College of Medicine, University of Manitoba

This session will review the history and epidemiology of type 2 diabetes in children in Manitoba. In addition, our understanding of the natural history, treatment approaches and complications of this disease will also be discussed.

Topic #3 Available Diabetic Devices & Their Uses
Speaker: Lengim Ingram, BSc. Pharm., CDE

This session will provide delegates with a brief look at the available devices used in the treatment of diabetes in Canada, what is available, how to use them, and where to get them.

1:30 pm **STUDENT SESSION PREPARATION**

Presenters: Grace Badejo, B.Sc., B.Sc. Pharm, Associate/Owner of Shoppers Drug Mart Brandon & Jaden Brandt, B.Sc. Pharm, MSc. (Candidate)

This session is designed for 4th Year Pharmacy Students and International Pharmacy Graduates who are entering the profession of pharmacy. Students will be given mock scenarios with pharmacists as the patients. Come and interact with licensed pharmacists and receive tips to help you prepare for exams.

Sponsored by SHOPPERS DRUG MART Loblaw pharmacy

3:30 pm **SESSION C: QUIRKS & QUARKS**

Topic #1 A Career in Radiopharmacy: Critical Role in Diagnostic Imaging and Therapy
Speaker: Dr. Kennedy Mang'era, B.Pharm, MSc., Ph.D., CertM. Chief Operating Officer, Canadian Isotope Innovations

This presentation will provide an overview of Radiopharmacy as a career, and show the integration of therapeutic and diagnostic radiopharmaceuticals into patient care, particularly in oncology and cardiology.

SATURDAY APRIL 8TH EVENTS

RBC CONVENTION CENTRE

EXHIBITOR'S BUFFET LUNCH

POSTER PRESENTATIONS

SPONSOR'S SPOTLIGHT

STUDENT PREPARATION SESSION

3:30 pm **SESSION C: QUIRKS & QUARKS CONTINUED**

Topic #2 Pharmacists' Perspective on New Role of Pharmacy Technicians
Speakers: Carey Lai, B.Sc. Pharm, Pharmacist/Owner, Leila Pharmacy
Jackie Abraham, Certified Pharmacy Technician, Leila Pharmacy
Derek Risbey, B.Sc. Pharm, Certified Diabetes Educator, Pharmacy Manager, Grand Medicine Health Services Pharmacy
Nadia Delvecchio, Certified Pharmacy Technician, GMHSP

Pharmacists have enjoyed a huge expansion in our role as a primary health care professionals, but as the industry prepares for pharmacists to spend more time with patients, pharmacy technicians have been demoted to assistants. There are many highly qualified and competent assistants that pharmacists have come to rely on in their practice. These assistants have worked hard to get their title back and are ready to work in an expanded role so that pharmacists have more time to focus on patients. In reality, pharmacists will not be able to pursue their expanded roles without their key partners, the pharmacy technicians. Derek and Carey will share with you some of the roles and duties they have assigned to their pharmacy technicians and how it has helped improve patient care.

Topic #3 The Role of the Pharmacist and Availability of Medicine in Humanitarian Aid
Speaker: Suzanne Levesque, B. Pharm., MBA, Pharmacists without Borders Canada

PHARMACISTS WITHOUT BORDERS CANADA

Pharmacists without Borders Canada has gone on various humanitarian missions since 1995. This presentation will review the different roles played by Canadian pharmacists over the years and how the availability and quality of medicines impacted their work. An outlook on current international guidelines on medicine donations, and availability of medicines in developing countries.

6:00 pm **GALA DINNER & AWARDS PRESENTATION**

Delta Winnipeg Hotel Ballroom
Join us for an evening of celebration as we recognize the outstanding achievements of our colleagues in Manitoba.

PHARMACISTS MANITOBA IS PLEASED TO ANNOUNCE THE FOLLOWING NEW AWARDS THIS YEAR:

Ruban INSURANCE BROKERS

RUBAN INSURANCE FRIEND OF PHARMACY AWARD
The Friend of Pharmacy Award is presented to a non-pharmacist, who has contributed significantly to the success of the profession of pharmacy. The recipient will have gone beyond the day-to-day expectations of their work to make an outstanding contribution to the community of pharmacy.

The Blando Group

THE BLANDO GROUP PATIENT CHOICE AWARD
The Patient Choice Award is presented to a pharmacist who has been nominated by a patient or non-pharmacist colleague(s) for their outstanding commitment to delivering quality patient care and customer service, and for their lasting impact on patient outcomes or community health and wellness.

SATURDAY APRIL 8TH EVENTS

SOUND BITES

QUIRKS & QUARKS

DELTA WINNIPEG HOTEL

GALA DINNER AND AWARDS PRESENTATION

SUNDAY APRIL 9th
RBC Convention Centre

8:30 am **HOT BREAKFAST BUFFET SPONSORED BY** Pfizer SANOFI PASTEUR

9:00 am **SESSION D: SHORT & SNAPPY**

Topic #1 New Strategies in Preventing Community Acquired Pneumonia and Influenza
Speaker: Dr. George G. Zhanel, PhD., Professor-Department of Medical Microbiology and *Infectious Diseases, Max Rady College of Medicine, Rady Faculty of Health Sciences,* University of Manitoba, Director-CARA

During this session, Dr. Zhanel will discuss and review; the patient risk factors associated with community acquired pneumonia and influenza, the use of pneumococcal vaccines PPSV23 and PCV13 and the use of influenza vaccines in various age groups.

Sponsored by Pfizer SANOFI PASTEUR

Topic #2 Mental Health Services & Resources
Speaker: Deborah Kasner, MSW., Information and Referral Worker, The Canadian Mental Health Association.

This presentation will be a brief overview of programs and services provided at CMHA and a snapshot of current trends in requests for assistance with service navigation. We will discuss the challenges participants and their families face when trying to access mental health services in Manitoba and how we are providing support to the community to assist them in finding appropriate services.

Topic #3 Development of a Regional Antimicrobial Stewardship Program in Prairie Mountain Health
Speaker: Tara Hoop B.Sc., B.Sc. (Pharm), BCPS, Pharmacist, AntimicrobiaL Stewardship Program, Prairie Mountain Health

In 2012, Accreditation Canada added antimicrobial stewardship to its list of requirements of practice for hospital accreditation. In an effort to meet this standard, a pharmacist position was created for the purpose of establishing a stewardship program. Learn about the challenges of initiating an antimicrobial stewardship program in a large and varied health region, what has been done to support this practice, and what the future holds for this program.

11:00 am **SESSION E: RRR RELEVANT RESEARCH RUMINATIONS & 3 MINUTE THESIS'**

A series of short presentations that highlight some of the research at the College of Pharmacy, University of Manitoba that are of interest to front-line pharmacists.

Topic #1 Osteoporosis, the Grand Canyon and Other Gaps
Dr. Shawn Bugden B.Sc.(Pharm), M.Sc., PharmD, Associate Professor, College of Pharmacy, Rady Faculty of Health Sciences,, University of Manitoba

Topic #2 Price Comparison of Commonly Prescribed Medication in Manitoba: The Sequel
Dr. Shawn Bugden B.Sc.(Pharm), M.Sc., PharmD, Associate Professor, College of Pharmacy, Rady Faculty of Health Sciences, University of Manitoba

Topic #3 Trends in Prescription Synthetic Cannabinoid Medication and Health Outcomes in Manitoba
Wajd Alkabbani B.Sc.(Pharm), M.Sc. (Candidate)

Topic #4 Do I Have Time For This? Evaluating the Benefit & Burden of Preventative Treatment in The Later Years of Life
Jamie Falk B.Sc.(Pharm), PharmD, Assistant Professor at the College of Pharmacy, Rady Faculty of Health Sciences, University of Manitoba

Topic #5 Utilization of Depot Antipsychotics in Manitoba
Donica Janzen BSP, M.Sc. (Candidate)

SUNDAY APRIL 9TH EVENTS

HOT BREAKFAST BUFFET

SHORT & SNAPPY

COLLEGE OF PHARMACISTS OF MANITOBA AWARDS LUNCHEON

11:00 am **SESSION E: RRR RELEVANT RESEARCH RUMINATIONS & 3 MINUTE THESIS' CONTINUED**

Topic #6 Benzodiazepines and Z-Drugs: A Balancing Act Gone Wrong?
Jaden Brandt B.Sc. (Pharm), M.Sc. (Candidate)

Topic #7 Fentanyl Patches and the New Math – Something Doesn't Add Up
Dr. Shawn Bugden B.Sc.(Pharm), M.Sc., PharmD, Associate Professor, College of Pharmacy, Rady Faculty of Health Sciences, University of Manitoba

12:00 pm **COLLEGE OF PHARMACISTS OF MANITOBA AWARDS LUNCHEON**

1:30 pm **SESSION F: HEADLINE NEWS**

Topic #1 The Pharmacy Response to the Opioid Crisis
Speaker: Philip Emberley, PharmD, MBA, Director, Professional Affairs, Public & Professional Affairs, Canadian Pharmacists Association

The opioid crisis in Canada is a national problem affecting every province and every community. Pharmacists have an important role to play in the prevention and treatment of addiction. This session will discuss strategies that have emerged subsequent to the national opioid summit in 2016, as well as opportunities for front line pharmacists to take on a greater role.

Topic #2 Manitoba eHealth: One Patient One Record
Speaker: Don Thiessen, Director and Solution Information Officer Acute Care, Manitoba eHealth, Acute Care Solution

This session will provide a description of the current state of electronic patient information in Manitoba and the roadmap to the future.

Topic #3 Pan-Canadian Environmental Scan
Speakers: Sheila Ng, B.Sc.Pharm, Pharmacy Practice Instructor, College of Pharmacy, Rady Faculty of Health Sciences, University of Manitoba

Pharmacists in eight provinces across Canada currently have the authority to prescribe for minor ailments (ambulatory ailments, self-limiting conditions); however, the legislation, scope of prescribing, remuneration, professional uptake and continuing education requirements and resources related to pharmacist prescribing are not consistent nationally. This session will discuss the results of an environmental scan, which aimed to ascertain these differences and examine where Manitoba is in relation to other provinces.

Topic #4 Prescribing in Practice - The Manitoba Story
Speakers: Sheila Ng, B.Sc.Pharm, Pharmacy Practice Instructor, College of Pharmacy, Rady Faculty of Health Sciences, University of Manitoba
Dr. Brenna Shearer, BMR (OT), MSA (HSA), PhD, CEO, Pharmacists Manitoba

Preliminary Manitoba survey results will describe the demographics of survey participants, including their work setting, location and current status in terms of Manitoba certification for authorization to prescribe for minor ailments. The evaluation will also examine the barriers identified in applying pharmacists' assessment and prescribing for self-limiting conditions for respondents who have completed a self-study program and for pharmacists yet to enroll in training for certification. Identified training needs to enhance uptake and application of skills into practice will also be discussed.

Topic #5 Minor Ailment Templates
Speakers: Grace Badejo, B.Sc., B.Sc. Pharm, Associate/Owner of Shoppers Drug Mart Brandon & Jaden Brandt, B.Sc. Pharm, MSc. (Candidate)

This presentation will orient pharmacists to the variety of Minor Ailment Templates developed by Pharmacists Manitoba to support pharmacy practice and complement minor ailment prescribing. The presentation will focus on how the templates can be an effective tool for documentation and aid in the interview style of information gathering to inform clinical decision-making.

3:30 pm **CLOSING REMARKS**

SUNDAY APRIL 9TH EVENTS

SHAPING THE GENERATIONS

REGISTER ONLINE TODAY

DELTA HOTEL RESERVATIONS

CONFERENCE REGISTRATION

NOW OPEN @ PHARMACISTSMB.CA

FULL CONFERENCE REGISTRATION

- All continuing education sessions for entire conference weekend
- Includes all meals/events for entire conference weekend
- Parking is complimentary for Full Registrants on Saturday and Sunday as space allows at the RBC Convention Centre parking lot (space is limited).
  *Passes will be given at the registration desk.

FRIDAY APRIL 7th
Assiniboine Park Zoo

FRIDAY INDIVIDUAL TICKET: GATEWAY TO THE ARCTIC, ASSINIBOINE PARK ZOO

- Includes one ticket to the Gateway to the Arctic venue and reception

SATURDAY APRIL 8th
RBC Convention Centre & Delta Hotel

SATURDAY DAY REGISTRATION PACKAGE

- All Saturday continuing education sessions
- Hot Buffet Breakfast & Exhibitor's Buffet Lunch
- Excludes the Gala Dinner & Awards Presentation

SATURDAY STUDENT REGISTRATION PACKAGE

- All Saturday continuing education sessions & student preparation session
- Hot Breakfast Buffet & Exhibitor's Buffet Lunch
- Excludes the Gala Dinner & Awards Presentation

SATURDAY STUDENT/IPG PREPARATION SESSION REGISTRATION

- Student preparation session Saturday afternoon only

INDIVIDUAL TICKET: GALA DINNER & AWARDS CEREMONY

- Includes one Gala Dinner & Awards Presentation ticket at the Delta Winnipeg Hotel

SUNDAY APRIL 9th
RBC Convention Centre

SUNDAY DAY REGISTRATION PACKAGE

- All Sunday continuing education sessions
- Hot Buffet Breakfast
- College of Pharmacists of Manitoba Awards Luncheon

INDIVIDUAL TICKET: College of Pharmacists of Manitoba Awards Luncheon

- Includes one College of Pharmacists of Manitoba Awards Luncheon ticket at the RBC Convention Centre

PARKING @ THE RBC CONVENTION CENTRE

Parking is complimentary for Full Registrants on Saturday and Sunday as space allows at RBC Convention Centre parking lot.

REGISTRATION PACKAGES

FULL CONFERENCE REGISTRATION

SATURDAY REGISTRATION

SUNDAY REGISTRATION

STUDENT REGISTRATION

SPONSORS 2017

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YOUR PATIENTS ≥50 ARE AT AN INCREASED RISK.[1,2]

Prevnar® 13, the first and only adult pneumococcal conjugate vaccine, is now indicated for the prevention of pneumococcal pneumonia.[2]*

THINK **PREVNAR 13**

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Prevnar 13 is indicated for active immunization of adults 18 years of age and older for the prevention of pneumonia and invasive pneumococcal disease (including sepsis, meningitis, bacteraemic pneumonia, pleural empyema and bacteraemia) caused by *Streptococcus pneumoniae* serotypes 1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F and 23F.

Consult the Product Monograph at www.pfizer.ca/en/our_products/vaccines/monograph/232 for contraindications, warnings, precautions, adverse reactions, interactions, dosing, and conditions of clinical use. The Product Monograph is also available on request by calling 1-800-463-6001.

*Comparative clinical significance unknown.

REFERENCES: 1. McNeil SA, Qizilbash N, Ye J, *et al*. A retrospective study of the clinical burden of hospitalized all-cause and pneumococcal pneumonia in Canada. *Can Respir J* 2015. **2.** Prevnar® 13 Product Monograph. Pfizer Canada Inc., July 27 2015.

Pfizer Vaccines

See the consumer website at
PREVNAR.CA

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Prevnar® 13
Pneumococcal 13-valent Conjugate Vaccine (Diphtheria CRM_{197} Protein)

THE INS AND OUTS OF CRIMINAL RECORD CHECKS

MLT Aikins LLP

Grant Stefanson & Anna Solmundson

The College of Pharmacists of Manitoba requires pharmacists to undergo criminal record checks and adult and child abuse checks every five years. But, what about other pharmacy employees? Should pharmacy owners require police record checks for their employees? Do those employees have to agree?

Employers can request a criminal record check from an employee at any point during their employment. However, an employer's ability to request police record checks from an employee or employment applicants is limited by privacy, human rights and employment law. Generally, if an employer deems a record check is necessary, it should be done during a transition, whether an initial hiring process or before a promotion.

In Canada, there are laws in place to protect individuals and their personal information. Criminal record checks can be very privacy invasive and may lead to discriminatory treatment by employers and potential employers. Criminal record checks cannot be performed without the consent of the person being checked.

Privacy law can prevent employers from collecting unnecessary or unreasonably privacy-invasive information from applicants. The Manitoba Human Rights Commission recognizes unreasonable discrimination on the basis of a criminal record as a ground for a human rights complaint. Where discrimination is based on a criminal charge, the evidentiary onus on an employer will be greater; the employer must clearly demonstrate that the risk to the public, co-workers or the employer's business is so severe that the mere possibility of a conviction warrants the discriminatory employment decision. Manitoba also prohibits discrimination on the basis of a mental health police record.

WHY DOES THE EMPLOYER WANT TO OBTAIN A CRIMINAL CHECK?

An employer should consider their reasons for wanting a record check, and whether a standard hiring process (a request for a resume and cover letter, reference checks, an interview, orientation sessions, job shadowing periods, follow-up reviews, feedback from clients, etc.) would be sufficient to satisfy their concerns. Record checks should be done only where an employer deems it necessary for the position.

A police record check should not be considered a "standard" part of the hiring process, but it may be justified in some situations:

- legislation requires a record check for certain positions;
- having a criminal record would directly interfere with core job requirements;
- the position involves control over a large amount of organizational or client assets, and supervision, safeguards or auditing procedures are not feasible due to the work's nature;
- the position is one where access will be given to a high-security environment; or
- the position involves unsupervised and ongoing contact with individuals in the vulnerable sector, including the elderly, disabled and children.

IF AN EMPLOYER DETERMINES IT REQUIRES A RECORD CHECK, WHAT LEVEL OF RECORD CHECK IS APPROPRIATE?

As different types of record checks are more privacy invasive than others, the more sensitive the

information requested, the higher the burden is on the employer to justify why you need the information. There are two levels of checks:

- Criminal Record check: This process verifies whether an individual has a criminal record and provides the applicant with the detailed information that can be legally disclosed.
- Vulnerable Sector (VS) check: This process verifies whether an individual has a criminal record, as well as any record suspensions (formerly pardons) for sexual offences and local police records for information relevant to the VS check. The information that can be legally disclosed is provided to the applicant.

A VS check can be legally provided only if:

- the request is made by a person or organization responsible for the well-being of a child or vulnerable person;
- the request is made in the context of a specific application for a paid or volunteer position;
- the position being applied for is one of trust or authority towards a child or vulnerable person; and
- the applicant has given their consent in writing.

Vulnerable members of society are defined in the Criminal Records Act as persons who, because of age, a disability, or other circumstances, whether temporary or permanent are (a) in a position of dependence on others or (b) are otherwise at a greater risk than the general population of being harmed by a person in a position of authority or trust relative to them.

IF AN EMPLOYER RECEIVES A RECORD CHECK FROM A POTENTIAL EMPLOYEE WHAT CAN THEY DO WITH IT?

From a privacy perspective, the results of a police record check can disclose sensitive personal information and must be treated as confidential. Any record check should be used only for the hiring decision and other consistent employment uses. The results of the record check should be disclosed only to those in the organization who absolutely need to know for approved employment purposes (not the individual's direct manager or supervisor). Personal information should not be kept for longer than necessary.

From an employment and human rights perspective, an employer should have a clear, written policy establishing what types of offences are relevant to the specific position and what other factors are considered if a relevant offence is disclosed on a record check. Even within a certain type of offence there should be a detailed assessment of whether the actual circumstances of the record are sufficiently related to the position to deny the person the job.

Human rights commissions and tribunals have outlined a number of questions that are relevant to determining whether a record is related to a job requirement:

1. Does the behaviour for which the charge was laid, if repeated, pose any threat to the employer's ability to carry on its business safely and efficiently?
2. What were the circumstances of the charge and the particulars of the offence involved – e.g., how old was the individual when the events in question occurred, and were there any extenuating circumstances?
3. How much time has elapsed between the charge and the employment decision? What has the candidate done during that period of time? Have they shown any tendencies to repeat the kind of behaviour for which they were charged? Has the individual made efforts or shown a firm intention to rehabilitate him or herself?
4. Has a pardon or record suspension been secured, or has a conditional discharge been successfully received?
5. Having considered all the above, was the severity of the particular action taken against the potential employee warranted by the nature and circumstances of the charge or conviction?

B.O. (BODY ODOUR)

Meera B. Thadani, M.Sc.(Pharm.)

WHAT IS BODY ODOUR?

B.O. or body odour is caused by the action of resident bacteria on the skin surface on secretions produced by sweat glands. Present in animals and humans, the intensity of aroma can be influenced by many factors. In animals it can relate to behaviour and survival strategies. Body odour has a genetic basis in animals and humans, and can also be strongly influenced by various diseases and psychological conditions. Body odour is generally considered to be an unpleasant odour among most human cultures.

WHAT CAUSES BODY ODOUR?

The body's core temperature is regulated through receptors in the hypothalamus. Skin receptors monitor external body temperature. Increased body temperature increases sweating which evaporates to cool the body.

In humans, body odour is caused by sweat gland secretions and bacterial activity which metabolize the chemicals found in sweat to odorous substances.

There are three types of sweat glands (Figure 1) which cover the surface of the body.

Eccrine sweat glands cover the skin surface to cool the skin. Concentrated in the greatest numbers on the face, head, palms, trunk and soles of the feet, secrete hypotonic sweat to conserve electrolytes.

Apocrine sweat glands connect to hair follicles and are found in the armpits, genital, and nipple areas. Becoming functional at puberty, apocrine sweat is viscous, milky and odourless. When it reaches the skin surface it is altered by skin bacteria to produce the odour.

Apoeccrine sweat glands develop during puberty from the eccrine-like precursor glands with a larger capacity of producing sweat (up to 7–10 times) than eccrine glands. They are mainly found in the armpit and perianal region. These glands open directly to the surface of the skin through a long duct.[1]

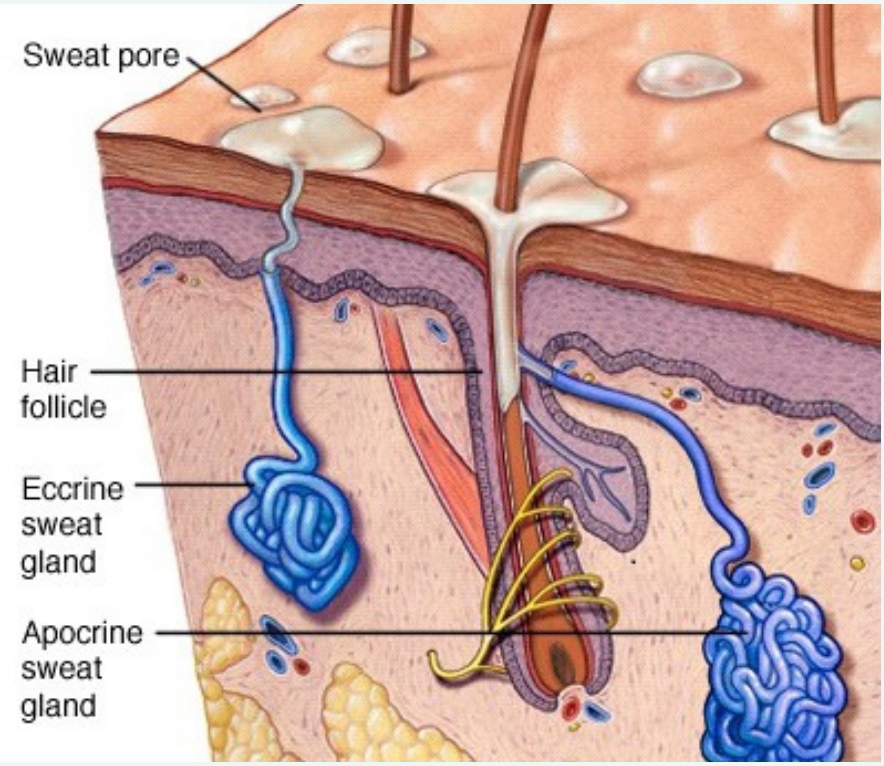

Figure 1 Cross section of skin and sweat glands. There are three to four million sweat glands distributed over the skin and 75% are eccrine sweat glands.

COMPOSITION OF SWEAT

Sweat glands regulate temperature and remove waste by secreting water, sodium salts, and nitrogenous waste (such as urea) onto the skin surface. The main electrolytes of sweat are sodium and chloride, but the amount is small enough to make sweat hypotonic at the skin surface.

Eccrine sweat is clear, odourless, and is composed of 98–99% water. It also contains sodium chloride, fatty acids, lactic acid, citric acid, ascorbic acid, urea, and uric acid. Its pH ranges from 4 to 6.8.

Apocrine sweat has a pH of 6 to 7.5. It contains water, proteins, carbohydrate waste material, lipids, and steroids. The sweat is oily, cloudy, viscous, and originally odourless. When decomposed by bacteria it acquires an odour. Because both apocrine glands and sebaceous glands open into the hair follicle, apocrine sweat is mixed with sebum.

The main constituents of human armpit odour are:

- unsaturated or hydroxylated branched fatty acids, E-3-methyl-2-hexenoic acid and 3-hydroxy-3-methyl-hexanoic acid
- sulfanylalkanols (3-methyl-3-sulfanylhexan-1-ol),
- and the odoriferous steroids androstenone (5α-androst-16-en-3-one) and androstenol (5α-androst-16-en-3α-ol).

The fatty acid E-3-methyl-2-hexenoic acid is bound and carried by two apocrine secretion odour-binding proteins, ASOB1 and ASOB2, to the skin surface.

Body odour is influenced by bacteria on the skin.

- *Corynebacterium*, manufacture lipases that break down the lipids in sweat to create smaller molecules of butyric acid.
- *Staphylococcus* hominis produce thioalcohol compounds that give body odour its characteristic aroma.
- *Propionibacteria* which thrive in the ducts of adolescent and adult sebaceous glands, produce propionic acid (propanoic acid), a breakdown product of some amino acids. Because propionic acid is chemically similar to acetic acid with similar characteristics including odour, body odours may be identified as having a vinegar-like smell.
- *Staphylococcus epidermidis* produce isovaleric acid (3-methyl butanoic acid), another source of odour.[2]

WHAT IS HYPERHIDROSIS (EXCESSIVE SWEATING)?

Sweating in response to increased temperature (a hot summer day), heavy clothing, exercise, emotional stimuli (anger, fear or excitement) is normal. However, excessive sweating that is not caused by increased temperature may be caused by a condition termed hyperhidrosis (Gr. –hyper, excessive + hidrosis, perspiration).

Primary hyperhidrosis is an idiopathic disorder of the eccrine sweat glands, associated with sympathetic over activity. Defined as focal visible excessive sweating of at least 6 months duration in at least one of the following eccrine dense sites: axilla (armpits), palms, soles or craniofacial area, without apparent cause plus at least 2 of the following characteristics:

- Age of onset before 25
- At least once per week
- Bilateral, relatively symmetrical sweating
- Impairing daily activities
- Absence during sleeping
- Positive family history

Generalized secondary hyperhidrosis can be due to drugs (such as anti-depressants), substance abuse, chronic alcoholism, endocrine or metabolic problems (such as diabetes mellitus, hyperthyroidism), malignancies, cardiovascular disorders, respiratory failure or infections.

Regional hyperhidrosis can be secondary to stroke, peripheral nerve damage and central or peripheral nervous system lesions that cause localized anhidrosis (lack of sweating) with sweating in other areas to compensate for the injury.

Focal secondary hyperhidrosis can be caused by:

- emotional problems (such as anxiety disorder)
- Frey syndrome (a rare neurological disorder affecting the parotid glands)
- eccrine nevus (an extremely rare cutaneous condition that, histologically, is characterized by an increase in size or number of eccrine sweat glands).[3]

The starch iodine test can be used to identify areas of excessive sweat production. Iodine is applied to the area and allowed to dry. A sprinkling of starch produces dark blue color when it binds to the iodine in areas of increased sweat production (Figure 2).

WHAT IS BROMHIDROSIS (FOUL SMELLING SWEAT)?

Bromhidrosis (Gr. bromos stench + hidros sweat) can be very embarrassing. But many people are not aware of it. It can have a hereditary link. It is diagnosed simply from the smell which is rancid and mainly from the armpits, but can involve the genital area and smelly feet as well (Figure 3). The likely cause is bacteria feasting on sweat along with poor personal hygiene. It can be related to obesity, diabetes and fungal infections. Excessive sweating can also be a factor. Some patients resort to unnecessary and harsh cleansing methods which can cause further injury to the skin.

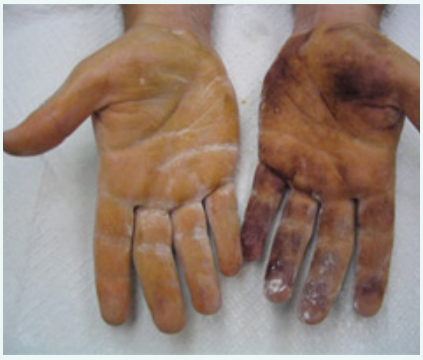

Figure 2 starch iodine test

NONPHARMACOLOGIC TREATMENT OF BODY ODOUR

Goals of treatment include:

- Controlling the smell
- Decrease wetness
- Prevent injury to the skin (fungal or bacterial skin infections, blisters to the hands and feet from excessive wetness)

Personal hygiene tips would include using breathable clothing that is regularly washed in hot water with soap that is preferably unscented. Regular showers and washing with unscented soaps. Proper foot care, with regular change of socks and rotation of shoes to keep footwear dry and clean as possible.

Iontophoresis requires the immersion of the hands or feet in a shallow pan of tap water. A medical device sends a low-voltage current through the water to block the sweat ducts.[4] Side effects include dry skin and discomfort during treatment. The number and frequency of treatments are usually under the care of a dermatologist.

Surgery involves the removal of sweat glands by:

- Excision (cut out sweat glands)
- Liposuction (remove with suction)

Figure 3 Bromhidrosis in the armpit

- Curettage (scrape out)
- Laser surgery (vaporize)

under the care and supervision of the dermatologist.

PHARMACOLOGIC TREATMENT OF BODY ODOUR

Antiperspirants cause sweat to thicken and clump to plug the eccrine gland pores. Aluminum salts (1–2%) can cause skin irritation and fragrance free products may be better for some individuals. Aluminum chloride solutions (up to 25%) are also available. They are more effective if applied at night because sweat glands are less productive.

Deodorants mask body odour with fragrances. To treat smelly feet, foot products contain absorbents such as zinc oxide, corn starch and sodium bicarbonate in powder form.

Botulinum toxin A is a neurotoxin produced by the anaerobic bacterium *Clostridium botulinum*. It is injected intradermally and acts to inhibit the release of acetylcholine at the neuromuscular junction and from sympathetic nerves that innervate eccrine sweat glands, which results in loss of sweating.

Anticholinergic agents work by inhibiting synaptic acetylcholine. They interfere with neuroglandular signalling. Their use is limited because doses required to achieve reduced sweating can also cause adverse effects such as dry mouth, blurred vision, urinary retention, constipation and tachycardia. For example, glycopyrrolate, an anticholinergic drug, at initial doses of 1 mg twice daily may improve hyperhidrosis, but the effective dosage required usually results in unacceptable side effects. Similarly oxybutinin, must be closely monitored by the prescribing physician.[5]

Body odour is a common problem that affects most of the general population at one time or another. Hyperhidrosis however, affects 3% of the population and patients will go to the pharmacy for help. Pharmacists can be helpful with providing their patients with common sense suggestions to control body odour, selecting non-prescription products and help monitor prescribed products. When co-morbidities such as infections, diabetes or medications are suspected, the patient should be referred to their physician for further care.

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3. Haider, A, Solish, N., CMAJ. 2005 Jan 4; 172(1): 69–75.
4. https://www.aad.org/public/diseases/dry-sweaty-skin/hyperhidrosis#treatment, accessed January 2017.
5. https://www.pharmacists.ca/products-services/compendium-therapeutics-minor-ailments/ accessed January 2017.

Evaluating the Credibility of Health Websites: **Can You Trust Dr. Google?**

How to Tell if It's Legit

There are several tools available to evaluate health websites. Most of them list criteria that reliable websites should meet. Here is a summary of the main criteria to look out for:

Author — The website should clearly identify the author, institution, and editorial board (the people responsible for the professional review of the content).

Date — The website should contain current scientific information, and the content should be updated regularly.

Objectivity — The website should be evidence-based and objective (factual) in its content, listing benefits and risks (e.g., side effects). The website should mention other treatment options, if available, including no treatment, and it should encourage patients to consult with a health care professional.

Purpose — The website should state its purpose clearly. Any advertising should be clearly marked and separated from the site's main content.

Transparency — The website should identify its ownership, sources of funding, and explain how it collects and uses personal information.

Usability — The website should be easy to use, well-organized, and well-designed. It should provide a way of contacting the owner of the site.

There will be some credible websites that don't meet all the criteria. Likewise, there will be unreliable websites that look very slick and seem to meet all of them. Ultimately, the only way to know if online health information is accurate is to find the source and read the scientific study being referenced. Learning how to evaluate for the credible criteria, however, will help you start filtering.

Examples of Credible Health Websites

The Medical Library Association has put together a list of pre-screened health websites called the *Top 100 List: Health Websites You Can Trust*. These websites can be accessed on the CAPHIS — Consumer and Patient Health Information Section — site: **caphis.mlanet.org/consumer/index.html**.

Red Flags

- ! The website relies on single cases or personal testimonials.
- ! The information is presented in a sensational, overly emotional, or alarmist way.
- ! The website implies that a treatment affects everyone in the same way (e.g., 100% success rate).
- ! The website is trying to sell you something.
- ! It is not clear who the author is or what qualifications or conflicts of interest he or she has.
- ! Studies are referenced, but they are old (from 10 years ago or more) or the year of publication is not provided.
- ! Links are broken — this could indicate that the site has not been updated recently and that the health information could be outdated.

Tools for Evaluating Health Websites

DISCERN
A validated instrument that enables patients and information providers to judge the quality of written consumer health information. It consists of 15 questions and a rating scale.

HONcode
A set of principles for evaluating websites and a certification seal that websites can obtain after being assessed by the Health On the Net (HON) expert team.

JAMA Benchmarks
Four criteria to score to a website (0 to 4 points) based on authorship, attribution, disclosure, and currency.

Credible Canadian Health Websites

Health Canada
www.hc-sc.gc.ca

Public Health Agency of Canada
www.publichealth.gc.ca

Government of Canada: Health
www.healthycanadians.gc.ca

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ABOUT CADTH

CADTH is an independent, not-for-profit organization responsible for providing Canada's health care decision-makers with objective evidence to help make informed decisions about the optimal use of drugs and medical devices in our health care system.

CADTH receives funding from Canada's federal, provincial, and territorial governments, with the exception of Quebec.

Ce document est également disponible en français.

May 2016

CADTH Evidence Driven.

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DEMONSTRATED EVIDENCE FOR FLUZONE® HIGH-DOSE

AN INFLUENZA VACCINE FOR INDIVIDUALS 65+

FLUZONE® High-Dose vaccine demonstrated superior efficacy vs FLUZONE®, a standard dose influenza vaccine.*†

24.2% more efficacious against laboratory-confirmed influenza illness caused by any viral type or subtype in adults 65 years of age and older (95% CI: 9.7; 36.5).‖¶§

The attack rates of laboratory-confirmed influenza-like illness (primary endpoints) were 1.43% in the FLUZONE® High-Dose arm and 1.89% for the FLUZONE® arm.

INDICATIONS AND CLINICAL USE:
FLUZONE® High-Dose is indicated for active immunization against influenza caused by the specific strains of influenza virus contained in the vaccine in adults 65 years of age and older. Annual influenza vaccination using the most current vaccine is recommended as immunity declines in the year following vaccination.

CONTRAINDICATIONS: Known severe allergic reaction to egg protein or any component of the vaccine or after previous administration of FLUZONE® High-Dose or a vaccine containing the same components or constituents.

RELEVANT WARNINGS & PRECAUTIONS:

- FLUZONE® High-Dose vaccine is not indicated for persons less than 65 years of age.
- As with any vaccine, immunization with FLUZONE® High-Dose may not protect 100% of individuals. Protection is limited to those strains of virus from which the vaccine is prepared or against closely related strains.
- Do not administer FLUZONE® High-Dose vaccine by intravascular injection. Do not administer into the buttocks.
- Postpone vaccination in case of moderate/severe febrile illness or acute disease.
- Administer FLUZONE® High-Dose vaccine with caution in persons suffering from coagulation disorders or on anticoagulation therapy.
- Immunocompromised persons (whether from disease or treatment) may not elicit the expected immune response.
- Avoid vaccinating persons who are known to have experienced Guillain-Barré syndrome (GBS) within 6 weeks after a previous influenza vaccination.

FOR MORE INFORMATION: Consult the product monograph at ***sanofipasteur.ca/PM/fluzoneHD_e*** for important information relating to adverse reactions, drug interactions and dosing information which have not been discussed in this piece. You may also contact Sanofi Pasteur's Vaccine Information Service (in Canada) at 1-888-621-1146.

Fluzone® *High-Dose*
INFLUENZA VACCINE
Senior Influenza Protection

For more information, please visit ***sanofipasteur.ca/PM/fluzoneHD_e*** for the Product Monograph.

* FLUZONE® High-Dose: trivalent influenza vaccine with 60 µg HA per strain/0.5 mL dose. † FLUZONE®: a standard dose trivalent influenza vaccine with 15 µg HA per strain/0.5 mL dose. ‖ In a multicentre study (FIM12) conducted in the United States and Canada, adults 65 years of age and older were randomized (1:1) to receive either FLUZONE® High-Dose or FLUZONE® Trivalent. The study was conducted over two influenza seasons (2011–2012 and 2012–2013). FLUZONE® High-Dose contained 60 µg of HA per strain/dose while FLUZONE® Trivalent contained 15 µg of HA per strain/dose. The per-protocol analysis set for efficacy assessments included 15,892 FLUZONE® High-Dose recipients and 15,911 FLUZONE® Trivalent recipients. The primary endpoint of the study was the occurrence of laboratory-confirmed influenza, defined as a new onset (or exacerbation) of at least one of the following respiratory symptoms: sore throat, cough, sputum production, wheezing, or difficulty breathing; concurrent with at least one of the following systemic signs or symptoms: temperature > 37.2°C, chills, tiredness, headaches or myalgia. ¶ In the first year of the study, the influenza B component of the vaccine and the majority of influenza B cases were of the Victoria lineage; in the second year, the influenza B component of the vaccine and the majority of influenza B cases were of the Yamagata lineage. § The pre-specified statistical superiority criterion for the primary endpoint (lower limit of the 2-sided 95% CI of the vaccine efficacy of FLUZONE® High-Dose relative to FLUZONE® > 9.1%; p-value against H_0:VE ≤ 9.1% = 0.022 one-sided) was met.

MEMBER OF INNOVATIVE MEDICINES CANADA PAAB

SANOFI PASTEUR

NOTICE: PHARMACISTS MANITOBA ANNUAL GENERAL MEETING

Saturday, April 8, 2017, 8:00 am
RBC Convention Centre
375 York Ave., Winnipeg, MB

PHARMACISTS MANITOBA

The Annual Report along with the audited financial statements will be posted to the Pharmacists Manitoba website prior to March 24th, 2017 and circulated electronically to all members. A limited number of print copies will be available at the Annual General Meeting. Members who wish to receive a print copy in advance of the meeting should contact Pharmacists Manitoba at 204-956-6681 or toll free at 1-800-677-7170 or by email to info@pharmacistsmb.ca prior to March 24th, 2017.

PHARMACISTS MANITOBA ANNUAL GENERAL MEETING AGENDA

8:00 am Complimentary Hot Breakfast

1.	Minutes of the Annual General Meeting, April 8th, 2016	
2.	Business Arising	
3.	President's Address	S. Smith
4.	Auditor's Report	
5.	Finance Report	D. Wong
6.	Canadian Pharmacists Benefits Association Report	M. Baxter
7.	New Business	
8.	Closing Resolution	

Six RRSP Myths and Misconceptions

Debunking some common misunderstandings, myths and otherwise incorrect assumptions surrounding registered retirement savings plans (RRSP)

Myth #1: I've worked, therefore I can contribute.
While it is true that one's ability to contribute to an RRSP is based on having earned income, some individuals lose sight of the fact that the income must have been earned in a previous year. This becomes confusing during the first 60 days of the year as individuals have the ability to make a contribution related to two tax years. For example, during the first 60 days of 2016, contributions can be for either the 2016 or 2015 tax year. Individuals making their 2016 contribution will do so based on their 2015 earned income, even though the contribution is being made in 2016.

Myth #2: A spousal contributions gives me twice the deduction
Although this is incorrect, it is surprising to find out how many people believe this to be true. The simplest way of remembering who can take the deduction is to remember that an individual has only one deduction limit based on him/her having earned income (or carryforwards) from a previous year. In the case where spouse A wants to contribute to spouse B's RRSP, the contribution must be made based on spouse A's RRSP limit.

Myth #3: Once I contribute, I can't carryforward
There are actually two types of carryforwards. The first kind of carryforward relates to someone not making use of their ability to contribute to their RRSP. Starting with the 1991 tax year, if you were allowed to contribute to your RRSP but didn't, you can carryforward this ability until such time as you have the funds to make the contribution. Unfortunately, many people lose sight of the fact that once the contribution is made the deduction *does not* have to be claimed and can be carried forward to a future tax year. This can be a good strategy when an individual wants to take advantage of tax-deferred growth now, but knows they will be in a higher tax bracket in the future and will therefore get a better deduction.

Myth #4: Once I turn 71, I can no longer contribute to an RRSP
No piece of legislation exists that states that there are any age restrictions on making an RRSP contribution. Individuals can make a contribution as long as they have earned income in a previous year or at least have a carryforward amount from a previous year. What this means is that someone who is over the age of 71, who has had to collapse their RRSP, can still make a spousal contribution. This of course assumes that (1) the spouse who still has an RRSP is 71 or younger and (2) the contributor is able to contribute because he/she either had earned income the previous year or still has carryforwards that were never used.

Myth #5: I can't contribute in the year I convert my RRSP to a RRIF
Given that an RRSP must be collapsed by December 31st of the year you turn 71, an individual is able to make an RRSP contribution right up to and including the day the RRSP is converted to a RRIF.

Myth #6: I have to use cash to make my RRSP contribution
You don't have to use cash. You can also use stocks and bonds and make a "contribution-in-kind". The thing to remember is that the contribution of the asset is considered a disposition for tax purposes and as a result, tax would have to be paid on the capital gain. It is also vital to remember that if a capital loss should result from the transfer, this loss cannot be used for tax purposes.

If you have any questions about RRSP's, please contact us at 204.946.9223 or Robert.blando@scotiawealth.com.

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Pharmacist Awarness Month 2017

PHARMACISTS MANITOBA

March is Pharmacist Awareness Month (PAM) - the perfect time to celebrate and promote the important role pharmacists play in delivering quality care to patients.

For Pharmacists Awareness Month 2017, Pharmacists Manitoba will be launching a social media campaign, **I Love My Pharmacist.** This is an exciting opportunity for our organization, since this landmarks the beginning of our presence on Twitter.

We will be kick starting our Twitter presence by tweeting facts, quotes and sharing pharmacist related articles for 31 days. Make sure to follow us on Twitter @PharmacistsMB to stay updated and don't forget to use the hashtag #IloveMBpharmacists.

Pharmacists Manitoba has also teamed up with first year pharmacy students who will be at St. Vital Centre in early March to interact with members of the public. Students will engage with the public by handing out "I Love My Pharmacists" stickers and encouraging them to tweet a photo wearing the sticker.

It's not just students who will be handing out stickers, but pharmacists as well. Pharmacists Manitoba will be mailing sheets of stickers to pharmacies across Manitoba prior to PAM.

We are encouraging all pharmacists to hand out stickers to their patients and staff to increase awareness. We are also asking pharmacists to take photos of patients wearing the stickers and to email them to info@pharmacistsmb.ca.

Last year for Pharmacists Awareness Month we teamed up with the Canadian Pharmacists Association (CPhA) for a national and provincial Image and Reputation Survey. The provinical survey results showed Manitobans overall impression of pharmacists, the important role pharmacists play in the healthcare system and much more.

We are pleased to team up with CPhA once again this year and share the survey results in conjunction with PAM 2017.

With the success of our Pharmacists Manitoba Legislative Day back in October, we decided that on March 21st, 2017 Pharmacists Manitoba will be back at the Legislature for a reception to continue our discussion with MLA's and legislative staff regarding professional pharmacist services.

Pharmacists: Doing More. For You.

If you are committed to improving the state of the pharmacy profession in Manitoba and would like to volunteer your time at the reception please contact either of our Government Relations Co-Chairs, Jaden Brandt or Scott Bowles by email at jkrbrandt@hotmail.com or scott_bowles07@hotmail.com respectively.

Alternatively, you may contact the Pharmacists Manitoba office at 1-204-956-6680 to make arrangements to participate.

PHARMACISTS NEEDED

JOIN US ON MARCH 21ST
FOR PHARMACISTS MANITOBA'S RECEPTION
AT THE MANITOBA LEGISLATIVE BUILDING

We are looking for pharmacists to help inform and educate MLA's and legislative staff about the professional services pharmacists provide to support better care, better health and better value for the health care system.

IF YOU HAVE EXPERIENCE WITH:

COMPREHENSIVE MEDICATION REVIEWS

POINT OF CARE TESTING (DIABETES AND CARDIOVASCULAR)

ASSESSMENT & PRESCRIBING FOR MINOR AILMENTS

PLEASE CONTACT

Government Relations Co-Chairs, Jaden Brandt at jkrbrandt@hotmail.com

or

Scott Bowles at scott_bowles07@hotmail.com

GETTING TO KNOW YOUR MANITOBA PHARMACIST

RUBY GRYMONPRE

Place/Year of Graduation:
I obtained my BSc. (Pharm) from the University of Manitoba in 1980 and my PharmD from the University of Minnesota in 1982.

Years in Practice:
You do the math!

Currently Working:
Since graduation in 1982 I have been employed by the Faculty (now College) of Pharmacy, University of Manitoba.

Accomplishments in Pharmacy:
Being the first PharmD in Canada recruited to a tenure track position in a Faculty of Pharmacy and promoted to full professor. Thank you Dr. Steele! Opportunities to teach and undertake scholarly works in the areas of Geriatric Pharmacy and to share my expertise with over 2,000 pharmacy, nursing, medicine and dental students. Serving a seven-year term as the Interprofessional Education Coordinator for the University of Manitoba leading to friendships, collaborations and achievements with colleagues from as far as Japan, United Kingdom, Australia, Qatar, the United States.

Family:
My companion, Darrell and three fantastic sons, Dylan, Kyle and Marcus now 26, 24 and 22 years of age.

Hobbies:
In the past, keeping up with three growing boys..... snowboarding, windsurfing, boating... more recently any activity that gets me outdoors... biking, hiking, kayaking, fishing, gardening and even shoveling snow.

Community Activities:
Now that the kids have grown, I volunteer my time to interprofessional efforts, as a board member to the Canadian Interprofessional Health Collaborative (CIHC), the CIHC representative to the World Coordinating Committee on Interprofessional Education (WCC) and a reference group member to an initiative entitled: Securing an interprofessional future for Australian health professional education and practice.

Favorite Thing About Manitoba:
Our four distinct seasons.

Most Relaxing Vacation Choice:
I have just returned from a one-year sabbatical leave in Gold Coast, Australia...don't tell my Dean...but definitely a relaxing vacation choice.

Pet Peeves:
You can call me Ruth or Rose...but do not call me Rudy!

Favorite fictional character and why?
Dory, the optimistic and free spirited regal tang with short-term memory loss and Marlin, the paranoid overprotective clown fish. Despite their individual differences and limitations, they achieve their goal of Finding Nemo...interprofessional collaboration at its best!

What could you do without forever?
Cooking.

What couldn't you do without for even a day?
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Therapeutic Options

FOCUS ON OSTEOARTHRITIS

By Tim Mickleborough, BSP, RPh, MEd

INTRODUCTION:

Osteoarthritis (OA) is one of the most common musculoskeletal disorders worldwide.[1] In Canada, one in every eight people are affected; this number is predicted to increase to one out of every four in the next 30 years.[2] It is estimated that nearly one in 100 Canadian adults will experience moderate to severe OA pain that will limit their daily activities.[2] A pharmacist can play an important role in helping to manage drug therapy. This article will provide an overview of the therapeutic options for the management of OA.

PATHOPHYSIOLOGY, SYMPTOMS AND RISK FACTORS:

The main symptoms of OA are joint pain, stiffness and locomotor restriction which can subsequently cause symptoms of muscle weakness and poor balance.[3] Pain is the most frequent symptom and can appear at any time of the day, but is generally worse in the late afternoon and early evening.[3] In some cases, pain can be severe enough to interfere with sleep.[3] Stiffness of a joint tends to be short-lived (<30 minutes),[1] worse after effort, and is more commonly seen in the evening, unlike morning stiffness commonly seen after rest in rheumatoid arthritis.[1,3] OA can affect any joint in the body but typically occurs in the joints of the knee, hip, spine and hands and is less common in the joints of the elbow, wrist, shoulder and ankle.[3] At one time, OA was considered a degenerative disease; however, it is now recognized that in addition to 'wear and tear' on the joint, there are definite biochemical and inflammatory changes involved within the cartilage matrix and joint structure.[1,4]

Many risk factors have been linked to OA. Advanced age is one of the strongest risk factors. Prevalence increases from less than 0.1% in those aged 25-34 years old to over 80% in people over 55 years of age.[5] Females have a higher risk of developing OA and are more likely to require a hip replacement.[5] The biggest modifiable risk factor for OA is obesity. However, obesity doesn't affect all joints in the same way; it has a greater impact on the knees and hands and less for the hip.[5] Other risk factors include physical activities (sports or occupations) which may involve repeated damage over time.[5]

THERAPEUTIC OPTIONS

The goals of OA therapy are to alleviate or eliminate joint pain, improve or restore joint function and mobility, improve muscle strength to protect joint structures, and ultimately prevent and reduce damage to joint cartilage and bone.[1]

NONPHARMACOLOGIC OPTIONS

Nonpharmacologic measures are important to manage OA and improve quality of life and include: patient education, physical therapy, orthotics and aids to daily living, exercise, physiotherapy and weight loss.[1] Ideally, treatment of OA should involve a multidisciplinary team of occupational therapists, physiotherapists, social workers, pharmacists and physicians.[1]

PHARMACOLOGIC OPTIONS

Management of OA involves a step-wise approach starting with topical analgesics and progressing to oral analgesics (e.g., acetaminophen, nonsteroidal anti-inflammatory drugs (NSAIDs), and opioids) and injectable agents.[1]

Topical analgesics

Topical analgesics such as diclofenac and capsaicin provide an alternative treatment for mild to moderate pain[6] for those patients who cannot tolerate or who are at increased risk of gastrointestinal, renal, cardiovascular or other adverse effects associated with oral NSAIDs.[1,6] The efficacy of topical NSAIDs, either as monotherapy or as an adjunct to non-NSAID therapies, is considered superior to placebo and equal to oral NSAIDs[1,6] and is associated with a lower incidence of gastrointestinal (GI) bleeds.[1] For this reason, topical NSAIDs such as diclofenac are recommended over oral agents for persons 75 years of age and older.[1,6] Local skin reactions such as rash, itching or burning are the most significant side-effects.[6]

Topical capsaicin can be used as an adjunct with other therapies or as monotherapy for those patients unable to tolerate oral or topical NSAIDs;[6] however, there is limited efficacy supporting its use.[1] The most common

side-effect is local irritation (burning, stinging, erythema).[6] Patients should be instructed not to apply capsaicin to the affected joint and then touch other areas of the body such as the eyes or genital areas.[6] Zucapsaicin is the "Z" isomer of capsaicin[7] and is approved as an adjunct to oral NSAIDs.[1] Zucapsaicin has not been shown to be more effective than capsaicin.[7]

Simple analgesics

The first choice of an oral drug for treating OA pain is acetaminophen because of its relatively low risk of side effects.[1,6,8] According to a recent meta-analysis, acetaminophen provides a significant, but small effect in reducing hip or knee pain compared to placebo when used short term.[9,10] Acetaminophen is not associated with significant gastrointestinal bleeding, cardiovascular toxicity or adverse renal effects; however, some evidence suggests that chronic use of acetaminophen can cause dose-dependent, long-term nephrotoxicity.[6,8] Acetaminophen's effect on the liver is well known.[6] Risk factors for acetaminophen-induced hepatotoxicity include malnutrition (due to fasting, gastroenteritis, chronic alcoholism or HIV disease) and use of concomitant, enzyme-inducing drugs such as rifampin, phenytoin, carbamazepine, barbiturates and ethanol. Both factors increase the presence of the toxic metabolite of acetaminophen.[11]

Acetaminophen is usually initiated on an as-needed basis, but in patients whose symptoms persist, a regular dosage range of 3gm to 4gm daily is recommended.[1,8,10,12,13] A lower daily dose of 2gm or 3gm is recommended in those patients who are frail, elderly, malnourished, on enzyme inducing drugs or chronic users of alcohol.[8,14] Pharmacists should monitor for excessive acetaminophen use and counsel patients to avoid concomitant acetaminophen-containing products such as over-the-counter cold remedies and combination acetaminophen-opioid pain relievers.[1,11,12]

NSAIDs

If full-dose acetaminophen does not sufficiently relieve pain, then a trial of topical or oral NSAIDs is warranted. Oral NSAIDs are more effective than acetaminophen in treating OA pain but are associated with an increased risk of gastrointestinal, cardiovascular, cerebrovascular and renal adverse effects.[1,8,12,14] The side-effect profile of NSAIDs correspond with their ability to inhibit cyclo-oxygenase enzymes (COX-1 and COX-2). Non-selective NSAIDs such as naproxen and ibuprofen impair COX-1 mediated mucosal protection whereas the selective COX-2 inhibitor, celecoxib, maintains stomach protection as it lacks significant COX-1 inhibition.[15] Compared to traditional NSAIDs, celecoxib has a 50-70% lower risk of causing complicated peptic ulcer bleeding.[16]

The cardiovascular risk factors of NSAIDs are also related to their inhibition of COX-1 and 2. The selective COX-2 inhibition by celecoxib increases the risk of cardiovascular events in patients with pre-existing cardiovascular disease due to the unopposed COX-1 vasoconstriction and platelet aggregation. Nonselective NSAIDs have varying COX selectivity and as such their cardiovascular risk will vary accordingly.[17] Diclofenac has significant COX-2 inhibition and, of the nonselective NSAIDs, it has the highest cardiovascular risk.[17] Ibuprofen at doses ≥ 2400mg/day has a similar risk of heart attack and stroke compared to diclofenac and celecoxib.[18] Naproxen, which has less COX-2 selectivity, is the preferred non-selective NSAID in patients with high cardiovascular risk.[17] The PRECISION trial found celecoxib to be equivalent to ibuprofen or naproxen with regard to cardiovascular safety;[19] however, one critique questioned these results based on participants' degree of cardiovascular risk, doses used, patient adherence and potential drug interactions.[20]

All NSAIDs can increase blood pressure so monitoring at baseline and during therapy is recommended.[1] NSAIDs are also contraindicated in patients with severe renal impairment (CrCl < 30mL/min) and prolonged use is discouraged in patients with mild to moderate renal impairment.[1]

Opioid Analgesics

Opioid analgesics are effective for managing OA pain but are not considered first-line therapy because of their extensive side-effect profile (e.g., constipation, sedation, confusion, dizziness, increased risk of falls and fractures and potential for addiction).[1,21] Opioids may be used in patients with moderate to severe pain who fail to respond to or cannot tolerate other options.[21] Tramadol may be a safer option for the elderly compared to opiods as it has a more tolerable side effect profile and it has a consistent pharmacokinetic profile regardless of age. It can be used in conjunction with or as an alternative to acetaminophen and NSAIDs.[1]

Antidepressants

In a recent meta-analysis of treatment of osteoarthritis knee pain, duloxetine, at doses between 60mg and 120mg daily, was more efficacious than placebo in reducing pain and improving function.[22] No serious adverse effects were reported.[22] However, in one study, adverse effects related to nausea and asthenia lead to drug discontinuation.[1] Duloxetine may be an appropriate option if the patient has concomitant depression and/or neuropathy.[1] Although duloxetine has antiplatelet properties, the combination with NSAIDs did not result in an increased risk of bleeding-related events compared to NSAID use alone.[1]

Glucosamine and Chondroitin

Due to limited evidence,[6] the American College of Rheumatology does not recommend glucosamine and chondroitin therapy for the treatment of OA.[12] There are few significant side-effects associated with their use.[6]

Oral corticosteroids

Oral corticosteroids are not recommended for treating OA. The potential side effects of bone density loss, development of osteoporosis and increased risk of joint osteonecrosis outweigh the benefits of this therapy.[1]

Injectable therapy

Intraarticular (IA) glucocorticoids are recommended for those patients who are experiencing pain in one or a few joints that are not adequately controlled with oral therapy.[6] The maximal benefits of IA glucocorticoids are typically seen during the first two weeks of therapy and diminish afterwards.[1,6] In weight-bearing joints, these injections are limited to three to four injections per year to reduce the risk of a Charcot-type arthropathy.[1]

Intra-articular (IA) injections of hyaluronic acid (HA) reduces the mechanical stress on the joint[23] and may be used in patients who do not respond adequately to oral therapy, or IA glucocorticoid injections,[21] or in patients over 75 years of age who are at risk of NSAID or opioid adverse effects.[1,21] Systematic reviews demonstrate a small beneficial effect on

pain and function, while a network meta-analysis showed superior efficacy to oral NSAIDs and IA corticosteroids in reducing pain and stiffness.[1] The duration of action may be longer than that of corticosteroid injections.[1]

There are many HA injections on the market and the differences among them are outlined in **Table 1**.

Treatment of OA can be complex as there are multiple topical, oral and injectable options available for patients. Pharmacists can play a role in the prevention and management of troublesome side effects and educate patients about their various treatment options.

TABLE 1: Injectable Hyaluronic acid (HA) products currently available in Canada

Trade name (manufacturer/ distributor)	Chemical name	Product Source	Supplied	Approved dosing	Approved indications
Cingal ™ (Anika Therapeutics Inc)[24]	triamcinolone hexacetonide / sodium hyaluronate[25]	bacterial source[26]	triamcinolone hexacetonide 18mg/sodium hyaluronate 88mg per 4ml syringe[25,26]	Single dose 4 mL injection[26]	OA of knee [26]
Durolane ® (Bioventus)[24]	NASHA® patent-processed HA[27]	bacterial source[27v]	60mg/3ml[27]	Single dose 3 mL injection (may be repeated as required by the physician)[27]	a) OA of knee, hip, ankles, fingers, toes. b) Pain following joint arthroscopy in the presence of OA within 3 months of procedure[27]
Durolane ® SJ (Bioventus)[24]	NASHA® patent processed HA[27]	bacterial source[27]	20mg/mL[27]	Single dose 1 mL injection (may be repeated as required by the physician) [27]	a) OA of ankle, fingers, toes. b) Pain following joint arthroscopy in the presence of OA within 3 months of procedure[27]
Euflexxa ® (Bio-Technology General (Israel) Ltd)[24]	sodium hyaluronate 1%[24]	bacterial source[28]	20mg/2ml[28]	2 mL once weekly for 3 weeks (total 3 injections)[28, 29]	OA of knee[28]
Hyalgan ® (Fidia Farmaceutici S.p.A)[24]	sodium hyaluronate[30]	avian source (rooster combs)[30]	20mg/2ml[30]	2 mL once weekly for 5 weeks (total 5 injections); some patients may benefit with total 3 injections given at weekly intervals[29,30,31]	OA of knee[29,30]
Monovisc ® (Pendopharm)[24]	sodium hyaluronate[32]	bacterial source[29,32]	80mg/4ml[32]	Single dose 4mL injection[32]	OA of knee[32]
NeoVisc ® (Tribute Pharmaceuticals Canada Ltd.)[24]	sodium hyaluronate[33]	bacterial source[33]	20mg/2ml 60mg/6ml[33]	2 mL once weekly for total of 3 to 5 injections (repeat every 6-8 months, depending on clinical response); Single dose 6 mL injection (repeat depending on clinical response)[33]	Synovial fluid replacement following arthrocentesis[33]
OrthoVisc ® (Pendopharm)[24]	sodium hyaluronate[34]	bacterial source[34]	30mg/2ml[34]	2 mL once weekly for 3 weeks (total 3 injections); additional series of injections may be administered when clinically indicated[34]	OA of knee[34]
Suplasyn ® (Mylan)[24]	sodium hyaluronate[35]	bacterial source[35]	20mg/2ml[35]	2 mL once weekly for 3 weeks (up to 6 weekly injections depending on condition)[35]	OA of knee, hip, toe, ankle, thumb, etc[35]
Suplasyn ® MD (mini dose) (Mylan)[24]	sodium hyaluronate[35]	bacterial source[35]	7mg/0.7ml[35]	0.7 mL once weekly for 3 weeks (additional injections may be administered depending on condition)[35]	Viscoelastic supplement for small synovial joints (for larger joints, Suplasyn 20 mg/2 ml should be used) [35]
Synvisc ® (Genzyme Biosurgery)[24]	hylan G-F-20 (hylan polymers A and B)[36]	avian source (chicken combs) [29,36]	16mg/2ml[36]	2 mL once weekly for 3 weeks (total 3 injections)[29,36]	OA of knee[36]
Synvisc-One ® (Genzyme Biosurgery)[24]	hylan G-F-20 (hylan polymers A and B)[36]	avian source (chicken combs)[29,36]	48mg/6ml[36]	one 6 mL injection[29,36]	OA of knee[36]

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THE CELTIC CURSE:

HEREDITARY HEMOCHROMATOSIS AND THE PHARMACISTS' ROLE IN HELPING TO IDENTIFY SUFFERERS

Carlyn Volume-Smith B.Sc.Pharm., M.Sc., PhD

Hereditary hemochromatosis (HHC) is an inherited disorder which causes patients to absorb too much iron from his/her diet. This excess iron then accumulates in the patient's body, causing deposits in organs and joints. Individuals with HHC who are suffering from effects of iron overload often remain undiagnosed until organ damage or other negative effects impact their longevity and quality of life. As one of the most accessible health care providers, pharmacists have the potential to play a key role in identifying patients who may suffer from iron overload due to HHC.

HHC is a recessive disorder that is commonly seen in persons of Celtic and Northern European heritage. It is estimated that, in Canada, the incidence in the general population is 1 in 300. Not all patients with the gene mutations go on to load iron, but for those that do, early intervention can prevent long term consequences.

Patients usually present in midlife, when body iron stores have accumulated and negative effects start to be felt. In some cases, a family history of severe liver disease (cirrhosis and/or cancer), arthritis and diabetes may be present. Onset in males is usually earlier than in females, who may be at lower risk due to pregnancies and menstrual blood losses which can deplete iron and prevent symptoms of iron overload.

Community pharmacists are often among the first health care providers approached by patients suffering from the diverse and non-specific symptoms of iron overload. In some cases, patients may seek the assistance of a pharmacist in an effort to self-treat before proceeding to their family physicians. Unfortunately, some remedies for iron overload symptoms can harm HHC sufferers over the long term. For example, advising regular dosing of acetaminophen could harm an already damaged liver. Recommending iron supplements or multivitamins with iron can aggravate iron overload in an already dangerous situation.

Two or more of the following common indicators of iron overload should prompt a referral to a physician for additional investigation:

- arthritis and joint pain (in particular the first two joints of the first two fingers)
- general tiredness
- changes in mood, anxiety or depression
- chest pains and shortness of breath
- impaired sexual function or infertility
- loss of body hair
- tanned or grey skin discoloration

When presented with middle aged or older individuals (particularly males) seeking treatment for two or more of the symptoms outlined above, pharmacists should ask the following questions prior to recommending over the counter therapies: First, is the individual of Celtic or Northern European heritage? And is there a history of severe liver disease, arthritis and/or diabetes in the family? If the answers to these questions are positive, there is merit in referring the patient to their physician for additional testing to rule our HHC.

Once HHC and iron overload is diagnosed, the primary treatment is regular removal of blood (phlebotomy). Phlebotomies prompt the body to mobilize excess iron stored in joints and organs to make new red blood cells to replace those that were taken. Phlebotomies occur on a regular basis (e.g., weekly) until such time that serum ferritin and transferrin saturation reach reasonable levels. Though alterations in diet cannot treat iron overload, patients are also advised to avoid dietary iron which can negatively affect iron build-up. Once iron stores are normalized, HHC sufferers typically require phlebotomies every three to four months as maintenance therapy. Regular blood donation can be used in some cases as maintenance therapy.

The Canadian Hemochromatosis Society (www.toomuchiron.ca) is a registered non-profit society that works to promote early diagnosis of hemochromatosis through increased awareness of the disorder in both the medical community and public. The CHS is also an information resource for individuals and families affected by iron overload. The Society also offers the" Iron Tracker" app for Android and Apple to assist patients in managing their condition.

WHY DO DRUGSTORES ENDURE?

A VENERABLE BUSINESS PLAN CONTINUES TO WORK AS A MARKETING TOOL

By Andrew Allentuck

It is a paradox that drug stores, which historically have been fixtures of the retail industry as apothecaries and as merchandisers, remain at the forefront of reshaped retailing, not just survivors of the onslaught of web-based marketing, but as victors in the highly competitive health products business. The combination of product mix, visible professional management and an inventory of vital products keeps a nineteenth century business concept robust in the 21st century.

As I write this column, several broad market retailers, including Macy's in the U.S, which closed 100 stores last year and announced closings of another 60 in early January this year, and department stores within the Sears Holdings Corporation, which has shut many stores and sold off valuable brands such as its Craftsman tools to Stanley Black and Decker Inc., have slashed their operations. Meanwhile, Amazon Inc. is growing into the largest retailer in the U.S.

In the midst of this carnage, which is a migration of in-person shopping to impersonal shopping, drug stores, which are a venerable and even anachronistic business model, are thriving. For example, shares of Walgreen Boots Alliance Inc., which announced late last year that it would buy rival drug chain Rite Aid Corp., are holding nicely in the range of US$82 with a 1.8% annual dividend. Mixing drugs and front of store merchandise remains a good business in a time of specialized retailing.

For the record, the concept and business of apothecaries can be traced back to ancient Babylon at 2,600 B.C. The business flourished in medieval Europe, in Britain in particular. Today, this venerable form of specialized retailing is thriving in Canada and elsewhere. The reasons for the phenomenon lie in the nature of the business and some fascinating statistics.

Statistics Canada data shows a remarkably consistent ratio of pharmacies to population varying from one retail pharmacy per 4,422 persons in Quebec to 3,399 in Saskatchewan. Tiny Prince Edward Island is an outlier with one pharmacy to 3,109 residents.

Moreover, in Canada, in the first decade of the millennium the growth of drug sales outpaced that of all retail commodities combined. Drug sales grew at an annual average rate nearly 50% higher than that of all commodities combined, reports Statistics Canada, evidence of both the aging population and some redefinition of merchandise categories.

The drug store is the anchor of most retail strips now, though it was not in the past, says Toronto-based retail analyst John Winter. "Notions and lotions sell well to an aging population," he explains. "There is more demand for products as people age. Once they are in the pharmacy, a twenty minute wait time to fill a script creates a customer almost forced to stay in the store. That is browsing time and few patients waiting resist the opportunity to buy front of store merchandise. Customers see things that are body-related. It is anchor shopping for necessities with time to buy luxuries."

There are other differences. Pharmacies have shorter lineups than many retail stores and the person at the end of the lineup may be the knowledgeable pharmacist rather than the less informed store sales associate.

There is also the phenomenon of affinity. The neighbourhood or town pharmacy creates repeat business. The pharmacist in a white jacket behind the counter is an accepted health expert. Lineups in pharmacies are short compared to those in retail stores, especially on weekends and before holidays. Drugstore service can be fast, witness a person just stung by a wasp. The pharmacist can grab an antihistamine and perhaps provide an ice pack a lot faster than a doctor in a walk-in clinic or a hospital emergency room.

As well, there is the bonding of the drug file. In theory, a patient in Manitoba can visit any dispensary. The pharmacist can check other drugs dispensed via the Drug Programs Information Network database, yet patients tend to stick with what and who they know. Cherry picking to get one script filled here and another there is rare with the exception of patients who know dispensing fee schedules, have little or no drug insurance and want to manage drug costs.

Then there is auto-suggestive merchandising. For the person interested in health, one vitamin suggests another. Brand extensions make sense in the pharmacy context though they can be confusing in ordinary retail space or in a grocery store. In the drug store, it is a question of the right toothpaste. In the grocery

store, which of many toothpastes to buy can be one choice too many.

There is also reciprocity, for the pharmacist may know the patient or at least have an insight into the condition that brings him or her to the counter. He or she may provide flu shots. There is a level of confidence in the drugstore than the general retail environment can't match.

That confidence may spill over to conventional merchandising. End of aisle deals or "must have" products work for the person waiting as well as the grab and go shopper. Above all, there is a sense of legitimacy in the drugstore. A hair comb sold in a pharmacy environment is arguably a health care product rather than a pocket gadget when sold as general merchandise in a mall. It is a change of concept based on a revised conception of the product. It goes from bauble in the general retail environment to a perceived necessity or perhaps just very good idea in the drug store.

Canadian pharmacies are capitalizing on two trends – the aging population, of course, and rising pharmaceutical expenditures per capita. Health data from the Organization for Economic Cooperation and Development show that pharmaceutical expenditure per capita rose by an astonishing 92% in 2012 over 2000 and pharmaceutical expenditures as a fraction of all health expenditures rose by 8% in the same period.

The shopping experience in the drugstore is far different than shopping for retail merchandise in general. It is focused on health products in an environment with professional oversight, is familiar and often associated with a pharmacist seen over many repeat visits, and is personal in a way that buying from internet vendors such as amazon.com cannot be.

There is a final and subjective explanation for the shift of business and of growing business in pharmacies. "Pharmacy students have a service orientation that they should help the population whether in hospitals or community pharmacies", explains Brock Cordes, an instructor on the marketing faculty of the Asper School of Business at the University of Manitoba. "The students know that they are there for the well-being of patients. The result is that when patients want to act contrary to their own welfare, the pharmacist points this out. That is rare in service businesses. Patients perceive that pharmacists have the knowledge, skill and motivation to do the correct thing. This is rare in the retail environment. You establish a relationship and that produces a lot of loyalty."

Finally, there is the issue of necessity. Almost everyone visits a pharmacy. It may be the anchor of an attached general merchandise store, a grocery store, or a department store. By accident and by plan, pharmacies are a basic community shopping facility with proliferation limited by availability of the pharmacist and frequency of customer visit determined by health needs which grow with age as well as role in the family. There is hardly another retail experience so grounded in the combination of necessity and restricted competition. It has worked for hundreds of years and shows no sign of failing. The venues of the apothecary business have migrated from stand-alone shops to kiosks in other retail environments, but the core business remains. And that is why drug stores flourish in a time when other retail concepts, such as department stores, are being shredded by the internet.

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