



Ontario College
of Pharmacists
Putting patients first since 1871

PHARMACY CONNECTION

WINTER 2014 • VOLUME 21 NUMBER 1

THE OFFICIAL PUBLICATION OF
THE ONTARIO COLLEGE OF PHARMACISTS

**THANK YOU
TO OUR
PRECEPTORS**

**THE ROLE OF
SUPERVISION IN
PROFESSIONAL
TRAINING**





Ontario College of Pharmacists

Putting patients first since 1871

MISSION:

The Ontario College of Pharmacists regulates pharmacy to ensure that the public receives quality services and care.

VISION:

Lead the advancement of pharmacy to optimize health and wellness through patient-centred care.

VALUES:

Transparency - Accountability - Excellence

STRATEGIC DIRECTIONS:

1. Optimize the evolving scope of practice of our members for the purpose of achieving positive health outcomes.
2. Promote the use and integration of technology and innovation to improve the quality and safety of patient care, and to achieve operational efficiency.
3. Foster professional collaboration to achieve coordinated patient-centred care and promote health and wellness.
4. Build and enhance relationships with key stakeholders, including the public, the government, our members, and other health care professionals.
5. Apply continuous quality improvement and fiscal responsibility in the fulfilment of our mission.

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K Esmail Merani	PM Gitu Parikh
K Mark Scanlon	PM Shahid Rashdi
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L Farid Wassef	

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- Accreditation
- Discipline
- Fitness to Practise
- Inquiries Complaints & Reports
- Patient Relations
- Quality Assurance
- Registration

Standing Committees

- Communications
- Drug Preparation Premises
- Finance & Audit
- Professional Practice

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The objectives of Pharmacy Connection are to communicate information about College activities and policies as well as provincial and federal initiatives affecting the profession; to encourage dialogue and discuss issues of interest to pharmacists, pharmacy technicians and applicants; to promote interprofessional collaboration of members with other allied health care professionals; and to communicate our role to members and stakeholders as regulator of the profession in the public interest.

We publish four times a year, in the Fall, Winter, Spring and Summer.

We also invite you to share your comments, suggestions or criticisms by letter to the Editor. Letters considered for reprinting must include the author's name, address and telephone number. The opinions expressed in this publication do not necessarily represent the views or official position of the Ontario College of Pharmacists.

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Marshall Moleschi,
R.Ph., B.Sc. (Pharm), MHA
Registrar

In this first issue of 2014, I'd like to take a moment to reflect on the work of the College this past year as it will continue to shape our work over the coming months and years.

The focus of our work throughout any given year is directed by Council's strategic plan. Considering our mandate of public assurance we must always remain flexible and responsive to specific incidents or issues that arise, including the evolving needs or attitudes expressed by government or the public at large. This past year, much of the College's work was influenced by such external factors.

Early in 2013 this College, as part of a small group of health professional regulators (AGRE – Advisory Group of Regulatory Excellence) – which consists of representatives from medicine, nursing, dentistry, pharmacy, optometry and physiotherapy – began work on a multi-staged initiative to examine information-sharing practices and determine how regulators might be more transparent in disclosing information regarding regulatory decisions and processes. The purpose of this project is to better assist the public

“Reflecting on past events is useful, but the real value is in extracting the lessons and allowing those to shape and influence our work as we move forward.”

in making informed choices regarding their healthcare.

The first step in this initiative was completed in 2013 and included the development of transparency principles designed to guide regulatory colleges' future decisions about making information available to the public. Although this framework has already influenced decisions within our College — such as approved changes to College by-laws last year that established the posting of the outcome of pharmacy inspections on the Public Register — we can expect more changes throughout 2014 as we continue to respond to the growing need for greater transparency.

The work of the College in 2013 was also significantly influenced by the incident of alleged under-dosing of chemotherapy medications to patients in four hospitals in Ontario and one in New Brunswick. This College, in collaboration with the Ministry of Health and Long-Term Care, Health Canada, Cancer Care Ontario and the Ontario Hospital Association, worked quickly to draft regulations and enabling by-laws that gave us the authority to inspect Drug Preparation Premises (DPP) where pharmacists and pharmacy technicians practice.

As we move into 2014 this incident continues to inform our work as we lead the implementation of many of the recommendations put forward by Dr. Jake Theissen

in his independent report of the incident — accepted by government last August. In particular, we are anticipating the passing of *Bill 117: Enhancing Patient Care and Pharmacy Safety Act*, which would provide the College with regulatory oversight of hospital pharmacies. In advance of this, we have begun work on establishing the framework necessary — including the development of inspection criteria — to take on this additional authority.

It is our professional responsibility, both as a regulatory college and individual practitioners, to be receptive to sentiments and incidents such as this as they will continuously shape our profession and remind us of our overriding mandate to protect the public. This important message of professional responsibility will also be the theme for a number of district meetings this spring — watch for details coming to your inbox via e-Connect, the College's new official communications vehicle.

Reflecting on past events is useful, but the real value is in extracting the lessons and allowing those to shape and influence our work as we move forward. I hope you are able to keep this focus in mind and use it to inform your practise as we fulfill our professional responsibilities in the year ahead.

All the best in 2014,

Marshall Moleschi 

DECEMBER 2013 COUNCIL MEETING

As recorded following Council's regularly scheduled meeting held at the College offices on December 9th, 2013.

TASK FORCE ON GOVERNANCE SEEKS FEEDBACK

Since its establishment in March 2013, the Task Force on Governance (TFG) has met regularly to review the College's governance model and develop new comprehensive governance documents. At this Council meeting, a full discussion was held on several topics on which the TFG wanted direction from Council. The process was chaired by the President, Ms. Tracey Phillips, and facilitated by Mr. Richard Steinecke. Direction and input was received on all the issues identified and it is anticipated that the draft governance documents will be available for Council review and subsequent approval over the next two Council meetings.

BILL 117, ENHANCING PATIENT CARE AND PHARMACY SAFETY (STATUTE LAW AMENDMENT) ACT, 2013

The Registrar provided Council with an overview of Bill 117, which at the time of this Council meeting was in second reading in the legislature. On October 10, 2013, Minister Matthews introduced *Bill 117, Enhancing Patient Care and Pharmacy Safety Act*, which, if passed, will provide authority to this College to regulate hospital pharmacies. In addition to changes

to the *Drugs and Pharmacies Regulation Act* (DPRA) to provide this authority to the College, the Bill includes proposed amendments to the *Regulated Health Professions Act* (RHPA) and the *Public Hospitals Act* (PHA). These amendments (1) enable health regulatory colleges to more readily share information with public health authorities for the purposes of administering the *Health Protection and Promotion Act*; (2) permit health regulatory colleges to share complaints-related information with a hospital; (3) require a hospital or employer to report to health regulatory colleges if a regulated health professional has voluntarily restricted his or her practice or privileges because of concerns regarding the member's conduct or practice; (4) allow the government to more quickly appoint a College supervisor in order to address any serious concerns regarding the quality of a college's governance and management; and (5) provide health regulatory colleges the flexibility to focus their investigation of complaints to matters that are likely to constitute professional misconduct, incompetence or incapacity.

The proposed legislation is intended to improve the health system's ability to identify, communicate and respond quickly to any future incidents affecting patient care and safety. Council

noted for information that since the introduction of this Bill, the Registrar has attended meetings with a number of hospital pharmacy groups across the province to outline and discuss the College's proposed activities in relation to this legislation.

PROFESSIONAL MISCONDUCT REGULATION APPROVED

In June 2013, Council approved for circulation a draft amended regulation to the *Pharmacy Act* addressing professional misconduct. The regulation, which was circulated to members and stakeholders for consultation and feedback, required updates to reflect changes in legislation and evolving practice including: the addition of a new class of registrants (pharmacy technicians), the expanded scope of practice, and the evolving expectation that members exercise professional judgment in choosing to deliver services and/or referring patients to another health professional as needed.

At the December meeting, following consideration of the feedback which resulted in only minor revisions to the circulated draft amended regulation, Council unanimously (with one noted abstention) voted in favour of approving the amendments to *Ontario Regulation 681/93* to the



Photos by DW Dorken

Pharmacy Act which will now be submitted to the government for enactment.

The regulation, in addition to giving members further clarity regarding ethical practice and professional boundaries, provides Council, committees and staff with a valuable screening mechanism to support and guide decisions when considering potential professional misconduct.

NEW TASK FORCE ON PROFESSIONAL RESPONSIBILITY IN PRACTICE ESTABLISHED

Council approved the establishment of a Task Force on Professional Responsibility in Practice. The mandate of this Task Force will be to review pharmacists' and pharmacy technicians' practice responsibility in light of the alleged diluted chemotherapy treatment issue. The Task Force will make and communicate recommendations to pharmacists and pharmacy technicians to raise awareness amongst practitioners of their practice responsibilities focused on ensuring safe practice for patients in Ontario. Led by Vice President Scanlon the Task Force, in addition to reporting its findings and recommendations to Council, will share these recommendations with the Standing Committee on Social Policy.

TRANSPARENCY PRINCIPLES UPDATE

As reported previously, this College, together with five other health regulatory colleges, is working on a multi-staged initiative that will see us examine our information-sharing practices and determine how we might make more information available to the public about college decisions and processes. The eight proposed common transparency principles were presented to Council in September and since then, to several committees. As well, they have now been shared and endorsed by the other five college councils.

Council heard that progress continues to be made on this initiative through the Transparency Working Group, as it compares the processes and data collection among Colleges. As well, AGRE, (the Advisory Group for Regulatory Excellence), which has oversight of this initiative, has engaged a public consultation firm to conduct a public poll to determine the type of information the public would consider useful. It is anticipated that more information will be forthcoming at the Council meeting in March 2014.

NAPRA BOARD SETS PRIORITIES FOR 2014

Registrar Moleschi reported to Council that the Board of the National Association of Pharmacy Regulatory Authorities (NAPRA), at its meeting in November, identified three top priorities for 2014: (1) development of Sterile and Non-sterile Pharmacy Compounding Standards; (2) review of the Standards of Practice (pharmacist and pharmacy technician); and (3) coordination of the external consultation on the Pharmacy Practice Management Systems document; all of which align closely with this College's priorities. Ms. Tracy Wiersema, OCP Past President and current NAPRA Vice President, continues to ably represent Ontario at that table. Updates on all these priorities will be communicated to Council, and the membership, as they become available.

NEW PUBLIC MEMBER APPOINTMENTS

Council welcomed to the table Mr. Norman MacDonald, Public Member from Toronto, who has been appointed to College Council for a period of three years beginning November 6, 2013. For the 2013/2014 term, Mr. MacDonald has been appointed to serve on the Discipline and Registration Committees of the College.



BILL 70, RHPA AMENDMENT ACT (SPOUSAL EXCEPTION)

Council noted for information that Bill 70, The *Regulated Health Professions Act* (RHPA) (Spousal Exception), 2013 had now passed third reading. The Bill amends the Health Professions Procedural Code to allow for an exception to the mandatory revocation of a member's certificate of registration where the patient is the member's spouse. Over the next year, this College will: (1) communicate with members to clarify the College's views on spousal treatment by pharmacists; (b) update current guideline on Maintaining Appropriate Boundaries and Preventing Sexual Abuse and Harassment to reflect passage of this legislation; and (3) draft the necessary regulation under clause 95(1)(O.a) for submission to government.

CITY OF LONDON – METHADONE PHARMACIES AND CLINICS – BY-LAW

This College was recently made aware that the City of London has enacted By-Law L-8 which requires the licensing and regulation of methadone pharmacies and methadone clinics. In keeping with the College's mandate of public protection, the Registrar wrote to Minister Matthews (Health and Long-Term Care) and

Minister Jeffrey (Municipal Affairs and Housing) advising them of the College's concern that this by-law may jeopardize methadone patients' access to continuous care and result in a negative impact on the patients' health. This concern is shared by the College of Physicians and Surgeons of Ontario. Both Colleges are committed to working with the two Ministries involved, as well as the City of London, to find solutions to address this issue without jeopardizing patient care.

UPDATE ON THE COLLEGE/LESLIE DAN FACULTY OF PHARMACY PARTNERSHIP TO ENHANCE COMMUNITY PHARMACY PRACTICE

In Fall 2012, the College signed an agreement with the University of Toronto to establish a Program that will address, through extensive research, the underlying behavioural issues and characteristics of pharmacists that are inhibiting pharmacists from confidently embracing/adopting an expanded scope of practice in the health care system. Dr. Zubin Austin provided a status report to College Council on the research activities undertaken by the University over the past year, as well as their results and the plan for the upcoming year.

To ensure that the Program is collaborative and continues to address the needs arising from an

expanded scope of practice, an Advisory Committee was established. The Committee is chaired by Registrar Moleschi who will be working directly with Dr. Austin this Spring to share and build on this work through a series of workshops throughout the province. Council will continue to be regularly updated on development of this very important initiative. **Pc**

NEXT COUNCIL MEETINGS:

- Monday 17 March, 2014
- Monday 16 June, 2014
- Monday 15 and Tuesday 16 September 2014

For more information respecting Council meetings, please contact Ms. Ushma Rajdev, Council and Executive Liaison at urajdev@ocpinfo.com

Introducing e-Connect:

COLLEGE'S NEWEST COMMUNICATION TOOL

In January 2014, the College launched its first e-newsletter, e-Connect. As the new official method of communication from the College, e-Connect offers important news and updates directly to your inbox.

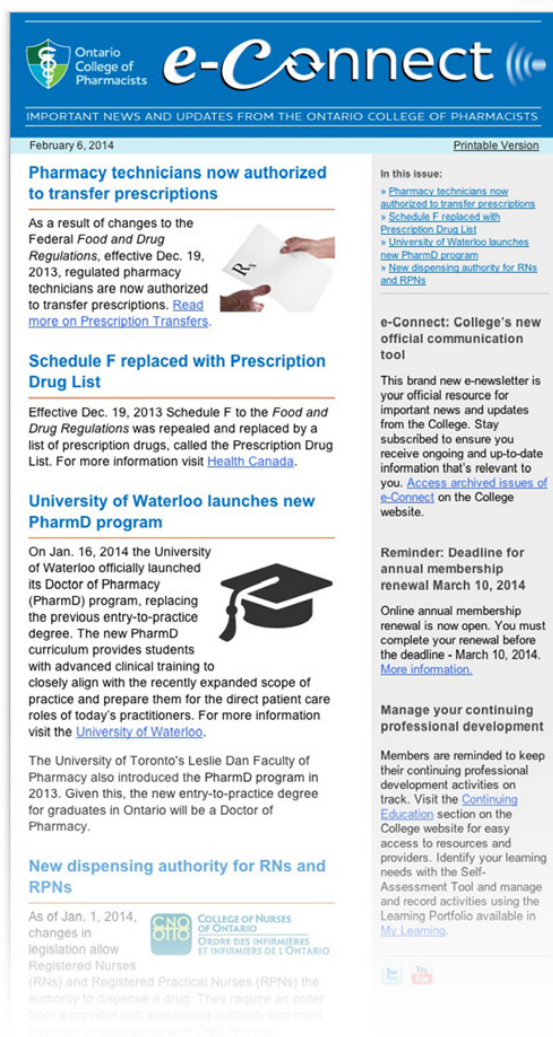
The College has introduced e-Connect to improve and enhance the way we communicate with our members. Replacing many general emails sent from the College, e-Connect is your resource for timely and relevant information. Designed to keep you informed on regulatory and practice issues, e-Connect provides tips and tools to enhance standards of practice. It will also serve as a reminder of key responsibilities and help you stay up-to-date on any changes to legislation, regulations, by-laws and more.

In issues of e-Connect you may find:

- helpful tips on a variety of practice issues
- important deadline dates and upcoming Council meetings
- useful tools to improve pharmacy practice
- College publications including the latest issue of *Pharmacy Connection*
- new web features and videos
- job opportunities at the College

e-Connect ensures you get the right information at the right time, with useful links to find more. The frequency of e-Connect will depend on the rhythm of relevant information, but we anticipate a couple of issues per month.

If you are a pharmacist or pharmacy technician registered in Ontario, you are automatically subscribed to receive e-Connect regularly. If you have yet to receive an issue, verify that the College has your correct email address on file by logging into your account and updating your personal and practice information on our website. **You may also need to add the College's email address to your safe-sender list**, so that issues of e-Connect are not discarded to your junk folder.



The information published in e-Connect is public and we encourage you to invite your colleagues to subscribe and to share e-Connect via social media including Facebook, Twitter and LinkedIn. If you are not a member of the College and would like to subscribe to receive issues of e-Connect, you can do so by accessing the [library on the College website](#), where you'll find archived issues and a link to subscribe.

e-Connect is your source for quick and easy access to information and is completely mobile-friendly, so you can stay connected even when you're on the go!

When Do Regulations Take Effect?




Over the past several years, College Council has approved several regulations under the *Drug and Pharmacies Regulation Act* and the *Pharmacy Act*. Most recently, Council approved a revised regulation on professional misconduct. So what happens next? Have the rules on professional misconduct changed? Is this regulation now in effect?

In a word, NO.

A regulation is not in effect until it is filed with the Registrar of Regulations and published on the Government of Ontario's e-Laws website and in the print version of *The Ontario Gazette*. When College Council approves a regulation, it is an approval to submit the regulation to government for review. Prior to filing and publication, the regulation is scrutinized by both bureaucrats and government members to ensure it fits in with the overall rules and principles of government. The overall impact of the

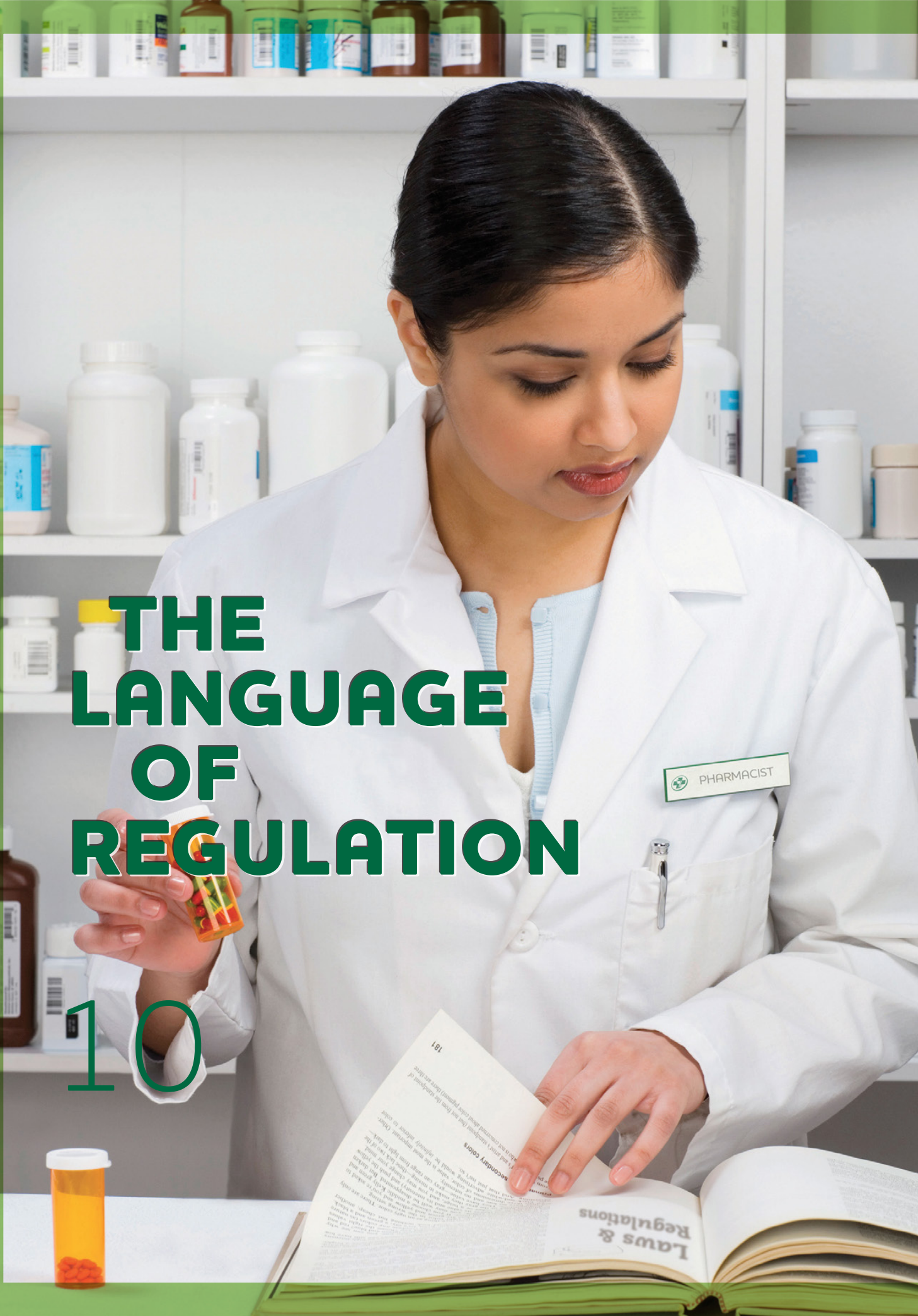
regulation is assessed, as are projected costs and benefits.

This process usually involves engagement with College staff to clarify the intent and impact of the regulation on member practice, and may lead to revisions of the regulation itself.

In this issue of *Pharmacy Connection* are two articles related to regulating member practice (*The Language of Regulation* on page 10 and *The Role of Supervision in Professional Training* on page 14). It should be noted, that the articles refer to the "draft revised professional misconduct regulation" and "the College's proposed *Professional Misconduct Regulations*". The regulation is "draft" and "proposed" because, while Council has approved it, the full process is not yet complete so the regulation is not yet in effect. Once it has been approved, members will be advised and directed to the new regulation. Until then, the current rules are the ones that govern practice. 

THE LANGUAGE OF REGULATION

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**THIS ARTICLE WILL EXPLORE
SOME OF THE TERMS USED IN
THE COLLEGE'S PROPOSED
PROFESSIONAL MISCONDUCT
REGULATIONS AND THE
ADVANTAGES IN USING
OPEN-ENDED LANGUAGE.**

As regulated health professionals, pharmacists and pharmacy technicians are required to practice within the parameters established by legal and ethical frameworks. However, the formal language used in laws and regulations can appear imprecise. For example, regulations may contain words and phrases that seem general and/or euphemistic, meant to guide professional behaviour, rather than prohibit it. Yet somehow, within the vagaries of language, the member needs to parse out what is meant and then practice accordingly. This article will explore some of the terms used in the College's proposed *Professional Misconduct Regulations* and the advantages in using open-ended language.

Taken together, laws and regulations create duties, obligations and responsibilities that are binding on the member and address the overall delivery of patient care. Health practitioners, as accountable self-regulating professionals, must be prepared to justify clinical decision-making within the context of this framework. Given that these rules of practice guide professional behaviour across a range of settings, they are articulated in general terms, rather than in regard to specific circumstances. Since both practitioners and members of the public should be equally able to understand what is meant by a regulation, basic phrases and terms are used. This approach may result in such vague language that it creates difficulties for the individual member who looks to regulations for guidance over what is acceptable in his or her practice.

There are both pros and cons to drafting regulations in a more or less precise fashion. The advantage of detailed regulations is that they are clear and easily enforced; however, they may end up being too narrow to really

get at the behaviour they are intended to address. Rules that are generally stated, on the other hand, are flexible and easily applied to a variety of circumstances. As their meaning is somewhat negotiable, they can support innovation and creativity in practice and permit the health professional latitude in making clinical decisions in the context of individual patient needs. A drawback, however, is that if the wording used is too vague, they may be unenforceable. Therefore, it is necessary to find a balance between clarity and generality.

The draft *Professional Misconduct Regulations* recently approved by College Council for submission to government contain several words and phrases that may be viewed as imprecise and which illustrate the issues raised above. The draft regulation includes terms such as “excessive” and “reasonable” along with phrases like “not of good quality” or “knows or ought to know”. While these are words and expressions that can be found in many health professional regulations, how does the individual member apply them to practice? As will be illustrated below, both context and judgment are key elements in making that determination.

USE OF THE TERM “EXCESSIVE”

The proposed regulation contains a provision making it professional misconduct to charge a fee or amount that is excessive in relation to the service or product provided. Accordingly, there must be a clear rationale for the amount charged for a product or service. Many health professional colleges in Ontario have exactly the same provision in their regulations, as it is clearly in the public interest that patients are not denied access to health-related products or services

“... context and judgment are key elements in making that determination.”

due to unreasonable fees. The College of Nurses of Ontario, for example, indicates to their members that, in setting a fee, a nurse should consider the nature and complexity of the nursing service rendered, including the time spent with or on behalf of the client, and the cost of materials.¹ In 2010, in anticipation of an expanded scope of pharmacy practice, Council approved a policy on *Fees for Professional Pharmacy Services* (<http://www.ocpinfo.com/regulations-standards/policies-guidelines/fees/>). The policy establishes principles that members are encouraged to use when establishing a fee schedule for professional services, including transparency, ethics and fairness.

WHAT IS “REASONABLE”?

In the context of health professional practice, what is considered to be “reasonable” is based on the role of the individual and the generally accepted standards in similar circumstances. The term is both generic and relative, and is meant to apply to whatever is appropriate in a particular situation. In the four areas where it is used in the draft professional misconduct regulations, additional qualifying detail is provided to illustrate what is meant in the circumstances. The new section defining what is, and what is not, considered to be a conflict of interest qualifies the concept based on what “a reasonable person knowing the relevant facts would conclude or perceive in the circumstances.” A

health professional is expected to use his or her professional judgment to assess what is appropriate behaviour and what may constitute misconduct.

NOT OF GOOD QUALITY

The use of this broadly stated phrase is not meant to imply that a member is required to test the make up of drugs via a chemical analysis at the pharmacy. The phrase “not of good quality” is meant broadly to include drugs that are past expiry, counterfeit drugs and drugs that have been exposed to conditions which alter the effectiveness of the drug; for example, if a pharmacy discovers a cold chain breach but sells or administers the drugs anyway. Listing everything that would make a drug “not of good quality” would require a very precise list and some scenarios may be missed. Sourcing drugs through reputable distributors, storing them according to manufacturer requirements, and evaluating the information provided on the label, including for example that there is a valid drug information number or natural product number, supports the member in ensuring that they meet appropriate standards and are of good quality.

In addition to the methods indicated above, there are tools that can be adapted to the specific pharmacy practice. Many organizations have developed systems to detect potential quality issues including, for example, the use of



a standardized checklist to identify problems with product orders. One version in use at an Ontario hospital prompts a review of the packaging and/or product label and utilizes criteria to evaluate product characteristics including dosage/strength and formulation and to check and compare against the product already in use.² Staff information and training are keys to ensuring an efficient and effective approach to protecting patient safety.

KNOWS OR OUGHT TO KNOW

A search of regulations across many professions, in addition to health professions, shows that the notion of using a phrase applying to what a professional "knows or ought to know" is common. Initially trained to a set of established competencies at entry to practice, professionals are expected to have mastered basic skills, and then continue to learn through practice, professional development, and

by applying evidence-informed decision-making. What a professional knows, or ought to know is therefore relative and can be expected to change over the course of a life of practice.

While it may seem ambiguous to refer to what a member knows or ought to know, essentially the meaning is subject to evaluation in the event of a complaint taking into account the duties of the member and the circumstances being evaluated. For example, Designated Managers have specific duties and obligations inferred through the legislative framework and reinforced by policy, which would be taken into account in the event of a complaint.

LOOKING FORWARD

Regulators require health professionals to continuously evaluate their own knowledge, skills and abilities. As reported in the article *A Futurist Looks at Professional Regulation* (<http://www.sml-law.com/>

wp-content/uploads/2013/11/Greyar180.pdf) regulating health professional practice is due to shift in substantial ways. With time, new approaches will be introduced to better assist an individual member to assess his or her professional practice. There will always continue to be, however, an onus on the member to apply professional judgment in the evaluation of his or her practice against the accepted standards of the profession. **PC**

References

- 1 College of Nurses of Ontario: Professional Conduct/ Professional Misconduct. p. 14 http://www.cno.org/Global/docs/ih/42007_misconduct.pdf
- 2 Fraser, Kelly. Pharmacy Checklist for New or Replacement Products. Windsor Regional Hospital Pharmacy Services, 2013.

A photograph of three healthcare professionals in white lab coats. In the foreground, a young Black woman with short dark hair, wearing a pink shirt under her white coat, smiles warmly at the camera. Behind her, slightly out of focus, are two men. On the left, an older man with a grey beard and a red striped tie. On the right, a younger man with a beard. The background is a soft-focus clinical setting. The entire image is framed with a green border.

THE ROLE OF SUPERVISION IN PROFESSIONAL TRAINING

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SUPERVISION IS AN IMPORTANT ELEMENT IN HEALTH PROFESSIONAL TRAINING AND PRACTICE AND IS CENTRAL TO THE LEARNING PROCESS

In December 2013, College Council approved a draft revised professional misconduct regulation for submission to government. The proposed draft regulation, which is currently under review by government, contains both new and revised provisions. One of the new provisions makes it an act of professional misconduct to fail to appropriately supervise a person whom the member is professionally, or legally, obligated to supervise. The addition of this condition into the draft regulation emphasizes the importance of supervision in protecting patient safety. This article will discuss the role of supervision in health professional training, review the instances in which supervision occurs in pharmacy practice, and identify some considerations for a member when responsible for supervision.

Supervision is an important element in health professional training and practice and is central to the learning process as it incorporates opportunities for self-evaluation as well as the development of analytical and reflective skills in the person being supervised. When the topic of supervision is raised in the context of the health professions, it is most often in relation to supervising students and interns; however, there are additional instances where supervision occurs. Supervision may be ordered where a member of a College requires mentorship to bring his or her practice up to the generally accepted standard of practice. Specific to pharmacy, the Designated Manager (DM) of a pharmacy is legally obligated to supervise pharmacy personnel, including both member and non-member staff.

SUPERVISION OF STUDENTS AND INTERNS

The professional obligations of both pharmacists and pharmacy technicians are outlined in standards of practice and College policies and guidelines. Experiential learning is an important

aspect of health professional training and helps to develop the competency of the student/intern, as demonstrated by the use of his or her knowledge, skills and abilities in providing patient care. Irrespective of the context in which students/interns are supervised, supervisors must ensure that they have the appropriate amount of time to allocate to this activity in order to provide an enriching experience for themselves and the student/interns.

A supervisor is expected to meet with a student/intern regularly to discuss the progress of his or her performance, give feedback on how to further develop competence, and provide formal assessments throughout the supervision period. The degree of oversight required by the student/intern can be adjusted as his or her professional judgment develops. Patient safety and the delivery of efficient and effective patient care is paramount, and will guide the supervisor's determination of how much autonomy the student/intern will have in the execution of their duties. Also factoring into this consideration is the complexity of the patient's condition and the level of risk in clinical decision-making.

The application of a model of graduated experiential learning will ensure that the student/intern is prepared to provide patient-centred care, which is dependent upon the development of clinical practice skills, critical thinking skills and decision-making skills under conditions of uncertainty. The supervisor has a great deal of latitude in the assignment of a student/intern's duties and his or her autonomy. Documented assessments demonstrating the student/intern's progress is evidence of the student/intern's readiness to participate in enhanced practice opportunities. As

the student/intern's clinical judgment develops, he or she can be permitted to practice off-site and counsel patients, for example, by conducting a MedsCheck at home, with the availability of the supervisor for consultation by telephone as required.

SUPERVISION OF A MEMBER'S PRACTICE

Another aspect of supervision is that which follows a review of a member's practice and finding that the level of care provided by the member has fallen below the acceptable standard. If this is the case, an order may be issued permitting a member to work only under the supervision of another member in good standing. The mentor will review the member's practice, identify areas requiring remediation, develop a learning plan and monitor the member's progress in meeting goals. In some cases, supervision may include standing side-by-side with the member in active practice situations. At the completion of the program, the results are reported to the College.

SUPERVISION DUTIES OF THE DM

The duties of the DM are addressed both through legislation and College policy. The DM's human resources duties are both functional and strategic. The DM is responsible for ensuring that staff members are fulfilling their duties and that they are providing good quality care. While regulated health professionals are responsible for their own practice, in a pharmacy the DM ensures that only a registered member, within the terms, conditions and limitations imposed on his or her certificate of registration, performs controlled acts. The DM must ensure that the staffing in the pharmacy supports

the pharmacists(s) in their cognitive and patient care functions, and allows the pharmacists(s) to collaborate as needed with other health professionals.

INTER-PROFESSIONAL CARE

Given the adoption of shared scopes of health professional practice and the emphasis on the inter-disciplinary team in care delivery, new models of supervision are emerging. Regulations under the *Pharmacy Act* include a provision permitting the direct supervision of a pharmacy student by any regulated health professional in premises that is not a pharmacy, if within a clinical component of an education or training program. Regulation itself will need to adjust to the pressures of the future. A recent publication identified a number of trends that will have an impact on professional regulation (and supervision) in the near future.¹ In addition to an emphasis on career-long competency and continuous quality improvement, expect a transition into an integrated and fluid regulatory process, with a greater emphasis on teams. How this trend to collaborative and joint accountability will be accomplished is uncertain, but it will be essential to maintaining the public trust. **PC**

Reference

- 1 Steinecke Maciura LeBlanc. Grey Areas "A Futurist Looks at Professional Regulation" October 2013, Issue No. 180.

Important Expiry Dates for Those Working Toward Pharmacy Technician Regulation



¹When an applicant is applying for a certificate of registration as a Pharmacy Technician more than 2 years following completion of their education program (date of graduation from a CCAPP program or the date they have finished their last bridging course). There are other ways to demonstrate currency of knowledge, such as completion of the PEBC Qualifying exam within the last 3 years.

²If your SPE/SPT Training has expired before your registration date you would need to complete this requirement again in order to demonstrate that your knowledge and skill has remained current.

As you make your plans to complete all of the registration requirements, you must remember that these requirements have expiry dates.

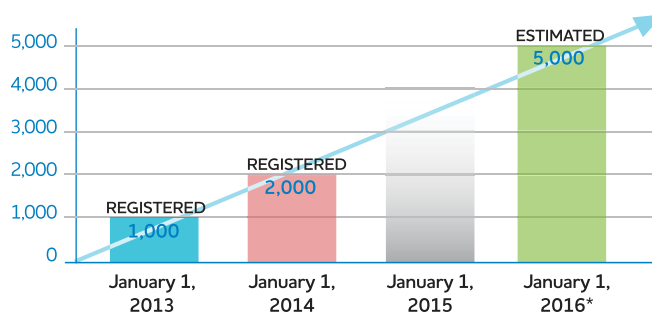
Most importantly if you are completing your education requirement through the bridging courses; remember that you must do so before Jan. 1, 2015. The last eligible offering of classroom and online courses is in fall 2014 and Prior Learning Assessment (PLAR) will only be available until summer 2014. Those unable to meet this deadline will be required to graduate from a CCAPP-accredited pharmacy technician program.

As illustrated in the diagram on the left, all of the requirements for registration have unique expiry dates that applicants must be aware of. If you apply for registration after these timelines have passed, a panel of the registration committee will need to determine if further training is required. As a reminder of your dates of completion, visit the College website (www.ocpinfo.com) and login to your account.

Avoid delays or having to repeat any requirements – register now. For more information on pharmacy technician regulations, visit the College website. **PC**

PHARMACY ENVIRONMENT IS CHANGING.

Pharmacy Technician Registration Estimate



* The estimated number shown in the graph is based on the more than **3,500** pharmacy technician applicants currently pre-registered and actively engaged in completing the requirements for registration as pharmacy technicians. Going forward, pharmacy technician education programs in Ontario will continue to graduate around **400** individuals per year who may choose to become registered.

The Narcotics Monitoring System (NMS) and Opioid Maintenance Treatment (Methadone and Buprenorphine)

Pearl Isaac, Anne Kalvik
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Leslie Dan Faculty of Pharmacy, University of Toronto

Use of the NMS system is an important tool for improving patient safety. Pharmacists treating people on opioid maintenance treatments (OMT) — e.g. methadone and buprenorphine — are providing care to patients who are already diagnosed with a substance use disorder. Therefore, paying particular attention to the NMS alerts is critical for this population. Pharmacists — but not physicians — have access to these real-time drug utilization review (DUR) alerts. Some physicians are beginning to provide directions regarding NMS messages on their prescriptions.

FIVE THINGS TO CONSIDER:

1. PRESCRIBERS RELY ON PHARMACISTS TO MAKE THEM AWARE OF NMS DUR ALERTS.

Pharmacists have the responsibility to follow up and communicate information relating to these alerts as necessary.

When a pharmacist receives a DUR warning message, the message may indicate a potential overuse/misuse situation. This may have important consequences on patient safety. Pharmacists must evaluate the response codes received and work in conjunction with the prescriber, other pharmacists providing care to the patient, and the patient to determine the appropriate course of action.

Recognizing that prescribers and pharmacists are part of the “circle of care”, they may share information about the alerts and patient information to help inform next steps in the treatment plan.

The NMS DUR warnings are intended to alert pharmacists of potential inappropriate use of monitored drugs and represent only one component of all information to be considered in the delivery of patient care.

Pharmacists should document their interventions regarding NMS alerts.

2. WHAT DOES “DOUBLE DOCTORING” AND “POLY-PHARMACY” REALLY MEAN ACCORDING TO NMS?

“May be double doctoring” message reflects that: the patient has obtained monitored drugs prescribed by 3 or more different prescribers in the previous 28 days*.

“Poly-pharmacy use indicated” message reflects that: the patient has obtained monitored drugs from 3 or more different dispensaries in the past 28 days.

It’s important that healthcare providers are cognizant of the limits of the system and not rely on the NMS as the sole check. It should be noted that the threshold may be less sensitive for the triggering of alerts than the impression of many pharmacists and physicians.

Pharmacists need to pay attention to NMS messages especially for patients on OMT, who by definition have a diagnosis of a substance use disorder.

*This is different from the double doctoring definition in the federal Controlled Drugs and Substance Act, where a patient receives a narcotic prescription from a second physician within 30 days, without disclosing this information.

3. PAYING EXTRA ATTENTION TO NMS ALERTS IS IMPORTANT AT THE START OF OMT

The initiation of opioid maintenance treatment is a period of high risk. It is possible that this will trigger multiple NMS alerts. Such alerts may be the result of the patient's substance use history which has brought them into treatment or may reflect narcotic, controlled drug, and targeted substance prescriptions currently in circulation which might require cancelling.

Pharmacists are encouraged to make patients aware of the NMS system and whenever possible, discuss NMS alerts directly with the patient. The outset of opioid maintenance treatment is a good time to do this.

4. BEING MINDFUL OF NMS WARNINGS IS IMPORTANT THROUGHOUT OMT

Alerts can be very meaningful even if a patient is considered to be stable.

Pharmacists need to recognize another limitation of the NMS: The alert warnings from the NMS are for information only, not rejections, and as such, there is no requirement to "override". Hence, there is need for education and involvement of other pharmacy staff in the process. They should be advised not to ignore any warnings and to provide information to the pharmacist for follow up to help guide treatment.

As discussed above, pharmacists need to use their professional judgment with this limited information. There is a need to work collaboratively with other treatment providers and the patient in the information gathering process so that appropriate clinical decisions can be made.

5. PATIENTS AND THE NMS

Patients need to be involved in their care and understand that DUR alerts are intended to optimize patient safety. As much as possible, the warning messages and their management should not be viewed as punitive.

When an alert is triggered, the patient can be consulted to provide further information to benefit their care. If patients are aware that these alerts exist, it may lead to patients taking a proactive approach in informing their physicians and pharmacists about other medications that are prescribed for them.

"MY-duplicate drug other pharmacy" warnings, especially with reference to methadone or buprenorphine, may be in response to a situation that has the potential to pose serious harm to the patient. Pharmacists need follow up appropriately, and address the safety concerns in a timely manner prior to dispensing.

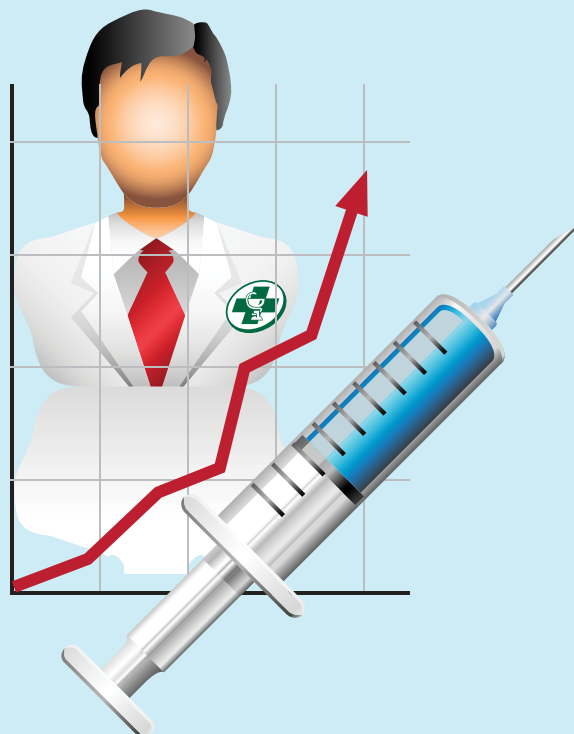
DRUG UTILIZATION REVIEW (DUR) RESPONSE CODE & DESCRIPTION	MEANINGS OF THE WARNING MESSAGE*
MH - May be double doctoring*	Indicates that, including the current claim, the recipient has obtained monitored drugs prescribed by 3 or more different prescribers in the past 28 days.
MI - Poly-pharmacy use indicated	Indicates that, including the current claim, the recipient has obtained monitored drugs from 3 or more different dispensaries in the past 28 days.
D7 - Refill too soon	Indicates that, based on the days supply of the previous claim submitted to the NMS, a refill should not be required at this time. The patient may still have enough product available.
DE - Fill/refill too late	Indicates that, based on the days supply of the previous claim submitted to the NMS, a refill is overdue at this time.
MY - Duplicate drug other pharmacy	Indicates that prior dispensing transaction exists for: <ul style="list-style-type: none"> • same patient • same Drug Identification Number/Product Identification Number or interchangeable product • same date of service • different dispensary

- http://www.health.gov.on.ca/en/pro/programs/drugs/ons/monitoring_system.aspx
- http://www.health.gov.on.ca/en/pro/programs/drugs/resources/narcotics_manual.pdf
- http://www.health.gov.on.ca/en/pro/programs/drugs/ons/docs/monitoring_faq.pdf

The authors gratefully acknowledge the review of this paper by Winnie Chan (MOHLTC) and Rob Crews (MOHLTC).

ADMINISTRATION OF FLU SHOTS BY PHARMACISTS ROSE SIGNIFICANTLY IN YEAR TWO!

Last year, close to 600 pharmacies participated in Ontario's publicly-funded flu vaccination program — the Universal Influenza Immunization Program (UIIP). Approximately 250,000 flu shots were administered by pharmacists in the first year of their participation in the UIIP. In the second year (2013/2014), three times as many pharmacies participated in the program (nearly 2,000) and more than 750,000 flu shots have been administered by pharmacists to patients throughout Ontario this season.



Members Emeritus

Any pharmacist who has practiced continually in good standing in Ontario and/or other jurisdictions for at least 25 years can voluntarily resign from the Register and make an application for the Member Emeritus designation. Members Emeritus are not permitted to practice pharmacy in Ontario but will be added to the roll of persons so designated, receive a certificate and continue to receive Pharmacy Connection at no charge.

For more information, contact Client Services at 416-962-4861 ext 3300 or email ocpclientservices@ocpinfo.com



Buprenorphine for the Treatment of Opioid Dependence

Updated from Winter 2012

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Buprenorphine has been available as a prescription opioid in Canada since 2008. It is marketed as *Suboxone*® by RB Pharmaceuticals in combination with naloxone in a sublingual tablet. In Canada, it is indicated for maintenance treatment of opioid dependence.

Buprenorphine treatment provides an important alternative to methadone maintenance treatment in Canada. It has been shown to be a valuable strategy in helping to address the consequences of the prescription opioid crisis in Ontario, perhaps particularly so in areas where there are few methadone treatment providers.¹ As with methadone treatment, patients prescribed buprenorphine should be carefully monitored within a framework of medical, social, and psychosocial support as part of a comprehensive opioid dependence treatment program.²

Pharmacist involvement in buprenorphine treatment can include the supervision of drug administration, monitoring patients, communicating with the treatment team, providing encouragement and support, and dispensing take-home doses ("carries").

Involvement in the treatment of opioid-dependent patients with buprenorphine, has the potential for pharmacists to expand their scope of practice and provides a satisfying professional opportunity to participate in the recovery of individuals dependent on opioids. This area of practice may be of particular interest to those pharmacists already involved in the provision of methadone maintenance treatment. Opioid dependence is a complex disorder; therefore pharmacists who take training specific to buprenorphine therapy and other treatment options will be best able to provide pharmacy services to these patients.

With buprenorphine maintenance treatment, as with methadone maintenance treatment, patients benefit from physicians and pharmacists working collaboratively to provide optimal treatment. This includes communicating clinical observations, missed doses, and, in particular now, warnings in response to the Narcotic Monitoring System (NMS). Pharmacists need to monitor and manage messages that appear through NMS for patients on buprenorphine treatment, since alerts may have special significance in this population who have already been diagnosed with a substance use disorder.

Clinical practice guidelines have been developed by the Centre for Addiction and Mental Health (CAMH) to support the initiation, maintenance and discontinuation of buprenorphine/naloxone maintenance treatment in the ambulatory treatment of adults and adolescents with opioid dependence in Ontario. The Guidelines³ are available from the CAMH, OCP or CPSO websites, and should be reviewed before dispensing buprenorphine. (http://knowledgex.camh.net/primary_care/guidelines_materials/Documents/buprenorphine_naloxone_gdlns2012.pdf)

KEY MESSAGES FOR BUPRENORPHINE

- Suboxone® is an opioid prescription medication containing buprenorphine 2 mg and 8 mg (in *sublingual* tablets) in fixed combination with naloxone 0.5 and 2 mg respectively (to deter injection drug use).
- Sublingual dissolution of Suboxone® tablets usually takes 2 to 10 minutes.
- Buprenorphine:
 - is efficacious as maintenance therapy in the treatment of opioid dependence.⁴⁻⁶
 - is an alternative to, but not a substitute for, methadone maintenance treatment.⁷
 - acts primarily as a partial agonist at mu-opioid receptors.²
 - is considered safer in overdose than methadone, although if combined with other CNS depressant drugs (e.g., benzodiazepines) respiratory depression can occur.⁸ If clinical symptoms of overdose occur, higher doses of naloxone or other measures for treatment may be required.⁹
 - may have a lower potential for abuse and dependence than pure agonists such as morphine¹⁰⁻¹¹, although abuse does occur.¹⁰⁻¹² The addition of naloxone to the Suboxone® product formulation is intended to further reduce the risk of injecting, but does not eliminate the risk.
 - can be titrated to a stable dose within days, in contrast to methadone which typically may take weeks to achieve the optimum dose.
 - prescribed at maximal doses, may not be sufficient for all patients. When the maximum daily dose does not stabilize a patient, consideration should be given to switching to methadone.
 - may induce withdrawal in patients dependent on opioids if administered too soon after last use of full opioid agonists, e.g. oxycodone or fentanyl.
 - has also been successfully used for medical withdrawal treatment (detoxification) from opioids^{8,13} and for the treatment of pain¹⁴ (both are unapproved indications in Canada).

REGULATORY FRAMEWORK FOR BUPRENORPHINE

Buprenorphine/naloxone does not require a special prescribing

exemption, unlike methadone, so prescriptions may be written by any practitioner licensed to prescribe narcotics. The College of Physicians and Surgeons of Ontario (CPSO) advises that they expect all physicians who wish to use buprenorphine to treat opioid-dependent patients will have training/education on this drug, and addiction medicine generally, prior to initiating buprenorphine treatment (www.CPSO.on.ca). In addition, the Ontario Drug Benefit LU codes for Suboxone® state that prescribers should complete an accredited course on opioid addiction and buprenorphine treatment before prescribing.

Prescriptions for Suboxone® have the same requirements as other "straight" Narcotic Drugs (Schedule N drugs); however, in addition, it is best practice to also indicate:

- start and stop dates
- days for supervised administration
- days for take home doses

As with other opioids, dispensing procedures for buprenorphine/naloxone must comply with the *Narcotics Safety and Awareness Act, 2010*, and requirements of the Narcotics Monitoring System.¹⁵

The Guidelines highly recommend that pharmacists who provide buprenorphine services undertake training. Pharmacists must be aware of the unique nature of buprenorphine dispensing and specific issues that exist in dispensing medications for the maintenance treatment of substance dependence. Some training resources are provided at the end of this article.

HOW BUPRENORPHINE WORKS

Buprenorphine is a synthetic opioid with a unique profile: it is a partial mu-opioid receptor agonist.²

Buprenorphine has a lower intrinsic activity at the mu-opioid receptor than a full agonist (e.g. methadone or oxycodone). This means that there is a "ceiling effect" to its opioid agonist effects at higher doses,¹⁶ making it safer in overdose and reducing its potential for abuse. There may be little increase in efficacy by increasing doses above 16 to 32 mg daily (Note: the maximum approved daily dose for Suboxone[®] in Canada is 24 mg). Although it is a partial agonist, buprenorphine has a very high affinity for the mu receptor. This tight binding means that buprenorphine can diminish the effects of other opioid agonists (e.g. methadone or oxycodone). It can precipitate withdrawal in those physically dependent on full opioid agonists by displacing them from opioid receptors.² The tight binding is also associated with a slow dissociation from the mu receptor resulting in a long duration of action.² This is why buprenorphine is associated with a milder withdrawal syndrome and has been used to assist in detoxification from other opioids.^{8,13}

Buprenorphine's partial mu-opioid agonist activity is beneficial in the treatment of opioid dependence because:

- It reduces craving for opioids.
- It may diminish the effects of other opioids (e.g. morphine, oxycodone, heroin).
- It can attenuate opioid withdrawal.

PHARMACOKINETIC CHARACTERISTICS SPECIFIC TO BUPRENORPHINE¹⁷

Buprenorphine's pharmacokinetic properties allow it to be utilized as a feasible maintenance treatment for opioid dependence. Buprenorphine has poor oral bioavailability due to extensive metabolism by intestine and liver. Sublingual administration allows absorption through the oral

mucosa and thus prevents breakdown via first-pass metabolism. Suboxone[®] tablets are formulated to be dissolved under the tongue. The onset of action is slow, with peak effects from sublingual administration occurring 3 – 4 hours after dosing. Buprenorphine is converted in the liver primarily by cytochrome P450 (CYP) 3A4 to an active metabolite (norbuprenorphine) with weak intrinsic activity. Both norbuprenorphine and buprenorphine are subject to hepatic glucuronidation. The mean elimination half-life is indicated as 37 hours in the product monograph², with evidence in the literature of large inter-individual variation (24 to 69 hours) following sublingual administration.¹⁷ Most of the dose is eliminated in the feces, with approximately 10 – 30% excreted in urine.

The slow onset of action and extended duration of action are both desired features in a treatment for opioid dependence. It is possible that buprenorphine can be given on an alternate day or three times weekly dosing schedule once the patient has been stabilized on a

daily buprenorphine dose. However, this may be a theoretical advantage, since many patients may have difficulty adhering to alternate day schedules and may benefit from daily contact with a pharmacist.

CLINICAL ASSESSMENT CONSIDERATIONS

"Opioid dependence" in the context being discussed in this article, can be considered the same as "addiction" which is characterized by a loss of control over opioid use, continued use despite knowledge of harmful consequences, compulsion to use and/or cravings. Many patients on chronic opioid therapy become physically dependent but not necessarily "addicted". Physical dependence (the development of tolerance and appearance of withdrawal symptoms after dose is lowered or stopped) alone does not indicate a diagnosis of opioid dependence.

Contraindications to buprenorphine/ naloxone in Canada² are:

- Allergy to buprenorphine/ naloxone

NOTES ABOUT NALOXONE:

Naloxone, a pure opioid antagonist, is contained in Suboxone[®] tablets in combination with buprenorphine, with the intention of deterring patients from dissolving and injecting the tablet. When injected, naloxone may attenuate the effects of buprenorphine or cause opioid withdrawal effects in opioid-dependent individuals. However, the effect may be limited by the short half-life of naloxone and the relatively stronger binding by buprenorphine to the receptors.

When Suboxone[®] is used sublingually, naloxone is largely unabsorbed and does not exert pharmacological activity.¹⁷

Naloxone in Suboxone[®] tablets does not appear to influence the pharmacokinetics of buprenorphine.¹⁷

- Use in opioid naïve patients.
- Breast feeding
- Severe respiratory insufficiency
- Severe hepatic insufficiency
- Acute alcohol dependence, or delirium tremens

DOSING INFORMATION

The product monograph states that Suboxone® must be given daily with supervised dosing by a health professional (e.g. a pharmacist) for a minimum of 2 months.² The exception to this is in circumstances in which the pharmacy is not open on weekends, in which case suitable patients may receive take-home doses for Saturday and/or Sunday and/or holidays.² However, the CAMH Guidelines, state that additional take-home doses earlier than two months could be provided if the physician decides that a patient would benefit from this and that the patient has a degree of clinical stability that would make them eligible for take-home doses. The patient must be made aware that this is against the Health Canada label, as well as all of the possible additional risks of receiving take-home dosing early in treatment such as overdose, consequences of careless storage and unintended ingestion by others, injection and diversion. Physicians document their rationale for the early take-home doses and their discussion with the patient about the risks. The number of take-home doses should be increased gradually and the patient carefully monitored. Refer to the Guidelines for further information.

INDUCTION

Therapy is initiated when the patient is **experiencing at least moderate opioid withdrawal symptoms:**

- at least 6-12 hours (preferably 12 hours) after use of short-acting opioids (e.g. heroin, oxycodone)²

or

- at least 12-24 hours (preferably 24 hours) or longer after the use of a long-acting opioid (e.g. oxycodone controlled-release formulations when swallowed whole).
 - For methadone maintenance patients wanting to switch to Suboxone®, waiting 3 days or more after the last dose of methadone before starting buprenorphine/naloxone is recommended. The methadone dose should be tapered down to 30 mg or less before buprenorphine treatment is initiated to minimize the possible precipitation of intense withdrawal symptoms.
 - At least 48 hours may be needed for patients discontinuing fentanyl patch use.

Initially a single dose of 2 to 4mg is given under supervision. An additional 4 mg may be administered later on in the same day depending on the individual patient's requirement.

Initial doses may be:

- prescribed by physician, dispensed and dosing observed by pharmacist, or
- prescribed by physician, dispensed by pharmacist, dosing observed in physician's office, or
- prescribed, dispensed and observed in the physician's office.

Precipitation of opioid withdrawal symptoms may occur when the patient is initiated on buprenorphine/naloxone if they are not yet in sufficient opioid withdrawal. Frequently, a Clinical Opiate Withdrawal Scale (COWS) score of 13 or greater is used to help determine this. The scale can be found in the Guidelines. If someone is not in sufficient withdrawal, buprenorphine, the high affinity partial mu agonist, displaces the full mu agonist opioid from the mu

receptors triggering a decrease in receptor activity which leads to a worsening of opioid withdrawal symptoms. If buprenorphine is taken when a patient is in sufficient opioid withdrawal, the partial agonism will produce relief of the withdrawal symptoms. Consideration should be given to reassessing the patient one hour after the first dose of buprenorphine to assess for possible precipitated withdrawal. Additional doses of buprenorphine are not recommended for precipitated withdrawal, rather, symptomatic management of withdrawal symptoms is preferred. The prescriber should be notified of the situation and buprenorphine induction rescheduled, typically for the next day. Abstinence from other opioids should be encouraged during this time.

MAINTENANCE

The dose should be increased progressively according to the individual patient's needs and should not exceed a maximum daily dose of 24 mg according to the Canadian product monograph.² Average maintenance doses have generally been found to be 8-12mg per day.³ The dose is titrated according to reassessment of the physical and psychological status of the patient.³ Stable doses of buprenorphine can be reached in a few days.

Once a patient has been stabilized on a maintenance dose, there is the option to reduce the frequency of administration for suitable patients (e.g. if doses have not been missed or when an alternative to take-home doses is needed for work or travel).^{18,19} Alternate day doses are given at double the daily dose (e.g. 16 mg q2days for a patient maintained on 8 mg per day). An example of three times weekly administration for a patient maintained on 8 mg per day would be: Monday and Wednesday doses given at twice the daily dose (i.e. 16

mg) and a Friday dose at 3 times the daily dose (i.e. 24 mg). The dose given on any given day should not exceed 24 mg. In practice however, alternate day dosing may not be an effective strategy since many patients benefit from daily contact with the pharmacist or other health care providers, and some find it difficult to track days on which to take the medication.

OBSERVED DOSING

Water can be provided to patients **before** their dose to moisten the mouth and potentially decrease the time it takes for tablets to dissolve. The 8 mg tablets, although not scored, may be split to speed up dissolution. Observed dosing includes checking under the tongue to ensure dissolution of the SL tablet.

A pharmacist can provide take-home doses or portions of doses only if it is indicated on the prescription.

Supervised dosing by pharmacists ensures patient adherence with buprenorphine therapy and that it is being taken appropriately. This may help achieve positive outcomes for patients in opioid dependence treatment programs, and especially for those with a history of aberrant medication-related behaviours. Observed dose dispensing services are part of a structured opioid treatment program and can act as an effective mechanism to stabilize patients.

RECOMMENDED DISPENSING PROCEDURE FOR PHARMACISTS:

- Confirm identity of patients using photo identification, especially when the patient is not known to the pharmacist.
- Assess patients for intoxication and compliance prior to dosing. It

is good practice to note the time of observed doses.

- It is recommended that pharmacists employ some form of dose tracking sheet/tool (e.g. a patient calendar) to aid assessment of adherence and missed doses.
- Dosing is best done in a private area of the pharmacy where the patient can sit undisturbed by other patients, yet still be observed by the pharmacist.
- It is recommended that tablets are pushed through foil wrapping into a medication cup to minimize handling.
- If the Suboxone® dose consists of more than one tablet, all tablets can be placed under the tongue at the same time.
- Tablets may be split to speed up dissolution if needed. Sometimes this strategy is also used to minimize diversion of observed doses. Crushing of tablets is discouraged.
- Dissolution of Suboxone® tablets is not immediate and may require up to 10 minutes to completely dissolve under the tongue. After 1–3 minutes, pharmacists should check under the tongue to assess for dissolution; this is the most important time for reducing the possibility of dose diversion, e.g. once the tablet begins to dissolve it becomes more difficult to divert (although it should be noted that diversion of this pulpy mass has occurred).
- Drinking water or other fluids immediately prior to taking Suboxone® may moisten the mouth and enhance dissolution of tablets and speed up the dosing administration process.
- While the tablets are dissolving, patients should be instructed to do their best not to swallow their saliva. Patients should not suck on the tablets.
- Patients should refrain from drinking fluids or eating for approximately 5 minutes or more, after tablets have dissolved in

order to ensure that the full dose of medication has been absorbed.

- If the patient vomits after taking the sublingual dose, a replacement dose is not required as there is no effect on buprenorphine absorption once the tablet has dissolved. This is in contrast to methadone treatment, when under certain circumstances, a replacement dose might be prescribed.
- Finally, pharmacists should consider using a treatment agreement with the patient. This helps to communicate information regarding practical issues pertaining to pharmacy routine and services, as well as expectations of the patient and pharmacy staff.
 - Refer to the CAMH Guidelines Supplement 5: Buprenorphine/Naloxone Dispensing for more information, including a sample treatment agreement.

TAKE-HOME DOSES

Take-home dosing can be considered based on the assessment of clinical stability, length of time in treatment and the patient's ability to safely store the drug. The pharmacist can help to inform this decision by sharing with the prescriber information gathered in the course of providing pharmacy care. Examples of useful information include missed doses, Narcotic Monitoring System alerts, concerns regarding patient self-care, and incidents of intoxication. The risks and benefits of take home doses for a patient should be re-assessed on a regular basis. (See also Dosing Information section above.)

Pharmacists are encouraged to have an initial pharmacy/patient treatment agreement, and also a separate agreement for patients starting take-home doses to include more information on safety issues.

Take home doses should be kept in the original strip foil packaging, removed from the original box and placed in vials with childproof closures. There have been reports of overdoses involving children taking tablets.²⁰ Take home doses need to be securely stored.

MANAGEMENT OF MISSED DOSES

Pharmacists need to track missed doses of buprenorphine and be able to easily retrieve this important information; use of a tracking tool/record of dose administration is advised.

Compliance with buprenorphine treatment **needs to be monitored by the pharmacist**. All missed doses should be communicated to the prescriber, since they can be important indicators of client instability. The pharmacist should consult the prescriber to develop a plan on how to continue with buprenorphine treatment after more than 5 consecutive days missed. Recommendations for new starting doses are available in the CAMH Guidelines³ (Table 1) based on the patient's buprenorphine dose and number of consecutive doses missed.

MANAGEMENT OF INTOXICATED PATIENTS

Prior to dosing, pharmacists should assess patients for possible intoxication. For purposes of

patient safety, patients should not receive a dose of buprenorphine/naloxone if they appear intoxicated or sedated. Pharmacists will need to hold or delay administration. It is recommended that the prescriber be contacted to make a collaborative decision on patient management. Patient safety is paramount. Due to the long duration of action of buprenorphine/naloxone, it is reasonable to hold one day's dose and reassess the next day. Education should be provided to the patient to reinforce safety risks of buprenorphine/naloxone, especially when used in combination with alcohol (or sedatives).

To help prevent such a situation, it is recommended that pharmacists communicate with patients at the initiation of treatment and on an ongoing basis to discuss what to expect should they present to the pharmacy for their dose while intoxicated. Pharmacists should be familiar with signs and symptoms of intoxication.

Information about intoxicated patients and course of action in the pharmacy needs to be shared with the prescriber.

CONTINUITY OF CARE

Communication must occur among pharmacists and other health care providers (as with

methadone maintenance treatment) to ensure that there are no omissions or overlaps in buprenorphine dosing. This is important when a patient is switching pharmacies, or is admitted or discharged from institutions such as hospitals or jails.

UNAPPROVED USES FOR SUBOXONE

WITHDRAWAL TREATMENT

Although not officially approved for opioid detoxification/medical withdrawal, buprenorphine treatment has been shown to be well accepted by patients and effective for this purpose.²¹

PAIN TREATMENT

Suboxone® has been prescribed (off-label in Canada) in the context of treatment of pain and chemical dependence.¹⁴ Similarly to methadone, when buprenorphine is prescribed for this indication, it is frequently given as a split dose.

ADVERSE EFFECTS

It is important to distinguish adverse effects from *withdrawal symptoms* that can be precipitated by buprenorphine.

As discussed above, after the first

TABLE 1: SUGGESTIONS FOR MANAGING MISSED DOSES³

Buprenorphine Dose	Number of Consecutive Days Missed	New Starting Dose
> 8 mg	> 7 days	4 mg
> 8 mg	6–7 days	8 mg
6–8 mg	6 or more days	4 mg
2–4 mg	6 or more days	2–4 mg

dose of buprenorphine there may be some precipitated opioid withdrawal symptoms if the patient was not in sufficient withdrawal prior to first administration, such as headache, gastrointestinal upset, nausea, diarrhea, runny nose, sweating.

Adverse effects during buprenorphine treatment may be dose related and similar to other opioids. Most common are constipation, headache, CNS depression (e.g. sedation) euphoria, sweating, nausea, insomnia and orthostatic hypotension.

Toxic effects can be caused by buprenorphine alone or in combination with other CNS depressants. Since buprenorphine is a partial agonist, there is a ceiling effect on respiratory depression; however, very high doses of buprenorphine in some individuals have been associated with severe symptoms. Respiratory depression, when it occurs, may be delayed in onset and more prolonged than with opioids such as morphine, and reversal with naloxone is more difficult due to buprenorphine's very tight binding to opioid receptors. Other treatment approaches may be necessary (e.g., assisted ventilation).

DRUG INTERACTIONS

Serious respiratory depression has occurred when buprenorphine has been combined with CNS depressants including other opioids, alcohol, benzodiazepines, certain antidepressants, sedating antihistamines, and barbiturates.²

Special caution is recommended with the use of benzodiazepines and buprenorphine as this combination has resulted in respiratory depression, coma and death.²

Medications with CNS depressant effects should be avoided whenever possible and patients counselled regarding the risks associated with alcohol and benzodiazepine use.²

Buprenorphine is primarily metabolized by CYP3A4. Inducers (e.g. phenytoin, carbamazepine, rifampin) or inhibitors (e.g. ketoconazole, fluvoxamine, erythromycin, indinavir, saquinavir) of this enzyme would be expected to interact with buprenorphine. Ketoconazole, a powerful inhibitor of CYP3A4, has received particular attention and it has been reported to significantly increase peak plasma concentrations of buprenorphine.¹⁷ Careful patient monitoring and adjustment of buprenorphine dose when necessary, is recommended. Pharmacists may find the following link useful: <http://www.opioiddruginteractions.com/>

SPECIAL PATIENT POPULATIONS:

PREGNANT PATIENTS

The role of buprenorphine in pregnancy has not been clearly elucidated and Suboxone® is not approved for use in this population.² However there are studies which have shown buprenorphine to be efficacious, well tolerated and safe in pregnancy.^{22,23} Neonatal withdrawal can occur, although some sources indicate that symptoms are mild or absent in many cases.^{8,24} Although buprenorphine may prove to be a suitable option for the treatment of opioid dependence during pregnancy, the role and safety of naloxone in this context is not known. Buprenorphine without naloxone (Subutex®) may be an option through Health Canada's Special Access Programme. The current standard of care for the treatment

of opioid dependence in pregnancy is still methadone maintenance treatment.

PATIENTS WITH RENAL OR HEPATIC FAILURE

The dose of buprenorphine does not have to be significantly adjusted in renal impairment.¹⁷ It is possible that the dose may need to be modified in chronic liver disease.¹⁷

PATIENTS WITH ONTARIO DRUG BENEFIT COVERAGE

Both strengths of Suboxone are currently covered by the Ontario Drug Benefit plan under two Limited Use (LU) codes:

- 437: For the treatment of opioid dependence in patients who have failed, have significant intolerance, have a contraindication to, or who are at high risk for toxicity with methadone
- 438: For the treatment of opioid dependence when a methadone maintenance program is not available or accessible (i.e. No methadone maintenance programs available in the area, or waiting list is 3 months or longer).

For both codes, ODB indicates that physicians should complete an accredited course on opioid addiction and buprenorphine treatment before prescribing.

ABUSE OF BUPRENORPHINE

Buprenorphine is considered to have a lower potential for abuse due to its pharmacological properties (i.e. partial opioid agonist activity) compared to opioids which are full agonists, e.g. oxycodone or morphine. However, abuse has been reported in countries where both buprenorphine alone, and in combination with naloxone are available.⁹⁻¹¹ There have been increasing reports of misuse from

the US involving buprenorphine.^{25,26} Some have suggested that abuse may occur in the context of attempting to alleviate withdrawal rather than for the purpose of seeking euphoria.²⁷

Buprenorphine tablets have been abused by crushing and then administration by snorting or by the intravenous route.

In the US, buprenorphine is also available in a sublingual film formulation. Concerns have also been

expressed about the diversion and abuse of this dosage form.²⁸

Supervised daily dosing in the first 2 months of buprenorphine treatment helps to reduce the risk of diversion. Pharmacists may minimize diversion through careful dispensing and dose monitoring, paying special attention to Narcotic Monitoring System alerts, watching for “double doctoring” and communicating possible diversion (e.g. lost or stolen carries) to the physician.

Use of diverted buprenorphine by opioid-naïve people can result in overdose, particularly when combined with alcohol, benzodiazepines or other CNS depressants. Diversion for use in a person dependent on methadone or other opioids can cause them to experience precipitated withdrawal.

Conclusion

Buprenorphine is available as Suboxone®, approved for the treatment of opioid dependence. This sublingual formulation is combined with naloxone to deter intravenous use. Pharmacists in Ontario have an opportunity play an important role in the management of Suboxone® treatment with other members of the treatment team.

Opioid substitution therapy, whether with buprenorphine or methadone, has been shown to be far more effective than detoxification in improving outcomes in the treatment of opioid dependence.²⁴ Buprenorphine has several advantages when compared to methadone: it is safer in overdose, optimal dosing can be achieved quickly, it may be associated with less abuse and diversion, it may be easier to taper, it may be associated with less stigma and may be more convenient for the patient. Clinical practice guidelines are available on the use of buprenorphine/naloxone for opioid dependence. They provide evidence-based clinical recommendations developed by

a multidisciplinary committee, and are available from the CAMH, OCP or CPSO websites.³ Pharmacists providing care to patients on this treatment should have this resource on hand.

Buprenorphine may be considered a first line therapy, especially in those with a shorter history of opioid dependence and/or lower levels of opioid agonist needs. However, those that do not do well on maximum doses of Suboxone® (24mg daily) may need to switch to methadone with its greater dosage range.

There had been a growing problem of prescription opioid abuse in Ontario.²⁹ The number of individuals seeking treatment^{30,31} has increased, as has the number of inadvertent deaths associated with opioid overdoses.^{32,33} Although OxyContin is no longer available, new generic formulations have been approved requiring caution. Pharmacists are vital health-care team members, and are well positioned to address the increasing problem of prescription opioid abuse and addiction.

The profession needs to take a lead role and actively engage in being part of the solution to this problem.³⁴ The Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain (<http://nationalpaincentre.mcmaster.ca/opioid/>) provides guidance for pharmacists in managing patients on chronic opioid therapy. Developing expertise in the pharmacological treatment of opioid dependence is also an important component.

Involvement in buprenorphine treatment provides pharmacists with increased opportunities to provide pharmaceutical care to patients with opioid dependence. Pharmacists who already provide methadone services may be in a position to expand their scope of practice and further participate in the recovery of their patients with opioid dependence. Pharmacists in most cases see the patient more frequently than the prescribing physician. This means that direct open communication between the physician and pharmacist is essential for the optimal care of patients receiving buprenorphine

TABLE 2: COMPARISON OF BUPRENORPHINE TO METHADONE

	BUPRENORPHINE	METHADONE
Formulation	Sublingual tablet	Oral liquid
Effective treatment for opioid dependence?	Yes	Yes
Physician exemption required to prescribe?	No	Yes
Pharmacology at opioid receptors	<i>Partial</i> mu-agonist	<i>Full</i> mu agonist
Onset of action	Slow sublingually	Slow orally
Duration of action	May be longer	Long
Titration time to stable dose	Days (to weeks)	Weeks
Supervised doses	Yes	Yes
Take-home doses possible?	Yes	Yes
Need for extemporaneous preparation by pharmacist	No	Yes
Time to ingest dose	Minutes (needs to dissolve under tongue)	Seconds (swallowed)
Alternate day dosing possible?	Yes	No
Ceiling dose for opioid substitution effects?	Yes	No (can titrate dose higher for patients who require it)
Ceiling dose for respiratory depressant effects?	Yes (may be safer in overdose)	No
Sedation	May be less	May be more pronounced
Physical dependence/withdrawal	May be less/milder	May be more difficult
Is abuse possible?	Yes (naloxone included to ↓ IV abuse)	Yes (juice added to ↓ IV abuse)
Concern of added toxicity when combined with CNS depressants?	Yes	Yes
CYP3A4 interactions	Yes	Yes
Stigma	May be less	Possibly more
Does counselling improve treatment outcomes?	Yes	Yes
Ontario Drug Benefit Coverage	Not a general benefit, but available through Limited Use (see above)	Yes
Need to provide discreet seating area in pharmacy for dosing?	Preferable	Seating not required (but may be best to have discreet area to medicate)

treatment. Possible barriers for patients to access treatment include the cost of Suboxone®, although the ODB Limited Use codes have now made this product more available. Another challenge is the ability to provide a suitable, confidential area in the pharmacy where patients can wait while the

buprenorphine dose is dissolving under the observation of the pharmacist.

Pharmacists who take buprenorphine training are best able to provide support and encouragement and to help prevent, identify and resolve drug-related problems

in their patients on buprenorphine treatment. Good communication between the pharmacist, physician and patient will result in optimal patient care before, during and throughout buprenorphine treatment.

Case Examples

CASE: MR. M


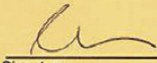
Mr. M arrives at the pharmacy Tuesday morning for his first scheduled dose of Suboxone® 4mg. He has recently stopped his chronic opioid therapy and reports that his last dose of oxycodone controlled-release was approximately 12 hours prior. The pharmacist confirms that he is showing/experiencing signs of opioid withdrawal, including mild headache and some mild nausea. The pharmacist observes Mr. M take his Suboxone® 4mg sublingual dose as prescribed and ensures that the SL tablets have dissolved completely. The pharmacist dispenses two additional Suboxone® 2mg tablets, as prescribed, for Mr. M to take home in case his withdrawal symptoms re-appear in the evening. Approximately 45 minutes later that same day, Mr. M returns to the pharmacy and reports worsening symptoms including sweating, increase in his headache, runny nose, abdominal upset with increased nausea, as well as diarrhea. Due to the timeframe of Mr. M's worsened symptoms of withdrawal, the pharmacist counsels Mr. M that is likely experiencing symptoms of precipitated opioid withdrawal from his first dose of buprenorphine. Mr. M admits that he actually had his last dose this morning, since he was worried about how long he would have to wait for his Suboxone® dose to "kick in".

CASE: MR. Y

Mr. Y is a 54 year-old male with a history of opioid dependence, who is maintained on buprenorphine/naloxone (Suboxone®). He has a history of opioid-taking behaviours that are associated with an increased risk of overdose, including taking more opioid analgesics

than prescribed when he was using oxycodone controlled-release, and stock-piling his previously prescribed methadone carries. According to his pharmacy records his buprenorphine had been prescribed as 8 mg SL on Monday, Wednesdays, and 12mg on Fridays. During a visit with his physician 4 weeks after starting Suboxone®, Mr. Y reports he is actually taking $\frac{1}{2}$ of an 8mg tablet every day. He stated that his pharmacy permits him to take $\frac{1}{2}$ of the tablet home for the days he does not have observed dosing.

The pharmacist reported to the physician that they had not given permission for him to take $\frac{1}{2}$ of the observed dose home, but did indicate that it takes a very long time to observe Mr Y taking the whole dose, and that it was possible that the client took the initiative to take a split portion of the dose home. Going forward, the pharmacist recommended that daily observed dosing be prescribed for this client and indicated that more care would be taken with observation of dosing in the future.

Nº 0928 camh <small>Centre for Addiction and Mental Health</small>		 *D0355A*	Client/Patient ID Label							
PRESCRIPTION - BUPRENORPHINE										
Client/Patient Name: <u>John A. Doe</u> <small>(last name, first name)</small>										
Health Record #: <u>987654</u>										
Address: <u>15 Oak Street, Toronto</u>		Date of Prescription: <u>June 1, 2014</u> <small>(dd/mm/yyyy)</small>								
<input type="checkbox"/> Addition Medicine Service 100 Stokes Street Toronto, Ontario M6J 1H4 Tel: 416-535-8501 x 36019 Fax: 416-595-6821	<input type="checkbox"/> Medical Withdrawal Service 40 & 50 White Squirrel Way Toronto, Ontario M6J 1H4 Tel: 416-535-8501 x 7197 Fax: 416-425-5279	<input type="checkbox"/> Medication and Substance Program 455 Spadina Avenue, Suite 200 Toronto, Ontario M5S 2G8 Tel: 416-535-8501 x 77369 Fax: 416-971-7172								
<input checked="" type="checkbox"/> Valid <u>only</u> at the following pharmacy: <u>ABC Pharmacy</u> <u>123 Main St</u>	Rx BUPRENORPHINE SUBLINGUAL <u>12</u> mg <u>Twelve</u> mg <small>(With naloxone at 25% of buprenorphine dose)</small> Dose in words Start Date: <u>June 2/14</u> End Date: <u>2014</u> Inclusive									
I.D. Type: <input checked="" type="checkbox"/> OHIP Card <input type="checkbox"/> Other (specify): <u>0957654321</u>	Observed dosing in the pharmacy on days circled: <table border="1"> <tr> <td>Mon</td> <td>Tue</td> <td>Wed</td> <td>Thur</td> <td>Fri</td> <td>Sat</td> <td>Sun</td> </tr> </table>			Mon	Tue	Wed	Thur	Fri	Sat	Sun
Mon	Tue	Wed	Thur	Fri	Sat	Sun				
I.D. Number: NO REFILLS	The following doses are to be dispensed as take home doses : <table border="1"> <tr> <td>Mon</td> <td>Tue</td> <td>Wed</td> <td>Thur</td> <td>Fri</td> <td>Sat</td> <td>Sun</td> </tr> </table>			Mon	Tue	Wed	Thur	Fri	Sat	Sun
Mon	Tue	Wed	Thur	Fri	Sat	Sun				
Special Instructions: <u>once daily</u>										
<ul style="list-style-type: none"> If any dose is missed, please notify the prescriber by fax or phone. In certain situations, e.g. stabilization or increasing dose, the prescription will need to be cancelled and modified. If 3 consecutive doses or more are missed, contact the prescriber. If 5 consecutive doses or more are missed, <u>cancel prescription</u> and contact prescriber For any concerns, please fax a copy of this prescription to the prescriber. 										
 Signature		<u>J. Sample</u> M.D. <u>12345</u> Print Name CPSO #								

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CASE: MS. P.

It is Friday evening and Ms. P arrives at the pharmacy for her observed daily dose of buprenorphine/naloxone. She has been maintained on Suboxone® 24 mg daily for the past 3 months. When the pharmacist greets her at the counter, she is wearing sunglasses and stumbling as she walks. After further assessment, the pharmacist notices that her eyes are reddened, she is slurring her words, and is slightly confused. With further questioning, the pharmacist confirms that Ms. P is intoxicated with alcohol. She received her last


dose of Suboxone® on the previous day. The pharmacist explained their concern to the patient and for safety reasons did not provide the dose to the patient. The pharmacist followed up with the prescriber according to their agreed upon process.

BUPRENORPHINE TRAINING RESOURCES

The CAMH Opioid Dependence Treatment Core Course now includes training on both methadone and buprenorphine.

http://www.camh.ca/en/education/about/AZCourses/Pages/odtcore_odt.aspx

The CAMH manual *Methadone Maintenance: A Pharmacist's Guide to Treatment* is currently being updated and the new edition will include buprenorphine maintenance treatment. It should be available later this year.

While waiting to take full training, pharmacists can access the Reckitt-Benckiser online Suboxone Education Program at <http://www.suboxonecme.ca>. 

Reference List

- Uddin F, Hope in Fort Hope, First Nations community is winning the battle against prescription drug abuse, *Can Fam Phys* 2013; 59, 391-392
- RB Pharmaceuticals Ltd, Suboxone® Product Monograph. June 2013.
- Handford C, et al. Buprenorphine/Naloxone for Opioid Dependence: Clinical Practice Guideline. Centre for Addiction and Mental Health, Toronto, 2012. (http://knowledge.camh.net/primary_care/guidelines_materials/Documents/buprenorphine_naloxone_gdlns2012.pdf)
- Johnson RE, Jaffe JH, Fudala PJ. A controlled trial of buprenorphine treatment for opioid dependence. *JAMA* 1992;267: 2750-2755
- Johnson RE, Chutuaie MA, Strain EC, et al. A comparison of levomethadyl acetate, buprenorphine, and methadone for opioid dependence. *New England Journal of Medicine* 2000;343: 1290-1297
- Mattick RP, Kimber J, Breen C, et al. Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. *Cochrane Database of Systematic Reviews* 2003.
- Srivastava A, Kahan M. Buprenorphine: a potential new treatment option for opioid dependence. *Can Med Assoc J* 2006;174: 1835-1836
- Kahan M, Srivastava A, Ordean A, Cirone S. Buprenorphine. New treatment of opioid addiction in primary care. *Can Fam Physician* 2011;57:281-9
- Megarbane B, Buisine A, Jacobs F, Resiere D, Chevillard L, Vicaut E, Baud F.J. Prospective comparative assessment of buprenorphine overdose with heroin and methadone: clinical characteristics and response to antidotal treatment. *J Subst Abuse Treat*. 2010 Jun;38(4):403-7.
- Cicero TJ, Inciardi JA. Potential for abuse of buprenorphine in office-based treatment of opioid dependence. *New England Journal of Medicine* 2005;353: 1863-1865
- Smith MY, Bailey JE, Woody GE, et al. Abuse of buprenorphine in the United States: 2003-2005. *Journal of Addictive Diseases* 2007;26: 107-111
- Robinson GM, Dukes PD, Robinson BJ, et al. The misuse of buprenorphine and a buprenorphine-naloxone combination in Wellington, New Zealand. *Drug and Alcohol Dependence* 1993;33: 81-86
- Blondell RD, Smith SJ, Servoss TJ, et al. Buprenorphine and methadone: A comparison of patient completion rates during inpatient detoxification. *Journal of Addictive Diseases* 2007;26: 3-11
- Heit H, Gourlay DL. Buprenorphine. New Tricks With an Old Molecule for Pain Management. *Clin J Pain* 2008;24:93-97.
- Ontario's Narcotic Strategy, MOHLTC: <http://www.health.gov.on.ca/en/pro/programs/drugs/ons/about.aspx>
- Walsh SL, Preston KL, Stitzer ML, et al. Clinical pharmacology of buprenorphine: Ceiling effects at high doses. *Clin Pharmacol Ther* 1994;55: 569-580
- Elkader A, Sproule BA. Buprenorphine. Clinical pharmacokinetics in the treatment of opioid dependence. *Clin Pharmacokinet* 2005;44: 661-680
- Petry NM, Bickel WK, Gaddler GJ. A comparison of four buprenorphine dosing regimens in the treatment of opioid dependence. *Clin Pharmacol Ther* 1999;66: 306-314
- Kovas AE, McFarland BH, McCarty DJ, et al. Buprenorphine for acute heroin detoxification: Diffusion of research into practice. *Journal of Substance Abuse Treatment* 2007;32: 199-206
- Lavonas EJ, Banner W, Bradt P et al, Root causes, clinical effects, and outcomes of unintentional exposures to buprenorphine by young children *J Pediatr*. 2013 Nov;163(5):1377-83.
- Ling W, Amass L, Shoptaw S, et al. A multi-center randomized trial of buprenorphine-naloxone versus clonidine for opioid detoxification: findings from the National Institute on Drug Abuse Clinical Trials Network. *Addiction* 2005;100: 1090-1100
- Fischer G, Ortner R, Rohrmeister K, et al. Methadone versus buprenorphine in pregnant addicts: a double-blind, double-dummy comparison study. *Addiction* 2006;101: 275-281
- Jones HE, Kaltenbach K, Heil S, et al., Neonatal abstinence syndrome after methadone or buprenorphine exposure. *New England Journal of Medicine* 2010;363:2320-31.
- Stein MD, Friedmann PD. Optimizing opioid detoxification: Rearranging the deck chairs on the Titanic. *Journal of Addictive Diseases* 2007;26: 1-2
- CESAR FAX, CESAR Publishes Report Warning of Emerging Epidemic of Buprenorphine Misuse, March 5, 2012, Vol 21, Issue 9
- CESAR FAX, Drug Users, Treatment Providers, and Law Enforcement Officers Describe Increasing Suboxone® Misuse in Ohio, January 16, 2012, Vol.21, Issue 2
- Zev Schuman-Olivier M.D. Mark Albanese M.D. Sarah E. Nelson Ph.D. Lolita Roland, Francine Puopolo Lauren Klinkera and Howard J. Shaffer Self-treatment: Illicit buprenorphine use by opioid-dependent treatment seekers; *Journal of Substance Abuse Treatment*, Volume 39, Issue 1, July 2010, Pages 41-50
- Sontag D. Addiction Treatment With a Dark Side, *New York Times* November 17, 2013: CLXIII, No.56,232: 1
- Brands B, Blake J, Sproule BA, et al. Prescription opioid abuse in patients presenting for methadone maintenance treatment. *Drug and Alcohol Dependence* 2004;73: 199-207.
- Sproule BA, Brands B, Li S, Catz-Biro L. Changing patterns in opioid addiction: Characterizing users of oxycodone and other opioids. *Canadian Family Physician* 2009;55:68-69.e1-5.
- DATIS. Substance Abuse Statistical Tables 2006/2007 to 2010/2011. www.datis.ca: 2011
- Dhalla IA, Mamdani MM, Sivilotti MLA, Kopp A, Qureshi O, Juurlink DN. Prescribing of opioid analgesics and related mortality before and after the introduction of long-acting oxycodone. *CMAJ* 181(12): 891-896.
- Madadi P, Hildebrandt D, Lauwers AE, Koren B. Characteristics of Opioid-Users Whose Death Was Related to Opioid-Toxicity: A Population-Based Study in Ontario, Canada *PLOS ONE* www.plosone.org, April 2013, Volume 8, Issue 4, e60600.
- Sproule BA. Decreasing the harms of prescription opioids: A case for pharmacists. *Drug and Alcohol Review* 2011;30:327-329.

Complexity and Vulnerability of Compliance Pack Preparation

A MULTI-INCIDENT ANALYSIS BY ISMP CANADA

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INTRODUCTION

The patient arrived at the pharmacy at 4:30 P.M. and the pharmacy was scheduled to close at 5 P.M. The patient was discharged from a hospital with numerous changes to his blister pack. Several errors were made. (These errors were not discovered until the pharmacist was trying to fax the patient's family doctor for subsequent refills at a later time).

- Two prescriptions from the hospital discharge order were put under the patient's family doctor's name and not the hospital discharge doctor's.
- The SIG on allopurinol was read "TO the once daily."
- Clopidogrel was supposed to be continued for 39 days after discharge as per the hospital discharge order, but it was only filled for 28 days without putting the refill for the remaining 11 days. (Note: 28-day supply was typical for blister packs for a four-week supply).
- The pharmacist was rushing to get new orders from the patient's family doctor and calling the hospital to clarify for warfarin since it was not on the hospital discharge order, and it was supposed to be restarted after clopidogrel was finished.

The above scenario illustrates the complexity and vulnerability of compliance packs due to numerous changes and insufficient time in prescription preparation and dispensing. This may potentially lead to a greater risk of medication errors as compared to individual prescription filling. It is important to be aware of the differences and additional accountabilities associated with dispensing in compliance packs versus traditional prescriptions.¹

Compliance packaging helps to enhance a patient's adherence to their medication schedule, particularly for those who are older, have cognitive impairment, and/or on a large number of medications, and ultimately optimizes the effectiveness of medication therapy.^{1,2} Approximately 70% of Canadian community pharmacists feel that the use of special packaging is one of the important factors to improve medication adherence.³ Therefore, compliance packaging is becoming more common for medication management in community pharmacy practice.

Processing and dispensing traditional prescriptions in vials already involves high-level procedures. Owing to its multi-compartment design, compliance packaging introduces further complexity and vulnerability in the pharmacy workflow, which increases the unpredictability and variations of the medication-use system.⁴ Therefore, the objective of this multi-incident analysis is to gain a better understanding of the potential contributing factors resulting from compliance pack-related incidents.

The Community Pharmacy Incident Reporting (CPhIR) Program (available at <http://www.cphir.ca>) is designed for community pharmacies to report near misses or medication incidents anonymously to ISMP Canada for further analysis and dissemination of shared learning from incidents. CPhIR has allowed the collection of invaluable information to help identify system-based vulnerable areas in community pharmacy practice in order to prevent medication incidents.⁵ This article provides an overview of a multi-incident analysis of compliance pack-related incidents reported to the CPhIR program.

MULTI-INCIDENT ANALYSIS OF MEDICATION INCIDENTS RELATED TO COMPLIANCE PACK PREPARATION IN COMMUNITY PHARMACY PRACTICE

Reports of medication incidents involving “blister pack”, “compliance pack”, “pill pack” and/or “bubble” were extracted from the CPhIR Program from June 2012 to May 2013. In total, 170 incidents met inclusion criteria and were included in this qualitative,

multi-incident analysis. The incidents were analyzed and categorized into two major themes: (1) order entry and (2) packaging process. The two major themes were further divided into subthemes, as shown in Table 1 and Table 2, respectively. (Note: The “Incident Examples” provided in Tables 1 and 2 were limited by what was inputted by pharmacy practitioners to the “Incident Description” field of the CPhIR program).

The “Incident Examples” provided in Tables 1 and 2 were submitted by pharmacy practitioners to the “Incident Description” field of the CPhIR program.

TABLE 1. THEME 1 – ORDER ENTRY

Order entry is the stage where pharmacy staff enters new prescriptions or makes changes to existing prescriptions on the computer system.

SUBTHEME	INCIDENT EXAMPLE	POTENTIAL CONTRIBUTING FACTORS
Hospital Discharge Order	<i>Patient was released from the hospital and normally gets blister packs. Pharmacy technician filled the antibiotic and logged all the other medications from the discharge prescription. Two changes needed to be made. In previous prescriptions, patient had been taking 2 tablets of metformin BID and 1 tablet of lansoprazole BID, but with the recent hospital discharge prescription, it indicated 1 tablet of metformin BID and 1 tablet of lansoprazole once daily. Pharmacy technician copied from old prescriptions and left the SIGs as before. Pharmacist noted the errors, fixed the directions of use and quantities on the computer, and counseled the patient of the adjusted doses at home.</i>	<ul style="list-style-type: none"> • Numerous modifications on the patient’s medication profile at one time • Copying from previous prescriptions • Lack of verification with the most up-to-date prescription(s) with the medications in the compliance pack
	<i>Patient was prescribed a new medication, amlodipine, upon hospital discharge. Patient normally gets blister packs but was given this new medication in a vial to catch up to the blisters. However, whoever entered the medications onto the computer system did not flag it as batch or put it in the panel for next fill. So when the pharmacy filled the next batch of blister packs (i.e. 2 weeks in advance before the patient needs them), it was not prompted to ask the family doctor for refilling the amlodipine. Patient’s son called the pharmacy as patient has run out of amlodipine in the vial and realized that the new blister packs did not contain amlodipine in them. Pharmacist also realized that they did the wrong quantity of catch-up dose since patient still has 1 week left of the old packs.</i>	<ul style="list-style-type: none"> • New medication(s) being added in the middle of a compliance pack cycle
Discontinuation of Medication from New Order	<i>When pharmacist checked the compliance packs, 15 mg oxazepam had not been discontinued. Both oxazepam 15 mg and 30 mg showed up on the prescription labels. Pharmacist cancelled the 15 mg.</i>	<ul style="list-style-type: none"> • Lack of automatic alert on the computer system for potential duplication of therapy
New Prescription Update	<i>Doctor changed the strength of losartan/hydrochlorothiazide. The new strength was put in the blister pack but the old</i>	<ul style="list-style-type: none"> • Lack of automatic alert on the computer system

SUBTHEME	INCIDENT EXAMPLE	POTENTIAL CONTRIBUTING FACTORS
	<p>strength was not removed. Patient ingested one dose and brought back the packs the next day. The pharmacist corrected the error. Patient did not suffer any long-term effects but felt a bit dizzy that night.</p> <p>Pharmacist noticed that there were 7 capsules short for gabapentin after filling the rest of the pill packs. It was then realized that the medication was put in both the morning and bedtime slot as was in the prior pill pack. When the latest prescription was entered, the time of administration was not updated to reflect that gabapentin was now to be taken only once a day instead of twice a day.</p>	<p>for potential duplication of therapy</p> <ul style="list-style-type: none"> • Lack of systematic process for independent double checks • Lack of verification with the most up-to-date prescription(s) and the medications in the compliance pack
Prospective Update	<p>Tecta® was given BID in the compliance pack but the pharmacy billed for once daily dosing. From looking up at the original prescription, it was a hospital discharge order and written as BID for the first month and then continue with once daily dosing. Pharmacy forgot to inactivate the BID prescription after the first month and showed up in the 2nd month blister pack and forgot to activate the once daily dosing. When pharmacist checked the hardcopies/billings, it only indicated for 28 tablets. The compliance pack was fixed by relabeling and inactivated BID order and put through the once daily order. Pharmacist also physically removed the bedtime doses, so only the morning doses were in the compliance card.</p> <p>A prescription was put through the computer system and filled the blister packs on November 23 for Kadian® 50 mg po BID. When the pharmacist was checking the prescription, she noted that the prescription was post-dated for November 26. The pharmacist cancelled the prescription but the capsules were left in the blister packs and put aside to be re-entered on November 26 as opposed to punching the medications out of the cards and putting them back into the stock bottles. On November 26, the prescription was filled again except it was put through as Kadian® 100 mg po BID instead of 50 mg po BID on the prescription. The compliance cards were labeled as 100 mg capsules even though the correct dose (i.e. 50 mg) was in the cards.</p>	<ul style="list-style-type: none"> • Lack of notifications on the computer system for prospective changes from the prescription • Lack of verification with the original prescription(s) and the medications in the compliance pack • Inappropriate storage of miscellaneous medications for future use
Miscalculation	<p>The direction of use for olanzapine indicated 1 tablet in the morning and 2 tablets at bedtime. Prescription had been logged as 84 tablets but the "next quantity" was put through as 28 tablets. When the prescription was filled, it only billed for 28 tablets, which should have been 84 tablets.</p> <p>Physician had allowed 3 months with 3 repeats for captopril. Pharmacy had to switch to 1 month with appropriate refills for blister packs and had a confirmation with the doctor. It was mistakenly put in as 5 repeats when it should have been 11 repeats.</p>	<ul style="list-style-type: none"> • Lack of awareness of the differences in entering compliance pack versus individual prescription order

TABLE 2. THEME 2 – PACKAGING PROCESS

Packaging process is the stage that involves the preparation of blister packs for each individual patient.

SUBTHEME	INCIDENT EXAMPLE	POTENTIAL CONTRIBUTING FACTORS
Labeling	<i>When preparing for the blister packs, the right drug (risperidone) was in the packs but the rabeprazole EC label was on it by accident.</i>	<ul style="list-style-type: none"> • Look-alike sound-alike (LASA) drugs • Lack of systematic process for independent double checks in workflow
Incorrect Time of Administration	<i>A new compliance-pack patient from nursing home was given instructions to take Toloxin® 4 times weekly. The patient had been taking it on Monday, Tuesday, Wednesday, and Thursday. It got packaged as Monday, Wednesday, Friday, and Sunday. The nurse noticed the discrepancy before it was given to the patient.</i>	<ul style="list-style-type: none"> • No specific day or time has been specified on the prescription label • Lack of systematic process for independent double checks in workflow
	<i>A patient on blister pack who gets methotrexate weekly at bedtime. Blisters were done incorrectly with methotrexate by putting in the morning slot instead of the bedtime slot. Pharmacist missed when checking and patient discovered the error.</i>	
	<i>The doses for atorvastatin and rabeprazole were double in the bedtime slot for Saturday and no dose for both of the medications for Sunday.</i>	<ul style="list-style-type: none"> • Numerous bubbles/slots on the compliance card with no physical barrier between the bubbles corresponding to the appropriate day and time
	<i>Prescription for methotrexate was supposed to be 3 tablets once weekly on Sunday. Pharmacy technician put 1 tablet in the Monday, Wednesday, and Friday's supertime slot. Note: for Novasen and vitamin B12, 1 tablet each at supper time slot on Monday, Wednesday, and Friday. Pharmacist noticed when checking and bubbles were fixed.</i>	<ul style="list-style-type: none"> • Filling multiple medications in multiple bubbles/slots simultaneously • Confirmation bias
Half-tablet Medications	<i>Patient is on Synthroid® 25 mcg (1.5 tablets) in the morning plus trazodone 50 mg (1.5 tablets) at bedtime. When checking the blister packs, the pharmacist noticed that $\frac{1}{2}$ tablet of trazodone was placed in the morning slot along with Synthroid® due to similar physical appearance.</i>	<ul style="list-style-type: none"> • Look-alike sound-alike (LASA) drugs • Lack of systematic process for independent double checks in workflow
Improper Return-to-stock Procedure	<i>Blister packs were never picked up and needed to be restocked. When restocking some of the irbesartan 75 mg tablets, they got in with the gliclazide MR 30 mg bottles. It was noticed when checking some pill packs.</i>	<ul style="list-style-type: none"> • Look-alike sound-alike (LASA) drugs • Lack of systematic process for independent double checks in workflow

SUBTHEME	INCIDENT EXAMPLE	POTENTIAL CONTRIBUTING FACTORS
Dose/Medication Omission	<p><i>Patient gets 10 medications blister packed and clopidogrel was omitted from morning slot (which contained 8 other pills). Pharmacist discovered the error when doing the final check.</i></p> <p><i>Patient has his medications blister packed 4 weeks at a time, including metoprolol 50 mg 3 tablets BID. Patient's family realized the morning dose for metoprolol was missing from 2 of the 4 blister packs, including the one patient had already started. This meant that the patient had missed 2 days of metoprolol in the morning. Patient was hospitalized for shortness of breath and was given an increased dose of diuretic.</i></p>	<ul style="list-style-type: none"> • Multiple medications in the same bubble/slot • Lack of systematic process for independent double checks in workflow • Lack of cross-reference check with other compliance packs of the same patient
Incorrect Medication	<i>Atorvastatin 10 mg was placed instead of rosuvastatin 10 mg in the blister pack. Error was found when checking the blister package.</i>	<ul style="list-style-type: none"> • Look-alike sound-alike (LASA) drugs • Lack of systematic process for independent double checks in workflow
Incorrect Strength	<i>Synthroid® 0.05 mg was placed in blister pack instead of 0.15 mg and patient took the wrong dose for 5 days before noticing the error. Patient reported feeling "more tired" than usual.</i>	<ul style="list-style-type: none"> • Multiple strengths of the medication are available from the same manufacturer • Lack of systematic process for independent double checks in workflow • Confirmation bias

HOW IS COMPLIANCE PACKAGING DIFFERENT FROM PREPARING TRADITIONAL PRESCRIPTIONS?

Comparing to traditional prescription preparation, compliance packaging often presents with unique features that are more prone to medication incidents. For example, during order entry (see Table 1) pharmacy staff typically enters the dispensing quantity, the number of refills, and the days supply as directed by the prescriber. However, since compliance packs are typically filled on a weekly, biweekly, or monthly basis, the number of refills and days supply may need to be modified during order entry in order to fit the compliance packaging schedule. This extra step will require additional cognitive processes performed by pharmacy staff during order entry, which may lead to an increased risk of error.

Moreover, for compliance packaging, the pharmacy

staff would need to place individual medication into each bubble of the compliance pack, corresponding to the appropriate day of the week and administration time indicated on the prescription label. Since there are no permanent physical barriers between each bubble (as opposed to individual vial per medication in traditional dispensing), compliance packaging is more prone to a medication being misplaced in another bubble or slot during the sealing process.

WHAT ARE SOME IMPORTANT CONSIDERATIONS FOR SAFE MEDICATION PRACTICES WITH COMPLIANCE PACKAGING?

Based on the potential contributing factors that have been identified from this multi-incident analysis, consider the following when preparing compliance packs for individual patients:


- Verify the printed prescription labels with the most current prescription order(s), especially when there is a new update or change to the patient's profile, including hospital discharge order, new prescription, and/or discontinuation of medications, etc.;
- Incorporate reminders on the computer system that will automatically flag any prospective changes needed to be made during the next compliance pack cycle;¹
- Conduct independent double checks whenever possible in the pharmacy workflow;⁷
- Implement barcode scanning (if possible) which serves as an automated independent double check to verify that the drug product and strength selected from the inventory matches with what has been entered into the patient's profile;⁶
- Encourage collaboration and dialogue with patients, caregivers, and other primary care practitioners to maintain good communication and ensure appropriate medication regimen is prepared in each compliance-pack cycle.⁶
- Consult the *Guideline on Multi-Medication Compliance Aids* (available from <http://www.ocpinfoc.com/regulations-standards/policies-guidelines/compliance-aids/>), which was updated by the Ontario College of Pharmacists in 2013.

CONCLUSION

The incidents gathered from this multi-incident analysis have reinforced the complexity and vulnerability of compliance pack preparation. Although compliance packs heighten patient's adherence and treatment outcomes, the complexity of the design and procedures for preparation may potentially lead to negative health consequences.⁸ As a result, this multi-incident analysis is intended to recognize the vulnerabilities with compliance pack preparation, which create opportunities for community pharmacy practitioners to implement additional safeguards to enhance medication safety.

ACKNOWLEDGEMENT

The authors would like to acknowledge Roger Cheng, Project Leader, ISMP Canada, for his assistance in conducting the incident analysis of this report.

ISMP Canada would like to acknowledge support from the Ontario Ministry of Health and Long-Term Care for the development of the Community Pharmacy Incident Reporting (CPhIR) Program (<http://www.cphir.ca>). The CPhIR Program also contributes to the Canadian Medication Incident Reporting and Prevention System (CMIRPS) (<http://www.ismpcanada.org/cmirms.htm>). A goal of CMIRPS is to analyze medication incident reports and develop recommendations for enhancing medication safety in all healthcare settings. The incidents anonymously reported by community pharmacy practitioners to CPhIR were extremely helpful in the preparation of this article. 

References

1. Hack B. Compliance packaging: issues and considerations. *Pharmacy Connection* 2010; 17(4): 32-34. Available from: <http://www.ocpinfoc.com/library/PC/download/PC%20July/August%202010>.
2. Hack B, Dufour J. Compliance packaging: issues and considerations part II. *Pharmacy Connection* 2011; 18(1): 35-36. Available from: <http://www.ocpinfoc.com/library/PC/download/PC%20Winter%202011>.
3. The Pharmacy Group. *Community Pharmacy in Canada: A Statistical Report*. Rogers Business and Professional Publishing. 2008; 18. Available from: <http://capdm.ca/members/pdf/Community%20Pharmacy%20in%20Canada%20dec07.pdf>.
4. Incident Analysis Collaborating Parties. *Canadian Incident Analysis Framework*. Edmonton, AB: Canadian Patient Safety Institute; 2012. Available from: <http://www.patientsafetyinstitute.ca/English/toolsResources/IncidentAnalysis/Documents/Canadian%20Incident%20Analysis%20Framework.PDF>.
5. Ho C, Hung P, Lee G, Kadija M. Community pharmacy incident reporting: A new tool for community pharmacies in Canada. *Healthcare Quarterly* 2010; 13: 16-24. Available from: <http://www.ismp-canada.org/download/HealthcareQuarterly/HQ2010V13SP16.pdf>.
6. Institute for Safe Medication Practices. Double-checking bingo cards. *ISMP Medication Safety Alert! Community/ambulatory Care Edition* 2013; 12(10): 2-3. Available from: <http://www.ismp.org/newsletters/ambulatory/archives/201310.asp>.
7. ISMP Canada. Lowering the risk of medication errors: Independent double checks. *ISMP Canada Safety Bulletin* 2005; 5(1): 1-2. Available from: <http://www.ismp-canada.org/download/safetyBulletins/ISMPCSB2005-01.pdf>.
8. Schneider PJ, Murphy JE, Pedersen CA. Impact of medication packaging on adherence and treatment outcomes in older ambulatory patients. *J Am Pharm Assoc* 2008; 48(1): 58-63. Available from: <http://japha.org/article.aspx?articleid=1043417>.

DISCIPLINE DECISIONS



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Member: Herman Ma, R.Ph.

At a hearing on November 18, 2013, a Panel of the Discipline Committee found Mr. Ma guilty of professional misconduct in that, while engaged in the practice of pharmacy as director, shareholder, Designated Manager and/or dispensing pharmacist at Leone Pharmacy in Toronto, Ontario, he

- falsified pharmacy records relating to his practice in connection with claims made for drugs in 2009;
- signed or issued, in his professional capacity, a document that he knew contained a false or misleading statement in connection with claims made for drugs in 2009;
- submitted an account or charge for services that he knew was false or misleading in connection with claims made for drugs in 2009.

In particular, he was found to have

- failed to maintain a standard of practice of the profession;
- falsified a record relating to his practice;
- signed or issued, in his professional capacity, a document that he knew contained a false or misleading statement;
- submitted an account or charge for services that he knew was false or misleading;
- contravened the *Pharmacy Act*, the *Drug and Pharmacies Regulation Act*,

the *Regulated Health Professions Act*, 1991, or the regulations under those Acts, and in particular, sections 155 and 156 of the *Drug and Pharmacies Regulation Act*, R.S.O. 1990, c. H-4, as amended;

- contravened a federal or provincial law or municipal by-law with respect to the distribution, sale or dispensing of any drug or mixture of drugs, and in particular, sections 5, 6 and 15(1) of the *Ontario Drug Benefit Act*, R.S.O. 1990, c. O.10, and sections 25 and 27 of *Regulation 201/96* under the *Ontario Drug Benefit Act*;
- engaged in conduct or performed an act relevant to the practice of pharmacy that, having regard to all the circumstances, would reasonably be regarded by members of the profession as disgraceful, dishonourable or unprofessional.

The Panel imposed an Order which included:

- A reprimand;
- Directing the Registrar to impose specified terms, conditions or limitations on the Member's Certificate of Registration, and in particular:
 - o that he complete successfully, at his own expense, within 12 months of the date of the Order, the ProBE Program on Professional/Problem Based Ethics for health care professionals;

- o that he shall be prohibited, for a period of three years from the date of the Order, from:
 - having any proprietary interest in a pharmacy of any kind;
 - acting as a Designated Manager in any pharmacy;
 - receiving any remuneration for his work as a pharmacist other than remuneration based only on hourly or weekly rates, and not on the basis of any incentive or bonus for prescription sales;
- o that he notify the College in writing of any employment in a pharmacy; and
- o that he ensure that his employers confirm in writing to the College that they have received and reviewed a copy of the Discipline Committee Panel's decision in this matter and their Order, and confirming the nature of the Member's remuneration.
- A suspension of ten months, with one month of the suspension to be remitted on condition that the Member complete the remedial training;
- Costs to the College in the amount of \$12,000.

In its public reprimand to the Member, the Panel underscored for the Member that he is a member of the profession of Pharmacy where integrity and trust is paramount and thus had disappointed the Panel. The Panel was concerned by the frequency and volume of the Member's fraudulent activities, finding the Member's actions to be dishonourable, disgraceful and conduct unbecoming a Pharmacist.

Member: Herman Reich, R.Ph.

At a hearing on December 11, 2013, a Panel of the Discipline Committee found Mr. Reich guilty of professional misconduct with respect to

- management of inventory of narcotics, controlled drugs and targeted substances under his control to prevent loss or theft, including failure to count and reconcile narcotics, controlled drugs and targeted substances at least every six months from on or about September 1, 2009 to on or about April 10, 2012;
- management of inventory of narcotics under his control to prevent loss or theft, including failure to include methadone in counting and reconciliation of narcotics from on or about June 25, 2011 to on or about April 10, 2012;
- management of inventory of narcotics and controlled drugs under his control to prevent loss or theft, including failure to report destruction of narcotics and controlled drugs to the Office of Controlled Substances from on or about April 30, 2010 to on or about April 10, 2012.

In particular, he was found to have

- failed to maintain a standard of practice of the profession;
- contravened, while engaged in the practice of pharmacy, a federal or provincial law or municipal by-law with respect to the distribution, sale or dispensing of any drug or mixture of drugs, and in particular s. 43 of the *Narcotic Control Regulations*, C.R.C., c. 1041, as amended, under the *Controlled Drugs and Substances Act*, S.C. 1996, c. 19, as amended, and/or s. G.03.012 of the *Food and Drug Regulations*, C.R.C., c. 870, as amended, to the *Food and Drugs Act*, R.S.C. 1985, c. F-27, as amended, and/or s. 7(1)(a) of the *Benzodiazepines and Other Targeted Substances Regulations*, S.O.R/2000-271 under the *Controlled Drugs and Substances Act*, S.C. 1996, c. 19, as amended;
- engaged in conduct or performed an act or acts relevant to the

practice of pharmacy that, having regard to all the circumstances, would reasonably be regarded by members of the profession as disgraceful, dishonourable or unprofessional.

The Panel imposed an Order which included:

- A reprimand;
- Directing the Registrar to impose specified terms, conditions or limitations on the Member's Certificate of Registration, and in particular:
 - o that the Member complete successfully, at his own expense, within 12 months of the date the Order is imposed, the ProBE Program – Professional/ Problem Based Ethics for health care professionals offered by the Centre for Personalized Education for Physicians;
 - o the Member shall be prohibited, for a period of 4 years from the date the Order is imposed, from:
 - acting as a Designated Manager in any pharmacy;
 - acting as a Narcotic Signer at any pharmacy;
 - o for a period of 5 years from the date the Order is imposed, the Member shall provide the College with the count and reconciliation of all narcotics, controlled drugs and targeted substances from his pharmacy every 6 months, beginning 6 months after the date of the Order of the Discipline Committee. The Member shall provide the College with this information either by sending it to the College himself, or by ensuring that the information is sent to the College by the Designated Manager;
 - o that the Member's practice, and all activities at his pharmacy will be monitored by the College for a period of 5 years from the date the Order is imposed by means of inspections by a

representative of the College at such times as the College may determine.

- A suspension of 16 months, with two months of the suspension to be remitted on condition that the Member complete the remedial training;
- Costs to the College in the amount of \$15,000.

In its public reprimand to the Member, the Panel stated that it found the Member's actions and inactions to be reprehensible and that his conduct was disgraceful, dishonourable, and unprofessional. The Panel expressed concern that this wasn't the Member's first time before the Discipline Committee. The Panel was appalled given the level of authority the Member had had as a pharmacist, Designated Manager, shareholder and owner of the pharmacy. The Panel agreed with the terms of the Order that was jointly presented by the parties.

Member: Andrew Bennett, R.Ph.

At a hearing on January 20, 2014, a Panel of the Discipline Committee found Mr. Bennett guilty of professional misconduct in that he

- failed to cancel unused and/or re-used doses;
- billed patient G.H. daily for Plavix 75mg from December 21, 2007 to April 27, 2008;
- billed patient C.B. daily for medications from March 24, 2008 to July 31, 2008;
- billed patient V.C. weekly for medications from February 11, 2008 to July 25, 2008, and again from August 29, 2008 to October 10, 2008;
- charged an individual dispensing fee for each of 2 prescriptions of Gabapentin 300mg dispensed concurrently to G.B. from August 24, 2007 to November 20, 2007, pursuant to the transfer

of only 1 prescription to the pharmacy;

- dispensed methadone doses to patients as carries without authorization;
- dispensed Rx# 1008996, 1008999 and 1009001 without authorization;
- failed to maintain records as required;
- reduced the quantity of methadone dispensed without authorization;
- dispensed drugs in weekly compliance pill packs in less than the full amount prescribed for patients without informed authorizations in writing from those patients;
- recorded 2 prescriptions of Gabapentin 300mg dispensed concurrently to G.B. from August 24, 2007 to November 20, 2007, pursuant to the transfer of only 1 prescription to the pharmacy;

In particular, he was found to have

- failed to maintain the standards of practice of the profession;
- failed to keep records as required respecting the Member's patients;
- falsified a record relating to the Member's practice;
- charged a fee that was excessive in relation to the service provided;
- contravened the *Pharmacy Act*, the *Drug and Pharmacies Regulation Act*, the *Regulated Health Professions Act*, 1991, or the regulations under those Acts, and in particular, sections 155 and/or 156 of the *Drug and Pharmacies Regulation Act*, R.S.O. 1990, c. H-4, as amended;
- contravened a federal or provincial law or municipal by-law with respect to the distribution, sale or dispensing of any drug or mixture of drugs, and in particular, section 9 of the *Drug Interchangeability and Dispensing Fee Act*, R.S.O. 1990, c. P.23; section 5 of O.Reg. 936 under the *Drug Interchangeability and Dispensing Fee Act*;

sections 5, 6(2) and 15(a) and (b) of the *Ontario Drug Benefit Act*, R.S.O. 1990, c.O.10; subsections 18(7), 18(8), 18(9) and 18(10) of *Ontario Regulation 201/96* under the *Ontario Drug Benefit Act*; and section 38 of the *Narcotic Control Regulations*, C.R.C., c.1041, as amended, under the *Controlled Drugs and Substances Act*, S.C. 1996, c. 19, as amended;

- engaged in conduct or performed an act relevant to the practice of pharmacy that, having regard to all the circumstances, would reasonably be regarded by members of the profession as disgraceful, dishonourable or unprofessional

The Panel imposed an Order which included:

- A reprimand;
- Directing the Registrar to impose the following specified terms, conditions and limitations on the Member's certificate of registration;
 - o the Member shall successfully complete, at his own expense, with such courses to be completed within twelve (12) months of this Order becoming final:
 - the ProBE Program on Ethics for Healthcare Professionals;
 - CPS I Module 3: Basic Professional Practice Laboratories from the Canadian Pharmacy Skills Program offered through the Leslie Dan Faculty of Pharmacy at the University of Toronto;
 - CPS II Module 3: Advanced Professional Practice Laboratories from the Canadian Pharmacy Skills Program offered through the Leslie Dan Faculty of Pharmacy at the University of Toronto; and
 - o the Member's practice shall be monitored by the College by means of inspection(s) by a representative or representa-

tives of the College at such time or times as the College may determine, to a maximum of two (2) inspections, during the thirty six (36) months following the lifting of the suspension referred to below;

- A suspension of four months, with one month of the suspension to be remitted on condition that the Member complete the remedial training;
- Costs to the College in the amount of \$8,500.

In its public reprimand to the Member, the Panel noted its disappointment with the Member and emphasized that the Member's conduct had fallen well short of what the public and his fellow professionals expect.

Member: Harvey Organ

At a hearing on January 20, 2014, a Panel of the Discipline Committee found Mr. Organ guilty of professional misconduct in that he

- was found guilty on June 30, 2010 of contravening the *Ontario Drug Benefit Act*, s. 15(1)(e);
- failed to report to the Registrar that he had been charged with offences under the *Ontario Drug Benefit Act* in April 2009 and/or that he had been found guilty of an offence under the *Ontario Drug Benefit Act* in June 2010;
- submitted false or incomplete information under the *Ontario Drug Benefit Act* or *Drug Interchangeability and Dispensing Fee Act* on November 20, 2007; February 27, 2008; August 26, 2008 and/or March 17, 2009 regarding professional allowances paid to Kohler's;
- submitted false or incorrect information in response to questions on the annual renewal application submitted to the

College in January 2010 regarding the charges under the *Ontario Drug Benefit Act* in April 2009;

- submitted false or inaccurate information in response to questions on the annual renewal application submitted to the College in February 2011 regarding the finding of guilt in relation to the offence under the *Ontario Drug Benefit Act*, in June 2010;

In particular, he

- was found guilty of offense relevant to his suitability to practise;
- contravened a term, condition or limitation imposed on his Certificate of Registration by O. Reg. 202/94 under the *Pharmacy Act*, 1991;
- failed to maintain a standard of practice of the profession;
- falsified a record relating to his practice;
- signed or issued, in his professional capacity, a document that he knew contained a false or misleading statement;
- engaged in conduct or performed an act relevant to the practice of pharmacy that, having regard to all the circumstances, would reasonably be regarded by members of the profession as disgraceful, dishonourable or unprofessional.

The Panel imposed an Order which included:

- A reprimand;
- Directing the Registrar to impose

specified terms, conditions or limitations on the Member's Certificate of Registration, and in particular, that the Member complete successfully and unconditionally, at his own expense, within 12 months of the date of the Order, the ProBE Program on Professional/Problem Based Ethics for Healthcare Professionals;

- A suspension of four months, with one month of the suspension to be remitted on condition that the Member complete the remedial training;
- Costs to the College in the amount of \$3,500.

In its reprimand to the Member, the Panel stated that it found the Member's conduct shameful, disgraceful and dishonourable. The Panel further noted that, should the Member be before the Discipline Committee in the future, he could expect any future sanction to be more severe. **Pc**

The full text of these decisions is available at www.canlii.org. CanLii is a non-profit organization managed by the Federation of Law Societies of Canada. CanLii's goal is to make Canadian law accessible for free on the Internet.

FOCUS ON ERROR PREVENTION

By Ian Stewart B.Sc.Pharm., R.Ph.

RECONSTITUTION OF ANTIBIOTICS

Many pharmacists have been informed by parents that the liquid antibiotic dispensed for their child is finished before the duration of therapy is completed. Factors may include spillage and error in measurement by the parent. However, in some cases, the cause may be the addition of an incorrect quantity of water when the antibiotic was been reconstituted at the pharmacy.

CASE:

Rx
Keflex® Suspension
Sig: 110mg four times daily
for 5 days

The above prescription, written for a three year old child, was taken to a community pharmacy for processing. The prescription was entered into the computer as 100ml Novo-Lexin® 125mg/5ml with the instructions to give 4.4mls four times daily for 5 days.


The pharmacy assistant reconstituted the antibiotic by adding water to the dry powder, and then gave it to the pharmacist for checking. The prescription was then checked for accuracy and the medication dispensed.

Two days later, the child's parent visited the pharmacy and reported that the antibiotic was almost complete, though the medication should be given for another three days. The parent assured the pharmacist that no spillage had occurred and the dosage was measured using the syringe which was supplied.

POSSIBLE CONTRIBUTING FACTORS:

- The instructions for reconstituting the antibiotic may have been misread. The label states "add two portions of 30ml water". The assistant likely added only 30mls of water instead of 60mls.
- The instructions for reconstituting antibiotics are not standardized. The manufacturer's label on the 150ml Novo-Lexin® 250mg/ml bottle states "add 90ml water". However, the 150ml Novo-Lexin® 125mg/ml bottle states "add two portions of 45mls".
- Most manufacturers' labels instruct the pharmacist to add the total quantity of water (e.g. 90ml) when reconstituting antibiotics. Therefore, the pharmacy assistant likely focused on the amount of water stated (30ml) and missed or failed to read the additional text which indicates the need to add a second 30ml of water. In some cases, the pharmacy assistant correctly interprets the instructions and the need to add a total of 60mls. However, he/she adds the first 30mls then forgets to add the second 30mls. This is more likely to occur in a busy environment.
- The manufacturer's label together with the prescription label completely covered the bottle, thereby preventing the pharmacist from identifying the addition of an insufficient amount of water. Hence, the dispensing of an incorrect concentration and an incorrect dose.

RECOMMENDATIONS:

- Manufacturers should be consistent in providing instructions for reconstituting antibiotics.
- The total quantity of water to be added must be stated. For example, "add a total of 60mls water in two lots of 30mls".
- Manufacturers should consider removing the need to add the water in two portions. Steps may include the use of larger bottles.
- Pharmacy staff should place the prescription label on the product in such a way that the pharmacist can confirm that the correct volume is being dispensed.
- To assist the pharmacist in confirming that the correct volume and concentration is being dispensed, manufacturers should add a "fill to line" on each bottle. 

Continue to send reports of medication errors in confidence to: [Ian Stewart at ian.stewart2@rogers.com](mailto:ian.stewart2@rogers.com). Please ensure that all identifying information (e.g. patient name, pharmacy name, healthcare provider name, etc.) are removed before submitting.

THANK YOU, PRECEPTORS & EVALUATORS!


The calls to be a preceptor
are multiple, coming not
only from the College
but from the pharmacy
and pharmacy technician
programs across the
province.

Support from preceptors and evaluators continues to drive the success of the Structured Practical Training (SPT) and Structured Practical Evaluation (SPE) programs. Whether they are new practitioners or seasoned veterans, the contributions they make play a pivotal role in preparing the preceptees to be competent members of the profession.

Fortunately, this is not a thankless role to be played. The levels of gratitude that are expressed to the College by the preceptees recognize the commitment that the preceptors and evaluators have been making. Undoubtedly, these comments are also shared directly by the preceptees to their preceptors. Further to that, it is important to recognize the appreciation that the College has for those that support the programs the College has in place for future colleagues. This would also include the organizations who put in place the supports and resources to allow their staff the opportunity to participate as preceptors and evaluators. The annual list of preceptors and evaluators looks to highlight the hundreds of individuals who have dedicated their time and energy to the SPT & SPE programs this past year. It is because of their commitment to the profession and to the principle that we all share responsibility for ensuring that preceptees meet the minimum standards to practice, that the programs have been as successful as they are.

The list also looks to encourage those who have not yet found the opportunity or initiative to participate as a preceptor, to do so. The calls to be a preceptor are multiple, coming not only from the College but from the pharmacy and pharmacy technician programs across

the province. In looking at the list, there appears to be a large number of pharmacists and pharmacy technicians serving in this role, however, in light of the total number of those eligible to serve as preceptors, they are but a small fraction. Previous editions of the "Thank You to Preceptors" have highlighted the benefits of being a preceptor, through the personal and professional satisfaction that is enjoyed from guiding someone into the profession, the knowledge that is gained from the preceptees and the sense of paying forward what was done for them earlier on in their career. There is also the benefit to the organizations of having a student, intern or pharmacy technician applicant who can add value to the practice site in their roles while training. Their contributions should not be underestimated.

The question shouldn't be, "Why should I be a preceptor?" It should be, "Why aren't I a preceptor?" Get on the list. Visit the OCP website and find out how to "[Become a Preceptor](#)". 

AJAX

Tammy Cassin	Ajax Pickering Health Centre
Laurie Cook	One Healthcare Pharmacy
Desiree De Silva	Shoppers Drug Mart
Patrick Garcha	Shoppers Drug Mart
Amir Ghassemi	Costco Pharmacy
Sweta Gupta	Loblaws Pharmacy
Haider Jaffry	Costco Pharmacy
Fotini Kagouras	Rouge Valley Health System
Emad Khalil	Health-Rite Pharmacy
Sarah Khalil	Health-Rite Pharmacy
Giselle Trikkas	Ajax Pickering Health Centre
Ellen Tsao	Ajax Pickering Health Centre
Terese Yousef	Costco Pharmacy

ALEXANDRIA

Helene Lauzon	Pharmacie Jean Coutu Pharmacy
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AMHERSTBURG

Luigi Di Pierdomenico	Emrose Medical Pharmacy
Robert Giegerich	Rexall Pharma Plus
Perry Ngan	Rexall Pharma Plus
Joseph Ubah	Rexall Pharma Plus
Mary Wolff	Shoppers Drug Mart

ANCASTER

Syed Ahmed	Costco Pharmacy
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ANGUS

Natalie McLeish	Angus Borden Guardian Pharmacy
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ARNPRIOR

John Whittle	Rexall
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ARTHUR

Ellen Haist	Walshs Pharmacy Ltd
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AURORA

Shahram Amin-Zadeh	Target Pharmacy
Edmund Bielawski	Summit Veterinary Pharmacy Inc
Faraz Chaudary	Shoppers Drug Mart
Shelina Jessa	Shoppers Drug Mart
Kai Lui	Remedy's Rx
Donna Nelson	Loblaws Pharmacy
David Onizuka	Shoppers Drug Mart
Mary Polczar	Medical Pharmacy
Parag Shah	Shoppers Drug Mart
John Shenouda	Hollandview Pharmacy
Eileen Tso	Sparkle Pharmacy

AYLMER

John Bajc	Hills Pharmacy Limited
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AZILDA

Jacqueline Chiu	Rexall
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BARRIE

Faris Al-Akeedi	Costco Pharmacy
Roselle Carrigan	Pharmasave Allandale
Sandra Chanko	First Medical Pharmacy
Jacquelyne Conlin	Medisystem Pharmacy
Andrea Desrosiers	Shoppers Drug Mart
Alireza Goudarzi	Costco Pharmacy
Sarah Haney	Wal-Mart Pharmacy
Ellen Helfand	Shoppers Drug Mart
Mohammad-Uzman Imran	Barrie Central Pharmacy
Raymond Labelle	Procure Pharmacy Ltd

Kevin MacCarthy	Pharmasave Allandale
David Morkos	PureHealth Pharmacy
Hamid Reza Nowroozi Dayen	Costco Pharmacy
Shamin Rajan	Shoppers Drug Mart
Alison Ross	Shoppers Drug Mart

BELLEVILLE

Dinie Engels	Quinte Healthcare Corporation
Wissam Hegazi	Quinte Healthcare Corporation
Andrea Johnston	Quinte Healthcare Corporation
Jennifer Leavitt	Quinte Healthcare Corporation
Jugana Milosevic	Wal-Mart Pharmacy
Leanne Vieira	Quinte Healthcare Corporation

BLENHEIM

Nicholas Roberts	Mcintyre Pharmacy Ltd
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BLIND RIVER

Joanne Weingartner	Blind River District Health Ct
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BOWMANVILLE

Barbara De Rond	Lakeridge Health
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BRACEBRIDGE

David Corner	Shoppers Drug Mart
Leo Krahn	Rexall Pharma Plus

BRADFORD

Tonya Madill	Wal-Mart Pharmacy
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BRAMALEA

Hamchand Goorah	Pharma Plus
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BRAMPTON

Seema Ahmed	Costco Pharmacy
Alvin Ashamalla	Brampton Civic Hospital
Ehab Aziz	Spring Valley Pharmacy
Jaspreet Bajaj	Father Tobin Pharmacy
Arun Bhardwaj	Healthplex Pharmacy
Cinzia Briganti	Brampton Civic Hospital
Ada Ceci	Rexall
Minaxi Chaudhari	Nanak Pharmacy
Kalpesh Chauhan	Shoppers Drug Mart
Dharmegn Darji	Rexall
Sherif El-Sabakhawi	Shoppers Drug Mart
Lilian Fam	MD Health Pharmacy
Cosimo Fragomeni	Vodden Medical Arts Pharmacy
Yvonne Guirgis	Pharma Plus
Awais Hanif	Brampton Civic Hospital
Rania Hanna	Shoppers Drug Mart
James Hernane	Shoppers Drug Mart
Ram Kaushik	Rexall
Jawairia Kazmi	Costco Pharmacy
Sharanjit Khachh	Shoppers Drug Mart
Carolyn Khan	Queen-Lynch Pharmacy
Anwar Khan	Pharma 7 Care
Carolyn Khan	Queen-Lynch Pharmacy
Sunitha Kondoor	Shoppers Drug Mart
Saima Mahmood	Shoppers Drug Mart
Gagandeep Manroy	Target Pharmacy
Amna Mian	Brampton Civic Hospital
Amarjit Midha	Shoppers Drug Mart
Dana Molckovsky	Main Street Medical Pharmacy
Kelly Nolan	Avita Integrative Health & Restoration Clinic
Christopher Oliveiro	Father Tobin Pharmacy
Mehul Panchmatia	IDA Gore Pharmacy

PRECEPTORS

Nishant Parikh	Westbram Pharmacy
Meena Patel	Shoppers Drug Mart
Celia Prioste-Galle	Main St Pharmacy
Andria Reich	Springdale Pharmacy
Ethel Rizarri	Shoppers Drug Mart
Asif Rizvi	Brampton Civic Hospital
Neven Saad	Greencross Drugs
Sameh Sadek	MD Health Pharmacy
Fatema Salem	Wal-Mart Pharmacy
Nadeem Sayani	Connaught Place Pharmacy
Ashwani Sehdev	Shoppers Drug Mart
Vipulkumar Shah	Shoppers Drug Mart
Devinder Singh	Shoppers Drug Mart
Anoop Singh	Brampton Civic Hospital
Sandip Singh	Shoppers Drug Mart
Jaspreet Sodhi	Shoppers Drug Mart
Winnie Tong	Brampton Civic Hospital
Jasjit Toor	Shoppers Drug Mart
Zacheriah Varghese	Drugstore Pharmacy
Harsimran Virk	Sandalwood Care Pharmacy
Asim-bin Waheed	Costco Pharmacy
Joseph Yousef	Sandalwood Medical Pharmacy

BRANTFORD

Wesam Abuzaier	The Brantford General Hospital
Luke Agada	Shoppers Drug Mart
Sunil Trimbak Chitnis	Guardian Discount Pharmacy
Shirley Drever	Medisystem Pharmacy
Stephen Flexman	iPharm
Crystal Pickering	The Brantford General Hospital
Rashda Rana	Fairview Remedy's Inc.
Jennifer Saluta	Medisystem Pharmacy
Jacqueline Steele	Medisystem Pharmacy
Gillian Stewart	Medisystem Pharmacy

BRIGHTON

Gwendolyn Olson	Rexall Pharma Plus
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BROCKVILLE

Threse Guirguis	Brockville Mental Health Center
Mary Love	Shoppers Drug Mart
Shirley Reid	Brockville Mental Health Center
Marielle Renaud	Brockville Pharmasave
John Silke	Wal-Mart Pharmacy

BROOKLIN

Tony Huynh	Shoppers Drug Mart
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BURLINGTON

Naglaa Abd El Sayed	Innomar Specialty Pharmacy
Najat Abu-Halimeh	Jasmin Pharmacy
Fred Chung	Innomar Specialty Pharmacy
Marilyn Cousins	Classic Care Pharmacy
Ashley Desouza	Smartmeds Pharmacy
Dina Dichek	Joseph Brant Hospital
Vishnu Dyal	Smartmeds Pharmacy
Nabil Georges	Plains Medical Pharmacy
Daphne Geslani	Smartmeds Pharmacy
Claire Gooderham	Morelli's Pharmacy
Raief Killeny	Total Health Pharmacy
Carolyn Mallari	Classic Care Pharmacy
Adriana Martin	Loblaws Pharmacy
Poobalan Nayiager	Joseph Brant Hospital
Iwona Oleksiak	Classic Care Pharmacy
Samir Patel	Morelli's Pharmacy
Sandhya Sukul	Costco Pharmacy

CAMBRIDGE

Permdip Johal	Cambridge Memorial Hospital
Jason Lee	Drugstore Pharmacy
Rana Mimar	Drugstore Pharmacy
Haralambos Papalambropou	Canamera Pharmacy
Angela Puim	Preston Medical Pharmacy
Kenneth Relph	Shoppers Drug Mart

CAMPBELLFORD

Jing Zhang	Campbellford Memorial Hospital
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CARLETON PLACE

Ashraf Al Taslaq	Carleton Place IDA Drugmart
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CASSELMAN

Camil Lapalme	Pharmacie Jean Coutu
Dale Pike	Pharmacie Jean Coutu

CHAPLEAU

Savminderjit Dhaliwall	Chapleau General Hospital: Services de Sante de Chapleau Health Services
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CHATHAM

Jennifer Apollinaro	Shoppers Drug Mart
Nancy Kay	Chatham-Kent Health Alliance
Thomas Lee	McCall's Clinic Pharmacy
Christopher Mazaris	Shoppers Drug Mart
Patricia Miller	Rexall
Sreekanth Yadiki	Pharma Plus

CHELMSFORD

Christa Merotto	Chelmsford Pharmacy
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CHESLEY

Kirstin Hastings	Rexall
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CHESTERVILLE

Donald Jones	Chesterville Pharmacy
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COBOURG

Pamela Garratt	Northumberland Hills Hospital
Robert Scherz	Pharmasave Cobourg Medical Pharmacy

COCHRANE

Francis Louvelle	John Wallace Drug Store
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COLLINGWOOD

Tundra Lee	Collingwood General & Marine Hospital
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CONCORD

Asim-bin Waheed	Costco Pharmacy
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CORNWALL

Joanne Labelle	Shoppers Drug Mart
Josee Lemay	Medical Arts Pharmacy

COURTICE

Ya Li Gao	Health Centre Pharmacy
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DEEP RIVER

Nina Shah	Rexall Pharma Plus
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DELHI

John Stanczyk	Delhi Healthcentre Pharmasave
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DON MILLS

Shelina Salehmohamed	Shoppers Drug Mart
Peter Yoo	Shoppers Drug Mart

DOWNSVIEW

Sarah Awadalla Total Health Pharmacy
 Mandeep Bharaj Shoppers Drug Mart
 Darren Hu Humber River Regional Hospital
 Jaymesh Khetia Shoppers Drug Mart
 Linda Yip Shoppers Drug Mart

DRYDEN

Sonia Cosgrove Dryden District General Hospital

DUNDAS

Kusum Shukla Shoppers Drug Mart

DUNNVILLE

Philip Hauser Hausers Pharmacy

DURHAM

Sujalkumar Patel Pharma Plus

EAST GWILLIMBURY

Diana Ayoub Costco Pharmacy
 Eliza Chu Costco Pharmacy
 Christine Hanna Costco Pharmacy
 Parinaz Saifi Costco Pharmacy

ELMVALE

Peter Whitfield Whitfield's Guardian Pharmacy

ESSEX

James Craig Shoppers Drug Mart
 Yolanda Stanczak Essex Pharma Care Pharmacy Inc.

ETOBICOKE

Michael Abdelmalak Cloverdale Clinic Pharmacy
 Muhammad Ashraf Woodbine Pharmacy
 Christopher Chan Shoppers Drug Mart
 Marta Cunha Drugstore Pharmacy
 Bhavin Desai Costco Pharmacy
 Wael Alfay Kirillos Eskandar Renforth Pharmacy
 Navtej Gill Appletree Medical Pharmacy
 Nermin Iskandar Renforth Pharmacy
 Umberto Leone Lakeshore West Pharmacy
 Emad Mankaruos Sav-On Drug Mart
 Elena Mikhaelian Costco Pharmacy
 Marjan Mofid Costco Pharmacy
 Balaji Pamalapati Loblaw Pharmacy
 Ramy Sourial Sav-On Drug Mart
 Ian Stewart Shoppers Drug Mart
 Ragavan Sundaramoorthy Shoppers Drug Mart
 Christopher Theis Drugtown Pharmacy
 Mathew Thomas Albion Martingrove Pharmacy
 Lawrence Ura Shoppers Drug Mart
 Abdul Wajid Loblaw Pharmacy
 Vyacheslav Zlydenyy Markland Wood Pharmacy Limited

EXETER

Kenneth Courtice Shoppers Drug Mart

FONTHILL

Ronald Parton Boggio & Parton Fonthill Pharmacy

FORT ERIE

Gerard Longval Garrison Square Remedy's RX

FORT FRANCES

Kevin Nielson Shoppers Drug Mart

GEORGETOWN

Khyati Mehta Halton Healthcare
 Heather Sproule Young's Pharmacy And Homecare

GLOUCESTER

Kelly Crotty Pharmacy Desjardins Limited
 Pierre Desjardins Pharmacy Desjardins Limited
 Anna Francis Shoppers Drug Mart
 Emmanuelle Masclet Pharmacy Desjardins Limited
 Tanya Rodrigues Costco Pharmacy
 Leflor Suello Costco Pharmacy

GODERICH

Shelley Van Aaken Alexandra Marine & General Hospital

GORE BAY

Kidane Gebrekristose Central Pharmacy

GRIMSBY

Despina Costa Shoppers Drug Mart

GUELPH

Claire Burpee Chiron Compounding Pharmacy Inc.
 Catherine Cremasco Shoppers Drug Mart
 Scott Fraser Chiron Compounding Pharmacy Inc.
 Theresa Howard Guelph General Hospital
 Heather Kidston Ontario Veterinary College
 Judith Krusky Guelph General Hospital
 Raymond Lam Homewood Health Centre
 Julie Lomas Guelph General Hospital
 Danny Lui Prime Care Pharmacy Arboretum
 Mark McNamara Shoppers Drug Mart
 Radmila Obradovic Homewood Health Centre
 Jennifer Smith Drugstore Pharmacy
 Neil Veridiano Drugstore Pharmacy

HALIBURTON

Gary Chow Rexall

HAMILTON

Navid Ahmad Shoppers Drug Mart
 Anuoluwapo Bank-Oni Pharma Plus
 Nancy Birchenough Rexall Dell Pharmacy
 Emad Boles Total Health Pharmacy
 Anna Brooks Juravinski Hospital
 Renu Cherian Shoppers Drug Mart
 Ezzy Cherian Shoppers Drug Mart
 Hoi Choi St. Joseph's Hospital
 Jordan Closs McMaster University Medical Centre
 Christa Connolly St. Joseph's Hospital
 Susan Davidson Juravinski Cancer Centre
 Rami El Sharkawy Juravinski Hospital
 Ayman El-Attar Daniel Drug Mart
 Walid Fattouh Shoppers Drug Mart
 Shari Gray Hamilton Health Sciences Corp
 Andrea Alicia Gut Rexall Dell Pharmacy
 Caroline Ho Stonechurch Pharmacy
 Philip Hosiasohn Rexall
 Wassim Houneini Shoppers Drug Mart
 Achal Jain Pharmaserve
 Stephanie Kajan Limeridge Medical Pharmacy
 Maged Kods Rexall
 Patricia Lilko Rexall
 Kim Ngoc Lu Juravinski Hospital
 Teresa McGinley Hamilton Health Sciences Corp
 Roman Moroz Rexall Dell Pharmacy

PRECEPTORS

Nikola Mrksic	Midtown Medical Pharmacy
Bhupinder Nagra	Shoppers Drug Mart
Leah O'Neal	Juravinski Hospital
Stephanie Olthof-Gilbreath	Marchese Pharmacy
Brenda Papalazarou	Juravinski Cancer Centre
Kelly Perrins	Juravinski Hospital
Lalitha Polamreddy	Centre For Mountain Health Services
Patricia Pracovics	St. Joseph's Hospital
Roma Randolph	Loblaw Pharmacy
Ivan Ross	McMaster University Medical Centre
Rami Safi	Shoppers Drug Mart
Jeannette Schindler	Shoppers Drug Mart
Vida Stankus	St. Joseph's Hospital
Michelle Stevenson	Juravinski Hospital
Khalid Syed	Shoppers Drug Mart
Julianna Tsui	Juravinski Cancer Centre
Elizabeth Tung	Hamilton Health Sciences Corp
Natalie Yee	Cancer Centre Pharmacy
Ka Yan Yu	St. Joseph's Hospital
Rizwana Zaheer	Shoppers Drug Mart

HANMER

Gregory Balaz	Valley Plaza Pharmacy Pharmasave
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HANOVER

Michelle Szafron	Loblaw Pharmacy
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HAWKESBURY

Abdel Hakim Ait-Aoudia	Pharmacie Jean Coutu Pharmacy
Taj Dhinsa	Wal-Mart Pharmacy
Michelle Dumas	Hawkesbury & District General Hospital
Sylvie Robillard	Pharmacie Jean Coutu Pharmacy

HENSALL

Mammdouh Haddad	Hensall Pharmacy
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INGERSOLL

Brian Fathers	Alexandra Hospital
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INNISFIL

Brent Chan	Shoppers Drug Mart
Johnny Fong	Stroud Medical Pharmacy

IROQUOIS FALLS

Brian Bertrand	Iroquois Falls Pharmacy
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KANATA

Katherine Burrell	Rexall Pharma Plus
Russell MacDonald	Shoppers Drug Mart
Joey Maltais	Shoppers Drug Mart
Babak Mardasi	Costco Pharmacy
Jason Tran	Costco Pharmacy
Sarah Yeo	Shoppers Drug Mart
Allison Yu	Costco Pharmacy

KENORA

James Edie	Lake Of The Woods District Hospital
Angela Larman Green	Shoppers Drug Mart
Tavia Tivy	Shoppers Drug Mart

KINCARDINE

Ronald Chapleau	Gordon Pharmasave
Taralee Elzinga	South Bruce Grey Health Centre

KING CITY

Haiderali Meghjee	King City Pharmacy
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KINGSTON

Syed Ahmad	Loblaw Pharmacy
Brian Beck	Medical Arts Pharmacy
Tricia Carasco	Kingston General Hospital
She Sing Chiu	Shoppers Drug Mart
Joel Donnelly	Medical Arts Pharmacy
Hossam Fetar	St. Mary's of the Lake Hospital
Heather Goodland	Kingston General Hospital
David Graham	Graham's Pharmacy
Qing Yang Guo	Kingston General Hospital
Tarek Hussein	Target Pharmacy
Kathryn Kerr	Quarry Medical Pharmacy
Ronald Koob	Kingston General Hospital
Maged Labib	Amherstview Drugs
Helen Lathigra	Shoppers Drug Mart
William Legere	Kingston General Hospital
Michelle Methot	Kingston General Hospital
Hitesh Patel	Loblaw Pharmacy
Carol Peterson	Kingston General Hospital
Bonnie Ralph	Kingston General Hospital
Louise Reynen	Drugstore Pharmacy
Donna Rychlo	St. Mary's of the Lake Hospital
Andrea Slack	Shoppers Drug Mart
Alan Smith	Kingston General Hospital
Rene Thibault	PCCC Mental Health Services Pharmacy
Lubov Weinberg	Shoppers Drug Mart

KINGSVILLE

Susan Dube	Malott's Guardian Pharmacy
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KIRKLAND LAKE

Jennifer Goulding	BDR Drug Mart
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KITCHENER

Ehab Abdel Sayed	The Tannery Pharmasave
Gurinder Brar	Fairway Lackner Pharmacy (PHARMASAVE)
Stephanie Di Sano	St. Mary's General Hospital
Sheri Digiovanni	The Grand River Hospital
Amira Guirguis	St. Mary's General Hospital
Scott Hannay	Williamsburg Pharmacy
Diary Husain	Costco Pharmacy
Lisa Leamen	Shoppers Drug Mart
Sandra Linseman	Health Care Centre Pharmacy
Thi Mai	Drug Basics
Barbara McCarley	The Grand River Hospital
Christopher Miller	Forest Hill Pharmacy
Abilashen Naidoo	Shoppers Drug Mart
Goran Petrovic	The Grand River Hospital
Maged Saad	Shoppers Drug Mart
Mervat Saad	Main Drug Mart
An Sada	St. Mary's General Hospital
Shanthi Sampath	The Pharmashoppe
Klarida Serjani	Shoppers Drug Mart
Nabil Shaker	Frederick Mall Pharmacy
John Thai	Medical Pharmacy
Shaun Toolsie	Riepert Pharmasave
Terry Wong	Medical Pharmacy

LASALLE

Roberto Modestino	Rexall
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LEAMINGTON

Jennifer Palmer	Leamington District Memorial Hospital
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LEVACK

Amanda Edward	Levack Pharmacy
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LINDSAY

Michael Cavanagh Kawartha Lakes Pharmacy
 Susan Fockler Ross Memorial Hospital
 Mahvash Noorbakhsh Shoppers Drug Mart

LISTOWEL

Pascal Niccoli Shoppers Drug Mart
 Catherine Soehner Shoppers Drug Mart

LONDON

Oluyemisi Alade North Tower Prescription Centre
 Gamal Awad Guardian Wonderland Pharmacy
 Steven Balestrini London Medical Pharmacy
 John Baskette London Health Sciences Centre
 Oswald Buhrmann Parkwood Hospital
 Sarah Burgess London Health Sciences Centre
 Sandra Campbell London Health Sciences Centre
 Gino Cimino Ealing Pharmacy Limited
 Felvant De Padua Shoppers Drug Mart
 Allykhan Dhalla Prescription Centre
 Patricia Dool London Health Sciences Centre
 Krystyna Edwards-Lee London Health Sciences Centre
 Krista Fenlon London Health Sciences Centre
 Cynthia Garrick Prescription Centre
 Christine Gawlik London Health Sciences Centre
 Bogumila Gurgul Pharma Plus
 Nina Hanif My Care Pharmacy
 Vinh Huynh Progressive Drug Mart - Huron
 Celia John London Health Sciences Centre
 Shamez Kassam Chapmans Pharmacy
 Claire Knauer Shoppers Drug Mart
 Daniel Kutz Rexall Pharma Plus
 Joel Lamoure London Health Sciences Centre
 Nisha Lattanzio Prescription Centre
 Joanne Lau London Health Sciences Centre
 David Ledger Wortley Village Pharmasave
 Laura Lefave North Tower Prescription Centre
 Bradley Linton London Health Sciences Centre
 Siamak Nassori Costco Pharmacy
 Andrea Neilson Shoppers Drug Mart
 Jadwiga Niska Shoppers Drug Mart
 Faith Norris London Health Sciences Centre
 Karim Ragheb Medisystem Pharmacy
 Irina Rajakumar London Health Sciences Centre
 Sahleslassie Redae Masonville Pharmacy
 Linda Ryerse London Health Sciences Centre
 Lori Sax London Health Sciences Centre
 Puja Shangavi Rexall Specialty
 Raied Shatara Costco Pharmacy
 Karen Skubnik Classic Care Pharmacy
 Kelly Smith London Health Sciences Centre
 Jessica Stovel London Health Sciences Centre
 Grant Taylor Shoppers Drug Mart
 Shirley Van Waes Parkwood Hospital
 Olive Varriano Parkwood Hospital
 Stephen Woo Shoppers Drug Mart
 Betty Wright Pharma Plus
 Neeta Yadav Shoppers Drug Mart
 Eiman Zourob Wal-Mart Pharmacy

LUCKNOW

Dionne Smith Lucknow Pharmasave

MANOTICK

Mohamed Abdalla Shoppers Drug Mart

MAPLE

Jason Chauhan Shoppers Drug Mart

MARKHAM

Safaa Azziz Costco Pharmacy
 Christine Howe Markham Stouffville Hospital
 Kinh Huynh Shoppers Drug Mart
 Kuruvilla Isaac Fenton Discount Pharmacy
 Hui Jin Costco Pharmacy
 Saleem Khamis Hillcroft Pharmacy
 Mohamed Khan Shoppers Drug Mart
 Jennifer Kwong Shoppers Drug Mart
 Janet Pui Sea Leung Costco Pharmacy
 Karen Leung Shoppers Drug Mart
 Jacqueline Ma Shoppers Drug Mart
 Karen Matthew Tong Markham Stouffville Hospital
 Mamdouh Menkarios Main Drug Mart
 Charing Ng Markham Stouffville Hospital
 Faranak Pashang Costco Pharmacy
 Mukta Rathore Loblaw Pharmacy
 Newsha Tafreshi Costco Pharmacy
 Sharon Yim Markham Stouffville Hospital

MASSEY

Heather Preuss Janeway PharmaChoice

MEAFORD

Christopher Davies Muxlow Pharmacy Limited

MIDLAND

Robert Keller Clinic Pharmacy
 Vaughan Mallows Georgian Bay General Hospital

MILTON

Yehia Atia Zak's Pharmacy
 Anca Elisei Loblaw Pharmacy
 Sherif Garra Total Health Pharmacy
 Aiman Nada Glen Eden Pharmacy
 Gehan Nazmy Total Health Pharmacy
 Hany Philips St. George Pharmacy

MISSISSAUGA

Jakleen Abd El Malak Lisgar Pharmacy
 Dima Abdulaheem Costco Pharmacy
 Anan Abou-Nassar Agnes Medical Pharmacy
 Elizebeth Abraham The Trillium Health Centre
 Jauher Ahmad Shoppers Drug Mart
 Navid Ahmad Battleford Pharmacy Inc
 Passant Al-shaikh Shoppers Drug Mart
 Amal Aridah Drugstore Pharmacy
 Sherein Ayoub Drugstore Pharmacy
 Ehab Aziz Marcos Pharmacy
 Andrea Beaman The Credit Valley Hospital
 Manuela Berbecel Costco Pharmacy
 Mansi Bhatt Total Health Pharmacy
 Narinder Bining The Trillium Health Centre
 Leonora Cabading Total Health Pharmacy
 Pui Kar Chan Shoppers Drug Mart
 Arthur Cheung Shoppers Drug Mart
 Peter Choi Cooksville Pharmacy Limited
 Ashwanthi Daya Shoppers Drug Mart
 Angelo Dias Derry Village IDA
 Alaa Dimitri Drugstore Pharmacy
 Nishaben Doshi Vardhman's Guardian Pharmacy
 Sahar El Narekh Total Health Pharmacy
 Mohamed Elsbakhawi Shoppers Drug Mart
 Monaliza Esguerra Shoppers Drug Mart
 Fatemeh Fazeli Loblaw Pharmacy
 Mariamma George Drugstore Pharmacy
 Adel Gergis Glenderry Pharmacy

PRECEPTORS

Mariam Ghattas	Total Health Pharmacy
Gagandeep Gill	Shoppers Simply Pharmacy
John Girgis	Apple-Hills Medical Pharmacy
Mohamad Haj-Bakri	Hiway 10 Pharmacy
Kevin Huang	Shoppers Drug Mart
Khurram Hussain	Shoppers Drug Mart
Minh Huynh	Medical Pharmacy
Jennifer Kallu	Shoppers Drug Mart
Sabina Kapoor	Shoppers Drug Mart
Munawar Khan	Costco Pharmacy
Jiwon Kim	The Credit Valley Hospital
Firas Kiyork	Medical Building Pharmacy
Bo Lee	Loblaws Pharmacy
Ameesh Lekhi	Shoppers Drug Mart
Nawroza Macklai	Shoppers Drug Mart
Jagjit Maghera	Shoppers Drug Mart
Tamer Mahrous	Eglinton Churchill Medical Pharmacy
Germine Meachial	Courtesy IDA Pharmacy
Rania Melek	Living Arts Pharmacy (Remedy's Rx)
Sameh Mikhaeil	Van Mills IDA Pharmacy
Arunkumar Mistry	Professional Medical Pharmacy
Nabil Morgan	Shoppers Drug Mart
Jack Overland	The Credit Valley Hospital
Marios Paggos	Shoppers Drug Mart
Anand Parikh	Meadowvale Professional Centre Pharmacy
Nikki Patel	Shoppers Drug Mart
Devendra Patel	Loblaws Pharmacy
Victoria Pilkington	The Trillium Health Centre
Tajammal Qureshi	Battleford Pharmacy Inc
Jasbir Rajput	City Centre Remedy's Rx
Tarulata Ravji	Shoppers Drug Mart
Reem Rifai	City Centre Remedy's Rx
Adel Saad	Thomas Pharmacy
Ramniklal Sachania	Heritage Hills Pharmacy
Arlene Salonga-Abule	The Credit Valley Hospital
Lilian Santos	Heritage Hills Pharmacy
John Sarofiem	Main Drug Mart
Anjana Sengar	The Trillium Health Centre
Amit Shah	Floradale Medical Pharmacy
Peter Shalvardjian	Shoppers Drug Mart
Manju Sharma	The Trillium Health Centre
Sandra Shin	Marketplace Pharmacy
Nancy Simonot	N.K.S. Health
Anmol Soor	Shoppers Drug Mart
Adel Towadros	Courtesy IDA Pharmacy
Chun Tso	Wellness Healthcare Pharmacy Inc
Najeeb Ur Rehman	Shoppers Drug Mart
Kalpeshkumar Varma	Costco Pharmacy
Kelly Vitullo	Baxter Pharmacy Services
Jerry Voutsis	Baxter Pharmacy Services
Ahmad Waseem	Shoppers Drug Mart
Kausar Wasim	Good Luck Pharmacy
Barbara Wong	Calea

MITCHELL

William Appleby	Walthers IDA Pharmacy
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MOOSONEE

Ofelia Hermogeno	Northern Pharmacy
Marie Fe Pabelina	Northern Pharmacy

MOUNT BRYDGES

Michael Gleiser	Southwest Middlesex Health Centre Pharmacy
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NAPANEE

Mina Guirguis	Napanee Richmond Medical Pharmacy
John McBride	Lennox-Addington Count General Hospital
Monette Mcfaul	Rexall

NEPEAN

David Andrews	Queensway-Carleton Hospital
Megan Baker	Queensway-Carleton Hospital
Hany Biskaly	Greenbank Pharmacy
Georgeta Botehkan	Loblaws Pharmacy
Chun Cheng	Queensway-Carleton Hospital
Cameron Forbes	Queensway-Carleton Hospital
Mark Kearney	Queensway-Carleton Hospital
Kimberley Malleau	Drugstore Pharmacy
Martin Rowland	Queensway-Carleton Hospital

NEW LISKEARD

Bruce Alexander	Findlay's Drug Store
Andrew McCaig	Findlay's Drug Store

NEWMARKET

Hoda Ibrahim	Newmarket Pharmacy
Julianne Labelle	Southlake Regional Health Centre
Moy Li Kwong Ken	Shoppers Drug Mart
Bryan Pick	Southlake Regional Health Centre
Anisa Shivji	Rexall
Hui Wang	Loblaws Pharmacy

NIAGARA FALLS

Ashraf Boulus	Loblaws Pharmacy
Frederick Hammond	The Greater Niagara General Hospital
Tania Lagace	Pharma Plus
Beverly Sims	Meadows Pharmacy Limited
Marnie Varley	Pharma Plus

NORTH BAY

Mohamed Abdelghany	North Bay Regional Health Centre
Moina Adekanye	Remedy's Northbay Pharmacy
Lyla Burnett	Rexall
Michele Cameron	North Bay Regional Health Centre
Kristie Chute	Pharmasave
Mitze Diggles	North Bay Regional Health Centre
Mary Godreau	Shoppers Drug Mart
Biqi He	Shoppers Drug Mart
Curtis Latimer	Shoppers Drug Mart
Courtney Lennon	North Bay Regional Health Centre
Ronnie McFadden	North Bay Regional Health Centre
Yasser Mohamed	North Bay Regional Health Centre
Richard Moore	Harris Guardian Pharmacy
Hannah-Ruth Mosher	North Bay Regional Health Centre
Victoria Nichol	Medical Pharmacy
Erin Pitkethly	Pharmacy
Veronica Prior	North Bay Regional Health Centre
Roch Remillard	Parkway Pharmacy
Maria Sermona	Loblaws Pharmacy
Jennifer Sicard	Medical Pharmacy
Pamela Simpson	Pharmasave
Matthew Woolsey	North Bay Regional Health Centre

NORTH YORK

Hatem Abou El Nile	Finch-Weston Medical Pharmacy
Ahmed Abou Zeid	Finch-Weston Medical Pharmacy
Yehia Atia	Finch-Weston Medical Pharmacy
Jessica Auyeung	North York General Hospital
Navraj Brar	Target Pharmacy
Joyce Chan	North York General Hospital
Jenny Chiu	North York General Hospital
Joyce Choy	North York General Hospital
Joseph Cundari	Columbus Pharmacy
Sanaz Darki	Shoppers Drug Mart
Vilma De Leon	North York General Hospital Pharmacy
Farhang Fakoori	Shoppers Drug Mart
Nadia Filippetto	Shoppers Drug Mart

Taras Kupchak	Shoppers Drug Mart
Samantha Lam	Shoppers Drug Mart
Christopher Lam Shang Lee	North York General Hospital Pharmacy
Edmond Lee	Shoppers Simply Pharmacy
Esther Liu	North York General Hospital
Bahaa Mehany	Main Drug Mart
Zahra Pouya	Shoppers Drug Mart
Chetna Ramaswamy	Drugstore Pharmacy
Mei Shi	North York General Hospital
Yevgeniya Soroka	Shoppers Drug Mart
Norman Tang	Branson Drugstore

NORTHBROOK

Eric Tobia	Tobia's Guardian Pharmacy
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OAKVILLE

Edward Akladios	Kingsridge Pharmacy
Antonio Behno	Postmaster IDA
Susan Blasko	Pharmex Direct Inc
Fabio De Rango	Shoppers Drug Mart
Sherif Gendy	White Oaks Pharmacy
Michael Gouda	Shoppers Drug Mart
Amgad Hakim	River Oaks Medical Pharmacy
Zaki Hanna	Oakville Town Centre Pharmacy
Andrea Jones	Halton Healthcare Services
Christine Kamel	Total Health Pharmacy
Dale-Ann Morrison	Shoppers Drug Mart
Tuy Nguyen	Wal-Mart Pharmacy
Rania Saghir	Shoppers Drug Mart
Emad Sourial	Oak Park Community Pharmacy
Meagan Walsh	Halton Healthcare Services
Silvana Yassa	Royal Oak Pharmacy

ORANGEVILLE

Carolyn Coons	Shoppers Drug Mart
Beverly Irwin	Shoppers Drug Mart
Kathleen Limina	Shoppers Drug Mart
Catherine Morrison	Headwaters Health Care Centre

ORILLIA

Leslie Braden	Orillia Soldiers' Memorial Hospital
Christina Chung	Shoppers Drug Mart
David Freeman	Orillia Soldiers' Memorial Hospital
Tiffany Hawkes	Orillia Soldiers' Memorial Hospital
Angela Howell	Rexall Pharma Plus
Peter Sadek	Downtown Dispensary
Vera Smith	Orillia Soldiers' Memorial Hospital
Lisa Tran	Orillia Soldiers' Memorial Hospital

ORLEANS

Lou Frangian	Pharmacie Orleans Pharmacy
Raafat Khalil	St. Mary Health Center Pharmacy
Essame Thabet	Shoppers Drug Mart

OSHAWA

Nelson Albacete	Shoppers Drug Mart
Sabah Ali	Shoppers Drug Mart
Abdul Arif	Loblaws Pharmacy
Chun-keung Cheung	Shoppers Drug Mart
Jeffrey Chou	Rexall Pharma Plus
Hala El-Boraie	Clinic Pharmacy
Patricia Grayhurst	Lakeridge Health
Baris Huner	Shoppers Drug Mart
Vincent Lau	Medical Pharmacy
Mona Mikhael	PharmaChoice
George Murphy	Costco Pharmacy
Edith Nelson	Prescription Pharmacy
Helen Puzio	King Street Pharmacy

Christopher Ritskes	Lakeridge Health
Nauman Shaikh	Rexall Pharma Plus
Linda Skinner	Lakeridge Health
Bijan Sohaei	Costco Pharmacy
Anne Stock	Lakeridge Health
Dileep Tripuraneni	Loblaws Pharmacy

OTTAWA

Amira Abdalla	Shoppers Drug Mart
Hoda Ahmed	Mooney's Bay Pharmacy
Samira Ali-abdullah	Loblaws Pharmacy
France Aube	Montfort Hospital
Jacinthe Auprix-Lefebvre	Medical Pharmacy
Mario Bedard	The Ottawa Hospital
Helen Blanchard	Children's Hospital of Eastern Ontario
Antranik Boghossian	Bell Pharmacy
Siphone Boualavong	Rexall Pharma Plus
David Cecillon	University of Ottawa Heart Institute
Cindy Changoor	Shoppers Drug Mart
Richard Cho	Costco Pharmacy
Celine Corman	The Ottawa Hospital
Nancy Cummings	Classic Care Pharmacy
Sonia Dallaire	Montfort Hospital
Ra'ed Darras	Shoppers Drug Mart
Mohamed Darwish	Shoppers Drug Mart
Nurroz Datto	The Royal Ottawa Mental Health Centre
Suzanne Eckert	Sco Hospital
Emad Ed-Dridi	Shoppers Drug Mart
Olusola Egunjobi	Medicine Shoppe
Ali Elbeddini	Loblaws Pharmacy
Sharon Emanuel	Shoppers Drug Mart
Mark Evans	Classic Care Pharmacy
Lena Farhat	Shoppers Drug Mart
Shannon Forster	Loblaws Pharmacy
Usama Gargas	Guardian Hillside Pharmacy
Sajjad Giby	Shoppers Drug Mart
Marie Delia Goulet	Children's Hospital of Eastern Ontario
Bassem Guirguis	Medical Arts Dispensary of Ottawa (2003) Ltd.
Nabil Hanna	Shoppers Drug Mart
Najlaa Ibrahim	Shoppers Drug Mart
Karyl Jaanusson	Rexall Pharma Plus
Robert Johns	Montfort Hospital
Marie Jolin	Bruyere Continuing Care
Mary Joy	The Royal Ottawa Mental Health Centre
Suchdev Kalsi	Wal-Mart Pharmacy
Hany Komy	Kilborn Pharmacy
Elizabeth Kozyra	The Royal Ottawa Mental Health Centre
Alexander Kuo	The Ottawa Hospital
Angela Lamer	Sco Hospital
Krista Leil	Shoppers Drug Mart
Tania Little	Green Street Pharmacy
Carmen Ma	Children's Hospital of Eastern Ontario
Jane MacKenzie	The Ottawa Hospital
Benny Mizrahi	Shoppers Drug Mart
Kristen Nelson	Sco Hospital
Uzoamaka Onochie-Roy	Ottawa Hospital
Salah Osman	Proactive Pharmacy
Vishal Ravikanti	Medical Pharmacy
Lisa Reny	Canada Chemists
Dima Rustom	New Edinburgh Pharmacy
Alison Schwass	Medical Pharmacy
Jennifer Spencer	The Ottawa Hospital
Carolyn Stewart	Children's Hospital of Eastern Ontario
Jimrod Suello	We Care Pharmasave
Jennifer Swetnam	Shoppers Drug Mart
Meechen Tchen	Children's Hospital of Eastern Ontario
Sallyanne Tierney	Bruyere Continuing Care
My-Hanh Truong	Montfort Hospital

PRECEPTORS

Nisha VarugheseChildren's Hospital of Eastern Ontario
Natalie Warren.....Montfort Hospital
Loretta Wilson.....Montfort Hospital

OWEN SOUND

Wanda KazarianMedical Pharmacy
Sally Mina.....DrugStore Pharmacy 4277 No Frills
Marc VacheresseGrey Bruce Health Services

PARRY SOUND

Miriam Carter.....West Parry Sound Health Centre

PEMBROKE

Lynn Keon.....Pembroke Regional Hospital Inc

PENETANGUISHENE

Sean Moore.....Village Square Pharmacy

PETAWAWA

Stavros Tsimiklis.....Rexall Pharma Plus

PETERBOROUGH

Sheilagh Breskey.....Peterborough Regional Health Centre
Kiranjeet Garcha.....Loblaw Pharmacy
Rasha Ghnem.....Burnham Medical Pharmacy
Tracy Lycett.....Medical Pharmacy
Pradeep Naik.....Peterborough Hospital Pharmacy
Warren Oake.....Costco Pharmacy
Prasanna Vemula.....Sherbrooke Heights Pharmacy
Catherine White.....Peterborough Regional Health Centre

PICKERING

Zeinab Abdulaziz.....Durham Drug Store
Amir Hussain.....Rexall
Ajish Prasad.....Shoppers Drug Mart
Nauman Shaikh.....Rexall
Rahim Suleman.....Shoppers Drug Mart
Angela Wu-Tenn.....Rexall

PORT COLBORNE

Aaron Boggio.....Boggio Pharmacy Ltd
Larry Boggio.....Boggio Pharmacy Ltd
Michel Saati.....Boggio Pharmacy Ltd

PORT DOVER

Kareena Ivanis.....Roulston's Discount Drugs Ltd

PORT ELGIN

Muhammad Khan.....Shoppers Drug Mart
Laura Misch.....Drugstore Pharmacy

PORT HOPE

Kristin Ferguson.....Loblaw Pharmacy

PORT PERRY

Christie King.....Shoppers Drug Mart
Fareeaa Mohammed.....Durham Pharmacy

PORT ROWAN

Glenn Coon.....Port Rowan Pharmasave

PRESCOTT

Geeta Bhanushali.....Loblaw Pharmacy

RENFREW

Anna Campbell.....Renfrew Victoria Hospital
Andrew Ritchie.....Aikenhead's Drug Store

REXDALE

Maha Boutros.....EGH Centre Pharmacy
Ashwin Gandhi.....Rexdale Pharmacy
Ashraf Melika.....Grace Pharmacy
Marian Mikhael.....William Osler Health Centre
Suhas Nirale.....Rexdale Pharmacy
Komal Pandya.....Rexdale Pharmacy
Lise Sau.....William Osler Health Centre
Yu Sine Wong.....William Osler Health Centre

RICHMOND HILL

Anis Abu El Khire.....Health Link Pharmacy
Vera Avetissov.....Shoppers Drug Mart
Gunjan Avinashi.....Shoppers Drug Mart
Jennifer Cardona.....Shoppers Drug Mart
Wai Yin Chan.....Shoppers Drug Mart
Giuseppe Colella.....Shoppers Drug Mart
Irene Frenkel.....Health + Pharmacy
Neil Grewal.....Target Pharmacy
Magdy Yashoue Rizkalla Han.....Total Health Pharmacy
Mohamedamin Jagani.....Hayyan Healthcare
Mun Kang.....Mackenzie Richmond Hill Hospital
Sun Kim.....Mackenzie Richmond Hill Hospital
Caresse Lam.....Drugstore Pharmacy
Francine Liu.....Costco Pharmacy
Fai Lo.....Shoppers Drug Mart
Richardo Loduca.....Shoppers Drug Mart
Mark Mandlsohn.....Shoppers Drug Mart
Tamer Mosallam.....Pars Medical Pharmacy
Massoud Motahari.....Costco Pharmacy
Maged Naguib.....Procare Pharmacy
Ishita Patel.....Hayyan Healthcare
Pareshkumar Patel.....Uptown Health Centre Pharmacy
Ishita Patel.....Hayyan Healthcare
Pauline Ramirez-Hashemi.....Drugstore Pharmacy
Mirette Riad.....Leslie & Major Mac. I.D.A. Pharmacy
Shani-Abbas Siwani.....Uptown Apothecary
Melissa Tam.....Loblaw Pharmacy
Jacqueline Usakovsky.....Neighbourhood Pharmacy
Serina Wong.....Shoppers Drug Mart

ROCKLAND

Joanna Baker.....Shoppers Drug Mart
Josee Corbeil.....Pharmacie Jean Coutu Pharmacy

RUSSELL

Cindy Cecillon.....Russell Pharmacy
Cynthia Johnson.....Russell Pharmacy
Ian McNeil.....Russell Pharmacy

SARNIA

Louise Bandiera.....Bluewater Health - Norman Site
Amrou Ibrahim.....Rapids Pharmachoice
Marcel Laporte.....BMC Pharmacy
Susan McQuaid.....Shoppers Drug Mart
Ellen Monaghan.....Bluewater Health - Norman Site
Lisa Shaw-Pringle.....Loblaw Pharmacy
June Weiss.....Bluewater Health - Norman Site

SAULT STE MARIE

Krysten Caputo.....Shoppers Drug Mart
Maria Coccimiglio.....Sault Area Hospital
Gregory Cummings.....Shoppers Drug Mart
Mary Davies.....Sault Area Hospital
Carla Deluco.....Group Health Centre Pharmacy
Paolo Di Renzo.....Pharmacy
Lucy Fata.....Sault Area Hospital

Olga Fischer	.....	Rexall Specialty Pharmacy
Gavin Forsyth	.....	Sault Area Hospital
Tyler Kaupp	.....	Medicine Shoppe
John MacDonald	.....	The Medicine Shoppe
Marlene O'Laney	.....	Rexall
Paula Patterson	.....	Loblaws Pharmacy
Emilia Perna	.....	Shoppers Drug Mart
Alistair Rasaiah	.....	Rexall Pharma Plus
Susannah Ross	.....	Shoppers Drug Mart
Adel Saleeb	.....	Central Drug Mart

SCARBOROUGH

Ahmad Abdullah	.....	Shoppers Drug Mart
Sameh Attia	.....	Midland Pharmacy
Karen Au	.....	Shoppers Drug Mart
Muhammad Awan	.....	Maple Drug Mart
Asad Baig	.....	Shoppers Drug Mart
Martha Bailewski	.....	Remedy's Rx
Darshana Balpande	.....	Shoppers Drug Mart
Paul Bau	.....	National Pharmacy
Sherif Behiry	.....	Cliffside Pharmacy
Sameh Bolos	.....	Mina Drug Store
Neil Bornstein	.....	West Hill Pharmasave
Chieng Cau	.....	Shoppers Drug Mart
Eddy Chan	.....	Shoppers Drug Mart
Patrick Chan	.....	Providence Healthcare
Lori Chan	.....	Centenary Health Centre
Eddy Chan	.....	Shoppers Drug Mart
Lori Chan	.....	Centenary Health Centre
Elizabeth Chau	.....	Drugstore Pharmacy
Akil Dhirani	.....	Village Square Pharmacy
Shery El Komos	.....	Fars Medical Pharmacy
Nayre Garabet	.....	Costco Pharmacy
Maged Hanna	.....	One Stop Medical Pharmacy
Margo Henes	.....	Pharmasave Pharmacy
Jerry Ip	.....	Shoppers Drug Mart
Sheri Iskander	.....	Costco Pharmacy
Maged Iskander	.....	Woburn Medical Pharmacy
Sheri Iskander	.....	Costco Pharmacy
Ana Marie Kabigting	.....	Rexall
Louise Leung	.....	Centenary Health Centre
Brian Li	.....	Village Square Pharmacy
Dylan Lor	.....	Drug Basics
Joanna Man	.....	Loblaws Pharmacy
Donna Marchack	.....	Shoppers Drug Mart
Jerry Metyas	.....	East GTA Family Health Team
Chimanlal Mistry	.....	Morrelle Drug Mart
Shobhana Morzaria	.....	Peoples Drug Mart
Leaggy Mwanza	.....	Shoppers Drug Mart
Medhat Nakhla	.....	Port Union Pharmacy
Oluremi Ojo	.....	Guardian Corporate Pharmacy
Nasrin Pahlavanmiragha	.....	Shoppers Drug Mart
Namiesh Seth	.....	Shoppers Drug Mart
Bhavin Shah	.....	Eglinton Discount Pharmacy
Gaurang Shah	.....	Total Care Drug Mart
Viktoria Shtein	.....	Shoppers Drug Mart
Lena Sin Yan Too	.....	Centenary Health Centre
Nitu Singh	.....	Shoppers Drug Mart
Sansanee Srihirun	.....	Greystone Pharmacy
Elena Sze	.....	The Scarborough General Hospital
Suresh Thambirajah	.....	Centenary Health Centre
Elsie Tsoi	.....	Centenary Health Centre
Alvaro Vargas	.....	Wal-Mart Pharmacy
Victor Wong	.....	Shoppers Drug Mart
Ka Kei Woo	.....	Shoppers Drug Mart
Mei-Fe Yamasaki	.....	Pharmasave
Ali Yehya	.....	Quints Medical Pharmacy
Norma Young	.....	Scarborough Grace Hospital

SIMCOE

Tara Collver	.....	Roulston's Pharmacy
Constance Eppel	.....	Norfolk General Hospital
Ashley Gubbels	.....	Roulston's Pharmacy
Joanne Holton	.....	Roulston's Discount Drugs Ltd
Gopi Menon	.....	Roulston's Discount Drugs Ltd
Edward Odumodu	Clark's Pharmasave West Street Health Centre

SIOUX LOOKOUT

Colin Pienaar	Sioux Lookout Remedy's Rx
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SMITHS FALLS

Sandra Gagnon	Loblaws Pharmacy
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ST CATHARINES

James Hansel Bulacac	Costco Pharmacy
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ST. CATHARINES

Adnan Ahmed	Shoppers Drug Mart
Sameh Awad	Court Street Pharmacy
Amir Awadalla	.....	Glenridge Pharmacy
Gerald Driver	.....	Niagara Health System
Eyad Hindi	.....	Montebello Medical Pharmacy
Tania Lagace	.....	Niagara Health System
James Lococo	.....	Shoppers Drug Mart
Gerard Longval	.....	Niagara Street Remedy Rx
Muhammad Sheikh	.....	Niagara Health System

ST. CLAIR BEACH

Pauline Bloch	.....	Shoppers Drug Mart
Mojisola Gbadamosi	Loblaws Pharmacy

ST. MARYS

Cathy Forster	Jacksons Guardian Drugs
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ST. THOMAS

Stephen Bond	Yurek Pharmacy Limited
Sandra Campbell	St. Thomas-Elgin General Hospital
Kathryn Fletcher	.....	St. Thomas-Elgin General Hospital
Valerie Higgins	.....	St. Thomas-Elgin General Hospital
David Grahame Lindsay	.....	Shoppers Drug Mart
Richard Nemett	.....	Shoppers Drug Mart
Weddaad Price	.....	Wellington Medical Pharmacy Pharmachoice

STITTSVILLE

Olga Gervais	.....	Stittsville IDA Pharmacy
Susan Gillis	.....	Stittsville IDA Pharmacy
Fatemeh Ramzi-Safae	Loblaws Pharmacy

STONE CREEK

Mark Gayowski	Pharmasave
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STOUFFVILLE

Edna Gibson	Stouffville IDA Pharmacy
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STRATFORD

Jennifer Alderdice	Stratford General Hospital
Colleen Bycraft	Stratford General Hospital
Theresa Ryan	.....	Sinclair Pharmacy

STRATHROY

Kathleen Clark	.....	Strathroy Middlesex General Hospital
Michael Gleiser	.....	Bossons Pharmacy
Hemal Mamtara	.....	Drugstore Pharmacy
Nicholas Vander Gulik	.....	Shoppers Drug Mart

STURGEON FALLS

Leslie Wilkinson The West Nipissing General Hospital

SUDBURY

Frances Brisebois Health Sciences North - Ramsey Lake Health Centre
 Adam Chappell Health Sciences North - Ramsey Lake Health Centre
 Sami Dabliz Pharmacy
 Mathew De Marco Sudbury Regional Hospital
 Danielle Del Frate Health Sciences North - Ramsey Lake Health Centre
 Miranda Foster Rexall
 Sylvain Gratton Rexall
 Maryanne Hopkins Health Sciences North - Horizon Sante-Nord
 Kathryn Jarvis Rexall
 Micheal Kilby Costco Pharmacy
 Nykolas Krawczuk Shoppers Drug Mart
 Walter Mozek Plaza 69 - Shoppers Drug Mart
 Scott Mullen Herman's Pharmacy
 Stephanie-Lynn Mumford Health Sciences North - Ramsey Lake Health Centre
 Kerah Osmars Shoppers Drug Mart
 Jean-Robert Paquette Health Care Pharmacy
 Luisa Ranger Shoppers Drug Mart
 Yvonne Salminen Loblaw Pharmacy
 Sean Simpson Lakeside Pharmacy
 Douglas Stewart Shoppers Drug Mart
 Michelle Tanguay Health Sciences North - Ramsey Lake Health Centre
 Julie Thompson Loblaw Pharmacy

TAVISTOCK

Marc Michaud Tavistock IDA Pharmacy

TECUMSEH

Giuseppe Pinelli IDA TLC Pharmacy

THORNBURY

Shannon Fry Thornbury Pharmasave

THORNHILL

Dimiana Botros Pharma Plus
 Phu Phong Lam Shoppers Drug Mart
 Jacques Lee Wal-Mart Pharmacy
 David Liberman Shoppers Drug Mart
 Jae Ihn Song Galleria Pharmacy

THOROLD

Cassandra DeAngelis Henderson's Pharmacy Limited
 Priya Sandhu Henderson's Pharmacy Limited

THUNDER BAY

Brenda Adams Janzen's Pharmacy
 Robert Chony Thunder Bay Regional Health Sciences Centre
 Augustine Daniar Shoppers Drug Mart
 Paul Dennison Lakehead Psychiatric Hospital
 Angela Heintzman Thunder Bay Regional Health Sciences Centre
 Vinay Kapoor Shoppers Drug Mart
 Chi Luu Shoppers Drug Mart
 Garry Prokopowich St. Joseph's Hospital
 Timothy Slack St. Joseph's Hospital
 Edoardo Veneruz Shoppers Drug Mart
 Meghan Willmore Shoppers Drug Mart
 Allan Winter Janzen's Pharmacy
 Anne Wray White Cedar Pharmacy

TILLSONBURG

Brian Fathers Tillsonburg District Memorial Hospital
 Megan Kelly Shoppers Drug Mart

TIMMINS

Lee-Anne Larocque Timmins And District Hospital
 Sandra Pasi Shoppers Drug Mart
 Natalie Torrens Timmins And District Hospital

TORONTO

Mina Abdel Maseh Friendly Care West King Pharmacy
 Luke Agada Wal-Mart Pharmacy
 Seh-Hwan Ahn Medisystem Pharmacy
 Keith Akada The Princess Margaret Hospital
 Intekhab Alam Shoppers Drug Mart
 Froozan Mohamed Amin Sunnybrook Health Sciences Centre
 Shalini Anand Shoppers Drug Mart
 Joanne Anderson Welcome Guardian Drugs
 Elizabeth Au The Toronto Western Hospital
 Walid Awadalla Jane Park Plaza Pharmacy
 Marilyn Bacher Ambulatory Patient Pharmacy
 Antonetta Bailie Mount Sinai Hospital
 Sandeep Bains Medisystem Pharmacy
 Mirjana Balac Toronto Rehab. Institute
 Salete Benetton Loblaw Pharmacy
 Brian Beven The Hospital For Sick Children
 Kori Bilben Bridgepoint Hospital
 Julie Boctor Islington Medical Pharmacy
 Doris Bortolotto The Toronto General Hospital
 Roshdy Boshara Bay College Drug Mart
 Cherry Brittain Shoppers Drug Mart
 Bianca Brooks Shoppers Drug Mart
 Rita Brun Toronto East General Hospital
 Khanh Cam The Toronto General Hospital
 So Chae Charles Pharmacy
 Diana Chau Medisystem Pharmacy
 Thomas Chen Shoppers Drug Mart
 Edward Chen Medisystem Pharmacy
 Chi Ming Jimmy Chiang Sunnybrook Health Sciences Centre
 Cindy Chin Bridgepoint Hospital
 Julie Choudhury Sunnybrook & Womens Col H.S.C.
 Nelson Da Silva Wellcare Union Medical Pharmacy
 Fabrizio Damiani Shoppers Drug Mart
 Peter Davies St. Michael's Hospital
 Michael Demian Metro Drugs
 Rita Di Scipio Sunnybrook Health Sciences Centre
 Michael Do Vina Pharmacy
 Georgina Donyina Target Pharmacy
 Colin Durnford Loblaw Pharmacy
 Basem Elias Islington IDA Pharmacy
 Jackline Elsobky Bathurst-Bloor IDA Drug Mart
 Mena Fanous Main Drug Mart
 Jessica Fearman Pharma Plus
 Carla Findlater Sunnybrook Health Sciences Centre
 Gabriella Fozo-Nagy The Toronto Western Hospital
 Baher Francis Allcures Pharmacy
 William Fu Medical Pharmacy
 Ricky Fung Toronto General Hospital Outpatient Pharmacy
 Hemamalini Gandeia Loblaw Pharmacy
 Basem Ghatas Dufferin-Finch Pharmacy
 Sali Ghobrial St. Gabriel Medical Pharmacy
 Gagandeep Grewal Mount Sinai Hospital
 Penny Guimont Shoppers Drug Mart
 Reem Haj St. Michael's Hospital
 Jack Halpern Peoples Drug Mart
 Wissam Hanna Canes Community Pharmacy
 Louis Hanna Total Health Pharmacy
 Manjit Hansra Shoppers Drug Mart
 Amit Harilall Toronto East Pharmasave
 Kambiz Harichi Drugstore Pharmacy
 Jennifer Harrison The Toronto General Hospital
 Madeleine Hebesh Bloor West Pharmacy
 Rayburn Ho Shoppers Drug Mart

Shuk Kwan Ho	The Princess Margaret Hospital
Roxanne Hook	The Hospital For Sick Children
Annie Hui	Ambulatory Patient Pharmacy
Richard Indris	West Park Healthcare Centre
Robert Siu Lin Ip	Shoppers Drug Mart
Nataliya Ivasiv	West End Medical Pharmacy
Akeel Jaffer	Shoppers Drug Mart
Jiten Jani	St. Joseph's Health Centre
Suhail Javaid	Shoppers Drug Mart
Padma Kakani	Shoppers Drug Mart
Olesya Kaliy	Shoppers Drug Mart
Sarah Kam	Shoppers Drug Mart
Zahra Kanani	Medisystem Pharmacy
Alexandra Karmiris	Shoppers Drug Mart
William Kassel	Kassel's Pharmacy Limited
Trinh Kazmierski	Ambulatory Patient Pharmacy
Robyn Knight	Rexall
Samer Kolta	Northview Pharmacy
Josephine Kong	Costco Pharmacy
Thaddeus Konop	Konop Chemists Ltd
Vojka Kostic	Bridgepoint Hospital
Rita Kutti	The Hospital For Sick Children
Sara Kynicos	The Toronto Western Hospital
Jerry Lam	International Pharmacy
Pui Leung	The Princess Margaret Hospital
Bethany Lund	Regional Cancer Centre
Giuseppina Luongo - Angelin	Medisystem Pharmacy
Elizabeth Lytwyn-Nobili	Shoppers Drug Mart
Angela Mall	Prescription Care Centre
Nitharsini Manickavasagar	Medisystem Pharmacy
Abdounaser Mansoubi	Shoppers Drug Mart
Marestella Marasigan	Dalecliff Medical Pharmacy
Miodrag Marinkovic	Shoppers Drug Mart
Sari Markel	Mount Sinai Hospital
Catherine McRae	Mount Sinai Hospital
Merry Mehawed	Northcliffe Pharmacy
Mary Mehta	Mount Sinai Hospital
Leila Moiseeva	Shoppers Drug Mart
Maria Molina Bedoya	Drugstore Pharmacy
Faddy Morgan	Regency Pharmacy
David Morkos	Woodgreen Pharmacy
Laura Murphy	The Toronto General Hospital
Medhat Nakhla	Christie Pharmacy
Amin Nasralla	Westmore Pharmacy
Falzana Nathoo	St. Michael's Hospital
Nadya Nencheva	Mount Sinai Hospital
Wing Ng	Victor Pharmacy
Wenzie Ng	The Princess Margaret Hospital
Lisa Ng-Haing	Sunnybrook Health Sciences Centre
Diep Nguyen	River Hill Pharmacy
Tien-Huan Nguyen	Wal-Mart Pharmacy
Jonathan Nhan	Shoppers Drug Mart
Benson Ning	Princess Margaret Hospital Outpatient Pharmacy
Parisa Pakbaz	Shoppers Drug Mart
Hitesh Pandya	Shoppers Drug Mart
John Papastergiou	Shoppers Drug Mart
Francesca Pasceri	Toronto Rehab. Institute
William Perks	Sunnybrook Health Sciences Centre
Jeffrey Petten	Prescription Care Centre
Sandra Porter	The Toronto General Hospital
Phoebe Quek	Ambulatory Patient Pharmacy
Ingrid Quinton	Sunnybrook Health Sciences Centre
Jay Rajora	Peoples Choice Remedy's Rx
Ramy Ramzy	Procure Pharmacy
Vijay Rasaiah	The Hospital For Sick Children
Nadeem Remtulla	Shoppers Drug Mart
Vera Riss	The Hospital For Sick Children
Abraam Rofael	Care and Health Pharmacy

Mary Rofael	Pharmasave Wynford Heights
Abraham Rothman	The Medicine Shoppe
Candice Rowntree	Shoppers Drug Mart
Ghulam Rubbani	Shoppers Drug Mart
Violet Sae	Metro Medical Pharmacy
Niloofer Saiy	Shoppers Drug Mart
Pauline Santora	Baycrest Hospital
Ashraf Seiha	Bathurst-Bloor IDA Drug Mart
Ada Seto	The Toronto Western Hospital
Yasmin Shaikh	Sunnybrook Health Sciences Centre
Mansur Siddiqui	Wal-Mart Pharmacy
Parmanand Singh	Target Pharmacy
Priya Singh	Toronto Rehab. Institute
James Snowden	Snowdon Pharmacy
Carol Sookram	Runnymede Healthcare Centre
Stephen Sorial	Main Drug Mart
Safwat Sourial	Shoppers Drug Mart
Nadia Sourour	Keele & Rogers Pharmacy
Angelo Stamadianos	Metro Drugs
Richard Stein	Canadian Compounding Pharmacy
Kenny Tan	Shoppers Drug Mart
Xin Ying Teng	The Toronto General Hospital
Vincent Teo	Sunnybrook Health Sciences Centre
Suresh Thomas	Shoppers Drug Mart
Koshy Thomas	St. Michael's Hospital
Eliza To	The Toronto General Hospital
Md Ullah	Shoppers Drug Mart
Shveta Unarket	Toronto Rehab. Institute
Diane Vella	Sunnybrook Health Sciences Centre
Stephanie Vidotto	Sunnybrook Health Sciences Centre
Tom Wan	Shoppers Drug Mart
Botros Wasef	Main Drug Mart
Laura Weyland	Shoppers Drug Mart
Angel Wong	Medisystem Pharmacy
Cindy Wong	Mount Sinai Hospital
Carol Wong	Rexall
Wai-yan Wu	Wellcare Pharmacy
Dean Yang	Sunnybrook Health Sciences Centre
Walter Yeh	Shoppers Drug Mart
Anita Yiu	Bridgepoint Hospital
Philip Yiu	Shoppers Drug Mart
Aziz Yousef	Bloor Park Pharmacy
Peter Youssef	Eglinton Medical Pharmacy
Roudolph Zaky	Augusta Central Pharmacy
Stefano Zannella	Regional Cancer Centre
Mohammad Ali Zohouri	Loblaws Pharmacy
Melanie Zomar	St. Michael's Hospital

TRENTON

Joanna Paula Armena	Wal-Mart Pharmacy
Debra Moffatt	Shoppers Drug Mart

UXBRIDGE

Eni Rambe	Wal-Mart Pharmacy
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VAL CARON

Robert Bignucolo	Val Est Pharmacy
Caroline Jolicoeur	Val Est Pharmacy

VANIER

Lee Fahn	Parkway Pharmacy
Sheila Ofori-Nyako	Drugstore Pharmacy
Jia Qi Wu	Shoppers Drug Mart

VAUGHAN

Ahmed Abou Zeid	Vellore Pharmacy
Salvatore Di Michele	Forum Drug Mart
Shaminder Kahlon	Shoppers Drug Mart

PRECEPTORS

John MetyasJane Medical Pharmacy
John ShamsShoppers Drug Mart
Rajiv SharmaSummeridge Guardian Pharmacy

WALKERTON

Kenneth BrownBrown's Guardian Pharmacy
Ryan FullertonBrown's Guardian Pharmacy

WALLACEBURG

Randy KriegPharma Plus

WATERLOO

Pradeep AcharyaThe K-W Pharmacy
Veneta AnandShoppers Drug Mart
Carole BeveridgeWestmount Place Pharmacy
Maria HornerShoppers Drug Mart
Philip HudsonBeechwood Wellness Pharmacy
Hoa HuynhRexall
Steve LeeWal-Mart Pharmacy
Jongsoon LeeLoblaw Pharmacy
Dragana NedeljkovicShoppers Drug Mart
Catherine SchillSchill's Pharmacy

WAWA

Mary SpitzerFenlon's Pharmacy

WELLAND

Joanna HabjanShoppers Drug Mart
Eugene MalikWelland Medical Pharmacy Ltd
Evelyn OkamuraWelland Medical Pharmacy Ltd
Licia SabatiniRexall
Joseph SeliskeWelland County General Hospital
Franco SicoliShoppers Drug Mart

WESTON

Arlene ChongHumber River Regional Hospital
Farhana HassanShoppers Drug Mart

WHITBY

Ashraf BebaweyJerry's The Drug Warehouse
Ashlee BruntOntario Shores Centre for Mental Health Sciences.
Esam DanialTotal Health Pharmacy
Michael El RahebPringle Creek Pharmasave
Muhammad FarooqShoppers Drug Mart
Linda HamShoppers Drug Mart
Melinda JejnaOntario Shores Centre for Mental Health Sciences.
Kelvin LeeShoppers Drug Mart
Shaun LeeOntario Shores Centre for Mental Health Sciences.
Karim RanmalDryden Medical Pharmacy Inc
Christopher YeeShoppers Drug Mart

WILLOWDALE

Jasvinder ButtooShoppers Drug Mart
Kwok LeeMadawaska Dispensary
Yong LinShoppers Drug Mart
Bethany McMullenShoppers Drug Mart
Ibrahim SaadHealth Drug Mart
Uday Pratap SinghShoppers Drug Mart

WINCHESTER

Joanne LeclairWinchester Dist Memorial Hspitl

WINDSOR

April AmlinShoppers Drug Mart
Dejan ApostolovskiRexall
Elisa BraccioShoppers Drug Mart

Timothy BradyShoppers Drug Mart
Marisa D'AlessandroWindsor Regional Hospital - Metropolitan Campus
George DaoudMedical Centre Pharmacy
John DevlinWindsor Regional Hospital - Metropolitan Campus
Shelley DonovanHotel Dieu Grace Health Care
Kellie-Ann DrouillardWindsor Regional Hospital - Metropolitan Campus
Peter DumoNovacare Pharmacy
Wasim El NekidyWindsor Regional Hospital
Alfred GeorgeCentral Mall Drug Mart
Shelly GerardWindsor Regional Hospital
Charlene Haluk-McMahonWindsor Regional Hospital - Metropolitan Campus
Amal HijaziWindsor Clinical Pharmacy
Lili HongStudent Centre Pharmacy
Sandy KauricZiter Pharmachoice
Dennis KorenHealth First Pharmacy
Snezana KrunicCostco Pharmacy
Theodore KummerShoppers Drug Mart
Claudine LanoueWindsor Regional Hospital - Metropolitan Campus
Sandra LenisaShoppers Drug Mart
Tien LeungWindsor Medical Pharmacy
Angel RublikWindsor Regional Hospital
Nathalee ScottShoppers Drug Mart
Erica ScratchShoppers Drug Mart
Gus SpanicTecumseh Pharmacy Plus
Richard Van HoorenFirst Medical Pharmacy
Ivana VolticRexall
Richard YeeYee Pharmacy Limited
Lidia YrigoyenWindsor Regional Hospital - Metropolitan Campus

WINGHAM

Peter ChangWingham And District Hospital
Vishal MehtaRexall
Hany TadrosJames Brown Pharmacy

WOODBRIIDGE

Gautam BhatiaWeston Pharmacare
Saman DaneshkhahCostco Pharmacy
Imran LatifCostco Pharmacy
Ying LauCostco Pharmacy
James LawrencePulse Rx LTC Pharmacy
Lisa LevinePanacea Pharmacy
Jitendra ManujaWeston Pharmacare
Caterina MazzaRexall Pharma Plus
Ogieriakhi OmozusiShoppers Drug Mart
Mona RaphaelHenderson's Woodbridge Medical Pharmacy
Prajna ShettyShoppers Drug Mart
Anna ValelaRexall Pharma Plus
Terence WongShoppers Drug Mart

WOODSTOCK

Emily LamantiaWoodstock General Hospital
Elizabeth SilverthorneShoppers Drug Mart
Lee TuanAll About Health Remedy's Rx

CONTINUING EDUCATION (CE)

This list of continuing education activities is provided as a courtesy to members. The Ontario College of Pharmacists does not necessarily endorse the CE activities on this list. For information on local live CE events in your area you may wish to contact your Regional CE coordinator (list available on the OCP website).

Visit www.ocpinfo.com for an up-to-date list of Continuing Education.

LIVE

Immunizations and Injections training courses

Multiple dates and locations – contact course providers

Ontario Pharmacists Association:

<https://www.opatoday.com/223957>

College of Pharmacists of Manitoba:

<http://mpha.in1touch.org/site/pdprograms?nav=qa>

Dalhousie University:

<http://www.dal.ca/faculty/healthprofessions/pharmacy.html>

Pear Health:

<http://www.pearhealthcare.com/training-injection-training.php>

University of Toronto:

<http://www.pharmacy.utoronto.ca/cpd/injections>

RxBriefcase, CPS and PHAC:

<http://www.advancingpractice.com/p-68-immunization-competencies-education-program.aspx>

March 21 – 23, 2014 (Banff, AB)

CSHP 40th Annual Banff Seminar – Pharmacy the Next Generation

Canadian Society of Hospital Pharmacists (CSHP)

Contact: http://www.cshp.ca/events/BanffSeminar/index_e.asp

March 26, 2014 or August 20, 2014 (Toronto, ON)

Confronting Medication Incidents

Ontario Pharmacists Association

Contact: <http://www.opatoday.com/professional/live-courses>

March 29, 2014 (Toronto, ON)

CSCP – 2014 Spring Conference – Medication Management in the Elderly

Canadian Society of Consultant Pharmacists

Contact: <http://cscpspringconference.weebly.com/>

April 2 – 4, 2014 (Toronto, ON)

Thrombosis Management

University of Toronto

Contact: <http://www.pharmacy.utoronto.ca/cpd/thrombosis/>

April 2 – 5, 2014 (Montreal, QC)

XIV International Symposium on Oncology Pharmacy Practice

International Society of Oncology Pharmacy Practitioners

Contact: <http://www.isoppxiv.org/>

April 5, 2014 (Ottawa, ON)

Update Mise a jour 2014 – 31st Annual Conference

Ottawa Valley Regional Drug Information Service

Contact: www.rxinfo.ca

April 5–6, 2014 or April 26–27, 2014 (Toronto, ON)

Certified Diabetes Educator Preparation Course

Ontario Pharmacists Association

Contact: <http://www.opatoday.com/professional/live-courses>

April 10, 2014 (Toronto, ON)

Multi-Incident Analysis Workshop

Institute for Safe Medication Practices

Contact: <http://www.ismp-canada.org/index.htm>

April 12 to November 8, 2014 (Multiple Dates & Locations)

Flu Season and Pharmacy Services: An Injection Refresher Workshop

Ontario Pharmacists Association

Contact: <http://www.opatoday.com/professional/live-courses>

April 25 – 26, 2014 (Toronto, ON)

17th Annual Contemporary Issues in Cardiovascular Pharmacotherapy Conference

Canadian Cardiovascular Pharmacists Network

Contact: <http://www.ccpn.ca/>

May 2 – 4, 2014 (Niagara Falls, ON)

Professional Development Conference for Pharmacy Technicians

Canadian Association of Pharmacy Technicians

Contact: http://www.capt.ca/Capt_PDC.aspx

May 7-10, 2014 (Toronto, ON)

Primary Care Today 2014- 12th Annual Conference

In collaboration with University of Toronto

Contact: <http://www.mycmeupdates.ca/pct/home.html>

May 13, 2014 (Kelowna, BC)

National Health Products (NHP) Research Society Conference

Canadian Pharmacists Association

Contact: <http://www.pharmacists.ca/index.cfm/news-events/events/>

Canadian Pharmacists Conference 2014

Canadian Pharmacists Association

Contact: <http://www.pharmacists.ca/index.cfm/news-events/events/conference/>

June 19 – 21, 2014 (Niagara Falls, ON)

OPA Conference 2014: Leading Practice Evolution

Ontario Pharmacists Association

Contact: <https://www.opatoday.com/professional/events/conference2014>

September 25, 2014 (Toronto, ON)

Proactive Risk Assessment in Pharmacy Practice: Using Failure Mode and Effects Analysis (FMEA)

Institute for Safe Medication Practices Canada

Contact: <http://www.ismp-canada.org/index.htm>

September 27, 2014 (Toronto, ON)

Infectious Diseases/Critical Care Conference

University of Toronto

Contact: <http://www.pharmacyutoronto.ca/cpd/id>

October 4, 2014 (Toronto, ON)

Humber Pharmacy Technicians Conference Healthmark

Contact: http://www.healthmark.ca/18-95-EVENTS/Humber-Pharmacy-Technicians-Conference_en.html

October 25, 2014 (Toronto, ON)

Medication Therapy Management for Older Adults – CGP Preparation Course

Ontario Pharmacists Association

Contact: <https://www.opatoday.com/224009>

November 1, 2014 (Toronto, ON)

Cardiovascular Patient Care Certificate Program

Ontario Pharmacists Association

Contact: <http://www.opatoday.com/professional/live-courses>

November 1, 2014 (Mississauga, ON)

Trillium Pharmacy Technician Conference

Healthmark

Contact: http://www.healthmark.ca/18-96-EVENTS/Trillium-Pharmacy-Technician-Conference_en.html

December 6, 2014 (Toronto, ON)

Psychiatric Patient Care – Level II

Ontario Pharmacists Association

Contact: <http://www.opatoday.com/professional/live-courses>

December 13, 2014 (Toronto, ON)

Infectious Disease Management Certificate Program

Ontario Pharmacists Association

Contact: <http://www.opatoday.com/professional/live-courses>

ONLINE/ WEBINARS/ BLENDED CE

Centre for Addiction and Mental Health (CAMH)

Online courses with live workshops in subjects including Mental Health & Addictions Practice Standards, Youth, Opioid Use Disorders and Treatment Options, Managing Opioids with Acute Pain Patients, The Training Enhancement in Applied Cessation Counselling and Health (TEACH) Project, Basic Pharmacology in Mental Health and Substance Use, Collaborating with Families Affected by Concurrent Disorders, Legal Issues in Mental Health Care in Ontario, Recovery-Oriented Approach, Youth, Drugs and Mental Health, Concurrent Disorders, Concurrent Disorders in Primary Care, Interactions Between Psychiatric Medications and Drugs of Abuse, Medications and Drugs of Abuse Interactions in ODT Clients, Safe and Effective Use of Opioids for Chronic Non-cancer Pain, Youth, Opioid Use Disorders and Treatment Options.

Contact: <http://www.camh.ca/en/education/>

Canadian Pharmacists Association (CPhA)

Home Study Online accredited education programs including the ADAPT Patient Skills Development certificate program, QUIT: Smoking Cessation Program, The How to of Managing Diabetes: A Prescription for Pharmacists. Complimentary online programs including Micronutrients: Past, Present, Future.

<http://www.pharmacists.ca/index.cfm/education-practice-resources/>

Canadian Society of Hospital Pharmacists (CSHP)

Online education programs accredited by CCCEP
www.csph.ca

Canadian Healthcare Network

Online CE Lessons

www.canadianhealthcarenetwork.ca

Communimed

A Practical Guide to Successful Therapeutic Drug Monitoring and Management (TDM & M) in Community Pharmacy: Focus on Levothyroxine
www.tdm-levothyroxine.ca

Continuous Professional Development Leslie Dan Faculty of Pharmacy, University of Toronto: Infectious Diseases Online Video Lectures and Slides, Influenza DVD
<http://www.pharmacyutoronto.ca/cpd/>

Continuous Professional Development Complimentary from OCP and Leslie Dan Faculty of Pharmacy, University of Toronto: Collaborative Care: Conflict In Inter-Professional Collaboration, Pain: Chronic Non-Cancer Pain, Pharmacists Role: Who Do We Think We Are?, Physical Assessment for Pharmacists, The '10 Minute Patient Interview' webcast.

<http://www.ocpinfo.com/practice-education/continuing-education/listings/pharmacists/>

Ontario Pharmacists Association (OPA)

Online courses with live workshops in subjects including De-prescribing, Infant Care and Nutrition, Infectious Disease – Foundations for Pharmacy, Interpretation of Lab Values, Introduction to Geriatrics and an Overview of the Beers Criteria, Methadone Education Program, Multi-Session Package, Natural Health Products, New

Anticoagulants, Ontario Drug Benefit blood glucose test strip reimbursement policy, Practical Management of Cough and Cold, Serving Travel Medicine Needs in the Pharmacy, The Transition from Hospital to Community, Ulcerative Colitis, Vitamin D in Osteoporosis, Why the Common Cold and Flu Matter: A Look at Prevention.

Complimentary online courses include Methadone and Buprenorphine, Head Start in Migraine Management, Smoking Cessation.

<http://www.opatoday.com/professional/online-learning>

RxBriefcase

Online CE Lessons (Clinical and Collaborative Care series) and the Immunization Competencies Education Program (ICEP).

www.rxbriefcase.com

**OCP is looking for regional CE Coordinators
in regions 4, 9, 10, 17, 25 and 27.**

To apply, submit your resume to ckuhn@ocpinfo.com

SPECIAL THANKS TO OUR CE COORDINATORS



Continuing Education Coordinator's Meeting, September 2013

The College recently launched its newly re-designed website with brand new navigation and fresh content that offers a tailored experience for each user. Our main visitors – College members, applicants and members of the general public – can now access the information they need on pages that have been designed specifically for them.

The website is intuitive, transparent, and provides visitors with several options for easy navigation. It is also completely accessible by all types of mobile devices and assistive technology devices like screen readers for the visually impaired.



www.ocpinfo.com