IN REVIEW

Canadian Society of Hospital Pharmacists Société canadienne des pharmaciens d'hôpitaux

HOSPITAL PHARMACY IN ONTARIO

SPRING ISSUE 2019

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PRESIDENTIAL ADDRESS

SPRING IS HERE (ALMOST) AND WITH IT, COMES NATURE IN A NEW SEASON OF GROWTH. SO TOO IS CSHP.

Debra Merrill

As many of you are now well aware, Myrella Roy retired as our Executive Director at the end of 2018 after 15 years of service to our Society. This led to a nation-wide search for which Jody Ciufo successfully was recruited as the Chief Executive Officer (CEO). You may wonder WHY the title change. The opportunity existed with this transition, to better align the title with the duties and role that we see in other associations and societies.

Jody comes to us with a lot of energy and experiences beyond healthcare and is working with a highly competent and experienced Board, led by Doug Doucette, the current chair whom many of you may be aware of. Doug is a very experienced Hospital Pharmacy leader and has held many national leadership roles in our profession (and our Society), and has been on the Editorial Board for the Hospital Pharmacy in Canada report since 2011.

At the beginning of February, members of the CHSP-OB Executive were privileged

NEXT HOME

PRESIDENTIAL ADDRESS continued

to meet with Jody in person. Topics discussed ranged from opportunities to change the model of how membership fees are paid and managed, platforms for improved communications especially as they pertained to education across the province as well as national, opening up opportunities to benefit from education sessions given by pharmacist experts from all provinces so that we can all take advantage of this.

We also explored opportunities for increased efficiencies in the 'back office' management which would result in decreased cost to operate the Ontario Branch. With decreased costs here, this would allow for increased funds to go towards additional educational opportunities and initiatives such as learning modules. An example being explored is a Hospital Pharmacy 101, a training tool for pharmacists new to hospital practice, or other such initiatives.

We continue to work closely with OCP especially as they pertain to the Inspection Standards, with OPA for common issues and concerns around our profession in Ontario, and the OHA to ensure that our voice is heard especially in these rapidly changing times in the healthcare system in Ontario. MCM is rapidly approaching and I look forward to sharing the information that comes out of those sessions.

Debbie Merrill,
BSc(Pharm), PharmD
President, CSHP-OB

On behalf of the
CSHP Ontario Branch Education Committee

[SAVE THE DATE!]

FOR THE CSHP ONTARIO BRANCH ANNUAL GENERAL MEETING AND EDUCATION CONFERENCE

NOVEMBER 16, 2019

The 71st Annual CSHP Ontario Branch Annual General Meeting and Education Conference will take place this fall on **Saturday, November 16,** followed by our Awards Night.

The Annual Conference will be held at the Leslie Dan Faculty of Pharmacy at the University of Toronto.

Once again, the Education Committee members are striving to bring you exciting educational sessions and valuable workshops. Please save the date and be on the lookout for our brochure, which will be coming out soon.

Rana Khafagy and Suzy Badr
Co-Chairs, Education Committee
Ontario Branch CSHP

CSHP ONTARIO BRANCH IS NOW RECRUITING FOR NEW COUNCIL MEMBERS:

The CSHP Ontario Branch Nominating Committee is seeking nominations for the elected position of President Elect. This is a 1-year term position beginning in Fall 2018. The President Elect serves a one year term but will be assigned one of three Executive Portfolios for a three year cycle through President Elect, followed by President, and finally as Past President.

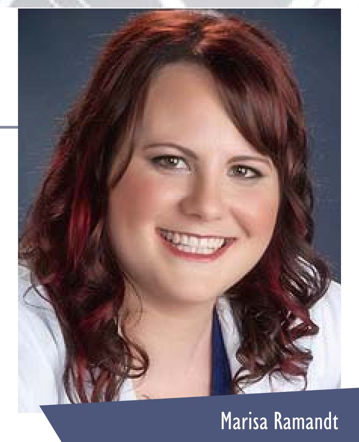
Please click here to review the Terms of Reference for more specific details regarding the President Elect position or feel free to contact Anne Stacey at astacey@cshp.ca.

CSHP OB Is also recruiting for Chairs (or Co-Chairs) for the Northern and Lake ON East Chapters. Please click here to review Chapter boundaries. Terms of Reference for the Chapter Chair position are available here.

Please click here to download the Nomination form. Interested candidates should complete this form and return to astacey@cshp.ca.

MAXIMIZE YOUR MEMBERSHIP AND GET INVOLVED WITH YOUR PROVINCIAL CSHP BRANCH TODAY!

CHAPTER CORNER: SOUTHWESTERN CHAPTER


Marisa Ramandt

Claire Hooper

WHAT'S NEW WITH TREATING POO?

2018 UPDATES TO THE IDSA GUIDELINES FOR CLOSTRIDIUM DIFFICILE

MARISA RAMANDT & CLAIRE HOOPER

The Infectious Diseases Society of America (IDSA) released updated guidelines in February 2018 for the management of Clostridium difficile infections (CDI). We will focus on treatment in the adult population, though the guidelines also address management in children. The guidelines can be located at: https://www.idsociety.org/practice-guideline/clostridium-difficile/

Highlighting the Major Changes in the New Guidelines:

Severity Classifications:

The terminology to classify initial CDI has been updated.[1] In addition, the criteria now focus on an absolute creatinine value, rather than a change from baseline. Previously, severe cases were characterized by an increase in SCr ≥ 1.5 times the premorbid level. This may still be useful to consider in patients with either low SCr or renal dysfunction at baseline.

Old Terminology	New Terminology	Clinical or Laboratory Characteristics
Mild or moderate	Non-severe	LKC < 15 and SCr < 133
Severe	Severe	LKC ≥ 15 or SCr > 133
Severe complicated	Fulminant	Hypotension or shock, ileus, megacolon

LKC = leukocytes (x 10^9 cells/L) SCr = serum creatinine (umol/L)

Recommended Treatment:

The biggest change in the treatment approach is that metronidazole has been removed as a first line treatment for an initial episode of non-severe CDI in adults. It still remains a first line treatment recommendation in children.

CHAPTER CORNER: SOUTHWESTERN continued

The implications of this change for the adult population, both financially and practically, are huge!

What do the new guidelines recommend for the treatment of an initial episode in adults?[1]

Clinical Definition	Recommended Treatment
Initial episode, non-severe	Vancomycin 125 mg QID PO x 10 days, OR Fidaxomicin 200 mg BID PO x 10 days *Alternate if above agents are not affordable or accessible:* Metronidazole 500 mg TID PO x 10 days
Initial episode, severe	Vancomycin 125 mg QID PO x 10 days, OR Fidaxomicin 200 mg BID PO x 10 days
Initial episode, fulminant	Vancomycin 500 mg PO or nasogastric tube QID If ileus, consider adding rectal instillation of vancomycin.* Metronidazole 500 mg q8h IV should be administered together with PO or PR vancomycin, particularly if ileus is present.

*500 mg in 100 mL normal saline per rectum q6h as retention enema

Get your Facts straight:

- *Clostridium difficile* underwent a genus name change to *Clostridioides difficile* in 2016.[2] However, you can still call it *C. diff*!
- Both vancomycin and fidaxomicin are not absorbed well from the gastrointestinal tract after oral administration which makes them perfect for obtaining high concentrations at the site of infection.[3]
- Remember that vancomycin should never be administered intravenously for this indication as it is not significantly excreted into the colon, which is the intended site of action.
- After years of use, there has been minimal documented resistance of vancomycin to *C. diff*. However, there has already been documented resistance for fidaxomicin.[4]
- Even a single exposure to antibiotics can affect bowel flora for up to 3 months.[5]
- A study examined the link between hospitalized patients receiving antibiotics and the risk of *C. diff* in subsequent patients who occupy the same bed. The study found that receipt of antibiotics by prior bed occupants was associated with a statistically significant increased risk of *C. diff* in subsequent patients, even if they themselves do not receive antibiotics.[6]

Q&A with Rita Dhami, Antimicrobial Stewardship Pharmacist at London Health Sciences Centre:

- **Why has metronidazole been removed as a first line option?**
  It was known that vancomycin was superior in severe and fulminant disease. This new recommendation for non-severe CDI was based on several clinical trials demonstrating greater cure rate and less frequent recurrence following vancomycin treatment compared with metronidazole.[7-10]
- **In what patient can we still use metronidazole?**
  The IDSA and AMMI Canada guidelines provide direction to steer towards vancomycin for all severity classifications. However, practically speaking, drug coverage in Ontario has been on ongoing challenge. So in a patient with a first episode, non-severe CDI where accessibility or affordability is a barrier to obtaining vancomycin or fidaxomicin, metronidazole may be an alternative.

CHAPTER CORNER: SOUTHWESTERN continued

- **How do you recommend classifying CDI severity in an immunocompromised patient?**
  Severity in the oncology population is difficult to assess using the standard criteria because patients with cancer are often neutropenic and have renal insufficiency. Some follow the Zar Criteria (Table 1) as a more applicable classification scheme.[11]
  At LHSC, we have a separate protocol for our hematology-oncology patients that stratifies patients into non-severe, severe or fulminant based on criteria other than WBC & Cr. We assess stool counts, fever, neutropenia, abdominal tenderness and signs of sepsis.

Non-severe (all characteristics must be present)	**Severe** (if any of the following features are present)	**Fulminant** (if any of the following features are present)
• No more than 4 to 5 unformed bowel movements per day • No abdominal tenderness on exam • No fever • Normal blood pressure • Expected time of neutropenia is short (3-5 days)	• Greater than 6 stools per day • Febrile with no other suspected cause • Early peritoneal signs • Tachycardia • Expected time of neutropenia is greater than 3-5 days	• Hypotension, shock • Febrile (> 38 degrees Celsius) or hypothermia (< 35.9 degrees Celsius) • Radiological evidence of severe colitis/ileus/toxic megacolon • Significant prolonged abdominal tenderness • Expected prolonged neutropenia greater than 3-5 days • ICU admission

- **Can you compare the cost of treatment with the two first line options?**
  Assuming 10 days of treatment:

Vancomycin *125 mg po q6h*	***Fidaxomicin*** *200 mg po q12h*
~$250 (capsules)	~$2200

- **Are there other important resources you would recommend?**
  The AMMI Canada guideline is an important resource which reiterates the same key messages as IDSA.[12]

References on next page.

CHAPTER CORNER: SOUTHWESTERN continued

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CHAPTER CORNER: LAKE ONTARIO WEST CHAPTER

THE CLINICAL TECHNICIAN – OPTIMIZING THE REGULATED PHARMACY TECHNICIAN ROLE IN HOSPITAL PRACTICE.

JENNIFER SMITH, RESOURCE PHARMACIST – MEDICATION SAFETY AND QUALITY
TRILLIUM HEALTH PARTNERS – MISSISSAUGA HOSPITAL

The world of hospital pharmacy is in a constant state of oscillation between demands and resources. With a growing population and hospital occupancy rates often above capacity, pharmacy teams must develop innovative ideas to improve efficiency and optimize the roles of pharmacists and pharmacy technicians. One of the strategies Trillium Health Partners (THP) has recently implemented is the clinical technician. This unique role allows pharmacy technicians to practice within their full scope, while helping balance pharmacist workload. THP currently has twelve clinical technicians between the Mississauga Hospital and the Credit Valley Hospital sites who play a significant role in our Pharmacy Assisted Warfarin Service (PAWS) and medication reconciliation. As an integral part of the PAWS program, clinical technicians have the opportunity to interview patients and gather data on home warfarin dose, INR monitoring, and any additional information that could impact the pharmacists approach to therapy. This information is documented on a pharmacy technician consult form and kept in the “interdisciplinary progress note” section of the patients chart. A copy of this documentation is used during the transfer of information between the clinical technician and the unit pharmacist. The information gathered by the clinical technician allows pharmacists to dedicate more time to other clinical tasks. With a workload ranging from 40-60 patients per day, time saved is a valuable asset pharmacists can invest back into patient care.

The introduction of clinical technicians was planned strategically to co-incide with the expansion of the PAWS program to all clinical units at THP. This was one approach to assist pharmacists with any resulting increase in workload, but most importantly it was an opportunity to foster collaborative relationships between pharmacists and pharmacy technicians. Overall, PAWS-related workload has not increased at the rate initially projected. This has been challenging for the clinical technicians as they are highly motivated to expand into a more clinical role. Upon evaluating technician consult data, clinical technicians are consulting on approximately 25-30% of all new PAWS patients. This can be attributed to many factors. Pharmacists tend to be proactive when it comes to managing workload therefore, they may prefer to complete

CHAPTER CORNER: LAKE ONTARIO WEST continued

a consult promptly before a technician has the opportunity to conduct the initial interview. There are also cases where a patient has been admitted for an extended period of time. In this scenario, the pharmacist is already quite familiar with the patients' history. Additionally, there are days where prescriber orders for PAWS are lower overall. It could also be the natural progression of a new role where trust is established over time. A similar trend was observed when pharmacy technicians began conducting medication reconcilliation at THP. It took time for trusting, collaborative relationships to be established amongst the pharmacists and pharmacy technicians. Building these relationships and increasing the number of clinical technician consults is something that is continuously being assessed and evaluated so this aspect of the program can be optimized.

The implementation of the clinical technician role coincided with THPs pharmacy assisted warfarin service expansion to help manage workload. The role was designed to be a unique, exciting opportunity for pharmacy technicians to expand and practice to their full scope. Like any new initiative, challenges have been presented and the role will continue to evolve. PAWS is one example of how the clinical technician has improved efficiency and created exciting job opportunities for pharmacy technicians at THP. The clinical technician portfolio will soon be expanding to include verification of reason for admission as part of our patient own medication project and collection of information to assist pharmacist dosing of Oseltamivir during flu outbreaks. As we move forward, it will be essential for hospital pharmacy practice to evolve and adapt to the numerous pressures faced by our health care system. This will require hospital pharmacy teams, and health care organizations as a whole, to develop innovative strategies for increasing efficiency while remaining committed to enhancing the quality of care provided to the communities they serve.

BOOMR PROJECT IMPROVES QUALITY AND EFFICIENCY OF MEDREC PROCESS DURING TRANSITIONS OF CARE

BOOMR authors: RVH's Michal Racki (left) and Debra Merrill (right)

ORIGINALLY SUBMITTED BY CHRIS SIMON, RVH RESEARCH INSTITUTE
EDITED BY MICHAL RACKI, GEORGIAN BAY SIMCOE CHAPTER CHAIR

When patients are transferred from acute care to a long-term care (LTC) home, strong communication and documentation among patients, families, and care providers helps safeguard against fragmented care.

Making sure patients accurately receive and understand their medication during this vulnerable period is particularly important, since these errors may place patients at risk for harm. Despite best efforts, recent studies have identified that high rates of medication errors and discrepancies continue to persist during transitions of care.

In a project supported by the Health Quality Ontario IDEAS program, RVH pharmacists Michal Racki and Debra Merrill worked alongside community, industry, and academic partners to improve the quality of collaborative Medication Reconciliation (MedRec) in the LTC setting. The project, known as BOOMR (Better Coordinated Cross-Sectoral Medication Reconciliation), implemented four new strategies to improve MedRec outcomes: 1) improving timing of the MedRec process; 2) increasing patient and family understating of their medications through proactive phone calls; 3) increasing interprofessional communication through conference calling; and 4) improving workflow and efficiency through reductions in unnecessary documentation.

These improvements resulted in a substantial increase in MedRec quality scores from 53% to 85%, as well as increased patient and family satisfaction about medication knowledge from 57% to 83%. It was found that BOOMR saved a collective 6 hours of interprofessional care time per patient, which has the potential to save the province up to $100 million annually. Importantly, over 92% of patients and families felt that they had input into their medication treatment goals, which included carrying out basic activities of daily living and re-engaging in social activities.

BOOMR PROJECT continued

Word about the effectiveness of BOOMR is spreading and results of the project were published in the April 2017 issue of the Healthcare Quarterly. In just over two years, the project has grown from a pilot assessment of a 15-bed convalescent LTC unit to more than 1,700 beds across three LHINs. The project won the IDEAS 2015 Cohort 6 Alumni Award and was also recognized on the Honour Roll of the Ontario Minister of Health and Long-Term Care's Medal for 2015 and 2016.

Merrill D, Racki M et al. BOOMR: better coordinated cross-sectoral medication reconciliation for residential care. Healthc Q 2017;20:34–9. Link: https://www.longwoods.com/publications/healthcare-quarterly/25070/1/vol.-20-no.-1-2017

Update your CSHP Member Profile Today!

CSHP Ontario Branch is trying to compile a list of pharmacist members who are working outside of the hospital setting (ex Family Health Team or other collaborative care setting). When renewing your membership this year, please take a minute to update your practice information, which can be found in the "Account" section after logging into your CSHP profile. This will help us tailor the communications that we are sending to you.

PHARMACY LEADERS IN THROMBOSIS ADVANCED PHARMACY RESIDENCY

Sunnybrook Health Sciences Centre offers a year-2 residency program for pharmacists in thrombosis management. This program is built on the recognition that the prevention and management of thromboembolic disorders are important patient quality of care priorities for hospitalized and community patients. The program is designed to help create capacity to effectively manage patients with respect to thromboembolic disorders by training pharmacists to have the advanced clinical skills and experience to be leaders in this aspect of patient care.

Overall goals:

- To foster competence in the areas of patient safety and quality improvement with specific emphasis on improving the effective and safe use of antithrombotic medications through the provision of evidence-based direct patient care as part of an inter-professional team
- Managing components of the medication use system, pertaining to antithrombotic medications
- Providing medication- and practice-related education to patients and other team members
- To enhance individual skills and confidence so that the successful resident can become a thrombosis management practitioner, change agent and leader in this area locally and/or regionally
- To develop project management and research skills through the completion of research projects in an area of relevance to thrombosis

Eligibility

The Pharmacy Leaders in Thrombosis Residency will consider applicants who express an interest in and commitment to advanced practice in the area of thrombosis. The applicant will be a registered pharmacist with one of the following:

1. Doctor of Pharmacy as a second professional degree (i.e. post-baccalaureate), or
2. Master's degree in advanced pharmacotherapy, or
3. Completion (or due to complete) an accredited year-1 Pharmacy residency.

Summary of Program Activities

The advanced practice residency is designed as a 1-year program ("Accreditation Pending" status by the Canadian Pharmacy Residency Board (CPRB)), with a proposed start date in September, 2019 (may be flexible upon request of the successful candidate). The option of combining the residency with a Master's degree can be considered based on the interest of the applicant.

The program will consist of:

- A broad-based, formal curriculum designed to increase the pharmacist's knowledge and understanding of the clinical science and operational practice of the prevention and treatment of venous and arterial thromboembolic disorders
- Practical, clinical experience on the inpatient and outpatient thromboembolism service as well as the Cardiology and Vascular Surgery programs
- Research in a relevant area of thrombosis practice.

Activities of the residency will also be tailored based on the needs and interests of the resident.

PHARMACY LEADERS IN THROMBOSIS ADVANCED PHARMACY RESIDENCY continued

Compensation

A resident will receive $50,000 (+ benefits) per year of the program.

Application

Interested applicants are asked to submit a letter of interest and a current curriculum vitae by **June 24th, 2019** to:

Danette Beechinor, Director of Pharmacy
Sunnybrook Health Sciences Centre, 2075 Bayview Avenue, Room 305
Toronto, ON M4N 3M5
danette.beechinor@sunnybrook.ca

Interviews of selected applicants will be scheduled on July 3rd and July 4th, 2019.

Canadian Society of Hospital Pharmacists

Société canadienne des pharmaciens d'hôpitaux

Canadian Society of Hospital Pharmacists | Ontario Branch

Ontario Hospital Pharmacy Management Seminar

Sunday, May 26 – Monday, May 27, 2019
Deerhurst Resort, Huntsville

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HOSPITAL PHARMACY IN ONTARIO

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