From MSHP President Melissa Ortega:

Greetings! It’s hard to believe we’re so far into the new year. It serves us well to take a few moments at times to celebrate accomplishments and anticipate what is to come. As MSHP members, there is a lot to get excited about for this upcoming year!

Membership growth and engagement define the success of our organization. This past year we strove to engage more members in committee work. We are excited to report that we have over 50 members engaged and participating in committee work to share ideas, anticipate your needs, and mobilize our mission. These communities of pharmacists, pharmacy technicians, and pharmacy students have been hard at work to provide programming that drives the advancement of pharmacy practice and the development of our workforce. Based on your feedback, we are excited to pursue new ventures with other state affiliates and event locations. Please be on the lookout for upcoming programming events, webinars, and information about our Annual Meeting.

We advocate for the improvement in medication use and enhancement of patient safety. Although some of this work happens behind the scenes, our Legislative Committee members have leveraged strong relationships with regulatory bodies and healthcare associations to expand MSHP’s reach, influence, and impact on behalf of our members and patients. Moreover, because of your participation in advocacy, MSHP was successful in sharing your comments and stories with the Board of Pharmacy (BOP) regarding the proposed sterile compounding regulations, and many revisions were incorporated.

The Legislative Committee also collaborated with our members to provide testimonies to the Massachusetts Health Policy Commission. The testimony highlighted how the practice of shifting drug distribution channels, commonly referred to as “white bagging” and “brown bagging”, poses challenges to health systems because they bypass several important safety measures incorporated by a hospital’s medication use process. These efforts are ongoing, and we will plan to communicate updates.

Lastly, our Board is determined to have effective and energized governance. Many initiatives are underway that will enhance our committee structure, performance metrics, and governance to meet your needs better and support our strategic priorities. We are in the works of collecting ideas to develop a forum specifically around practice advancement designed to advance pharmacy practice in the Commonwealth and, as a result, improve patient care. If you have ideas, feedback, and this sounds interesting to you, please don’t hesitate to email president@mashp.org. As always, if there are any questions, comments or feedback, we would love to hear from you.
CE Corner

Come Together. Right Now. Pharm-a-cy:
Collaboration Between Pharmacy Technicians and Pharmacists to Improve Medication-Use Safety
Kristen Knoph, PharmD; Qua Tran, CPhT
Union Street Restaurant and Bar, Newton, MA
March 20th, 2019 5:00-6:00 PM
Register Online »

Save the Date:

MSHP Honors and Awards Banquet & Annual Meeting
Tuesday May 14th, 2019 and Wednesday May 15th, 2019
UMass Lowell Inn and Conference Center
Lowell, MA
Register Online »

Local Clinical Skills Competition Winners 2018

Congratulations to the following pharmacy students, who won their local ASHP Clinical Skills competitions last fall and competed at the national competitions at the Midyear:

Sarah Bor and Dan Mendence
Northeastern University
Sierra Ferreira and Matthew Plante
MCPHS University-Boston
Jenel Clement and Joshua Emerson
MCPHS University-Worcester/Manchester
Allissa Long and Cassie Field
Western New England University

MCPHS-Boston ASHP Student Chapter Receives Two National Recognitions

MCPHS-Boston Wins ASHP’s Advocacy Photo Challenge

This past November, all of ASHP’s Student Societies of Health-System Pharmacists (SSHP) were invited to share their best advocacy efforts via a photo submission entitled, “It’s Great to Advocate”. When the votes were tallied, the winner was: MCPHS-Boston. Congratulations!

Pictured above are MCPHS students Mark Cepeda, PharmD Candidate 2020 and Brenna Reilly-Evans, PharmD Candidate 2021 hosting “sterile compounding” at the ASHP-SSHP student booth.
Their event, Pharmacy Carnival, was held September 15th at Copley Square in Boston. The purpose was to expand the public’s knowledge of today’s patient-oriented pharmacist. Students from each of the 15 different pharmacy organizations at MCPHS, together with students from Northeastern University’s ASHP-SSHP, created interactive games that would portray their organization’s mission while promoting the profession of pharmacy.

Read more about this successful outreach at: https://www.ashp.org/Pharmacy-Student/Programs-and-Awards/SSHP-Photo-Challenge

MCPHS-Boston Wins Outstanding ASHP-SSHP’s Professional Development Project Award

MCPHS-Boston students were winners of the ASHP Outstanding Professional Development Project Award at the 2018 ASHP Midyear Clinical Meeting in Anaheim, CA this past December.

Their project, A Co-Curricular, Interprofessional Mock Code Event, involved pharmacy, nursing, and physician assistant students working together on a simulation interdisciplinary team. Students developed a clinical case involving an emergency medical response to a patient trauma and student leaders from each discipline participated and described their professions’ role in the emergency code situation. Approximately 60 students from the 3 majors attended the event at MCPHS and learned more about the dynamics of interprofessional patient care and the contributions of each role.
Residency Spotlight

UMass Memorial Medical Center

UMass Memorial Medical Center (UMMMC) is an 800+ bed academic medical center that is part of UMass Memorial Health Care, the largest healthcare system in Central Massachusetts. We are the clinical partner of UMass Medical School. The Medical Center consists of three campuses in Worcester, MA: University Campus, Memorial Campus, and Hahnemann Campus. UMMMC offers a PGY1 Pharmacy Residency (6 positions), a PGY2 Cardiology Pharmacy Residency (3 positions), a PGY2 Critical Care Pharmacy Residency (1 position), a PGY2 Emergency Medicine Pharmacy Residency (1 position), and a PGY2 Medication Use Safety Pharmacy Residency (1 position). Residents provide pharmaceutical care in a variety of clinical settings, including internal medicine, medical and surgical ICU, cardiology, pediatrics, infectious disease, emergency medicine, oncology/bone marrow transplant, solid organ transplant, and medication management.

What are some of the unique characteristics of your program?

Throughout the year, residents provide 24-hour clinical services through an in-house on-call program. While on-call, residents respond to inpatient code blue, inpatient code stroke, and level 1 and 2 traumas independently. The residents also participate in pharmacy-led inpatient anticoagulation and pharmacokinetic consult services. The pharmacy-led inpatient anticoagulation service is highly regarded by providers within the institution, and exposes pharmacy residents to unique and challenging clinical cases.

What longitudinal experiences are residents involved in?

Residents gain operational experience through weekly staffing experiences. Residents also have the opportunity to develop communication and teaching skills through weekly resident case conferences, participation in a teaching certificate program, and presenting formal didactic lectures at local colleges of pharmacy, including a lecture in the Emergency Medicine Elective at MCPHS University. PGY1 and PGY2 residents also serve as co-preceptors for pharmacy students. PGY1 residents lead a weekly NAPLEX review session on a clinical topic of choice for all APPE rotation students. Additionally, residents develop leadership skills by participating as active members on several hospital committees.
Technician Spotlight

Erin Smith, CPhT

Image of Erin Smith

In this issue, we are spotlighting Erin Smith, CPhT. Erin is the Medication Reconciliation Technician Supervisor at Boston Medical Center (BMC). Her training includes classes at Northeastern University.

Erin supervises and is a member of BMC’s Medication Reconciliation Technician (MRT) group. She joined the team at its startup in March of 2016, with just two Emergency Department MRTs. They are responsible for interviewing patients who are being admitted to BMC and follow up by contacting outpatient pharmacies regarding their home medication regimens. Subsequently they enter notes into the patients’ charts, which are then co-signed by the covering pharmacist for the whole care team to utilize.

Erin’s primary area of coverage remains in the Emergency Department (ED), but, since the program’s inception, the program has expanded to include two additional full-time technicians covering the inpatient population, two part-time technicians and two per-diem students. The growth of their team allows for 7-day MRT coverage for both the Emergency Department and inpatient teams. The development of this program has increased the monthly medication reconciliation totals for the hospital from an average of about 300 per month in 2016 to nearly 1100 total in November 2018.

The MRT program is just one component of BMC’s broad initiative of reducing readmissions for their highest-risk patients (identified through an internally developed scoring tool), which has led to a reduction in the 30-day readmission rate by 15% for these targeted patients. The addition of inpatient MRTs earlier in 2018 has allowed a more comprehensive reach to patients entering through the ED. In many instances in which trauma patients have arrived with no information available through BMC’s electronic medical record software, the MRTs were able to work quickly and effectively to identify that they were on anticoagulation. This type of information is provided to the ED pharmacist, who then works with the trauma team to make safe interventions, such as reversal agents when indicated, prior to emergency surgeries. Gathering these histories helps to prevent medication errors, create a smooth transition of care and identify possible issues regarding patient access to medication prior to discharge.

Erin notes: “I have been pulled aside by a few patients on a return visit and in the main lobby on their way to appointments. These patients generally share the same sentiment; they look forward to seeing me and members of my team because it puts them at ease knowing that someone is looking out for them. I even had a patient cry during our interview and exclaim ‘You are the most compassionate person I have ever met!’ It is on days like those that I recognize that I made the right career choice.”

Practice Changing News

Editor: Jonathan Zand, PharmD, BCPS
Contributors: Shannon Kean, PharmD and Margaret Wey, PhD, RPh
All views expressed are those of contributing members and sources listed, but are not views or policy statements of MSHP or ASHP.

Ambulatory care, patient counseling: Out-of-pocket cost using Medicare part D prescription coverage often exceeds cost of prescriptions from $4 generic drug discount programs.

This paper compared patients’ copays through their Medicare Part D plans to determine how often these copays are greater than a $4 generic cost offered from some major retail pharmacies. Analyzing data from one month in 2017, 27 generic medications were identified for treating cardiovascular disease that were available at a $4 cash price point (i.e., without using insurance coverage) from Walmart.
these 27 medications filled, 21% of Medicare Part D plans charged more than $4 monthly copay. As high prescription costs are a barrier for optimal adherence, it is important to help patients understand that the lowest price available to them (which often requires shopping around) in some cases is lower without using their Part D insurance coverage.


Ambulatory care, patient counseling: angiotensin II receptor blocker (ARB) recalls

Following a nationwide recall of valsartan in July 2018 due to detection of potentially toxic impurities, the ARB recall was recently expanded by the FDA to include additional lots of valsartan as well as several lots of losartan, irbesartan and some ARB-containing combination medications. Recalled ARBs were found to have trace amounts of probable human carcinogens, i.e., chemical compounds known as NDMA (N-Nitrosodimethylamine) and NDEA (N-Nitrosodiethylamine). The FDA has established a clear way to measure for these impurities and is currently working with industry manufacturers to ensure products being brought to market are not produced with any of these contaminants above an “acceptable daily limit.” Patients who are concerned by these findings should confirm that they have not received a recalled medication by reviewing the complete list of products affected by the recall on the FDA website and should be counseled to continue taking their current medicine until their pharmacist provides a replacement or their doctor prescribes a different medication.


https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2706496

Ambulatory care, hospital practice: Pregabalin Use and Risk for Opioid-Related Death

Many patients using pregabalin are co-prescribed an opioid as part of multimodal analgesia; however, sedating effects of pregabalin may augment opioid-related central nervous system (CNS) depression. Previously available data have shown that concurrent use of opioids with another GABA analog, gabapentin, increased the risk of opioid-related mortality (Gomes T, et. al., PLoS Med. 2017 Oct 3;14(10):e1002396. [PMID: 28972983]). This study analyzed pregabalin prescription data of among Ontario residents who received concurrent opioids between 1997 and 2016 to evaluate whether there is a similar mortality risk with pregabalin. Concomitant exposure to pregabalin in the preceding 120 days was associated with significantly increased odds of opioid-related death compared with exposure to opioids alone (adjusted odds ratio [aOR], 1.68 [95% CI, 1.19 to 2.36]); on the other hand, concurrent nonsteroidal anti-inflammatory drugs (NSAIDs) and opioids use did not correlate with risk for opioid-related mortality (aOR, 1.04 [CI, 0.90 to 1.19]). When advising clinicians and patients on multimodal pain control regimens for both acute and
chronic pain, it is important to consider and discuss elevated risk of CNS depression in patients who are also receiving gabapentenoids.


Hospital practice model, infectious diseases: A “blueprint” for AUC-based vancomycin dosing service

Clinical outcomes from vancomycin appear to be optimized by targeting an $AUC_{24}:MIC$ of 400 to ~600 mg·hr/L when treating invasive *S aureus* infections. Trough concentrations, however, are traditionally used as a proxy for AUC due to practical issues including the need for multiple post-dose serum levels. As vancomycin trough concentrations and doses have increased to more effectively treat deep-seated and serious infections, so have reports of vancomycin-associated nephrotoxicity. Due to the potential benefits in efficacy and safety, some hospitals are considering AUC-based vancomycin dosing services. In their recent paper, Heil and colleagues discuss considerations in developing such a service and review state of the art methods for supporting PK calculations. Significant progress is being made with software that utilizes population PK values and Bayesian equations to calculate individualized doses. These programs overcome obstacles to AUC measurements by requiring few serum levels that can be obtained at any time in the dosing cycle even potentially before steady-state is reached. The predictive value of these programs improves as more patient-specific data points accumulate. However, software options are limited, can be costly, and there is lack of published experience in large-scale hospital implementations. Any institutional team considering development of AUC-based vancomycin dosing will find the review of options and technical guidance provided in this paper invaluable for planning and designing a program.

Source: Heil, EL, Claeyx KC, Mynatt RP et al. Making the change to area under the curve-based vancomycin dosing. Am J Health-Syst Pharm. 2018; 75:e828-37 (PMID 30333114)

Hospital practice, anticoagulation: New ASH guidelines on heparin induced thrombocytopenia.

The American Society of Hematology (ASH) released a new guideline on the management of heparin-induced thrombocytopenia (HIT), as part of a larger initiative to develop venous thromboembolism (VTE) guidelines. The HIT guideline incorporates the use of direct oral anticoagulants (DOACs) as additional options when non-heparin anticoagulants are indicated, e.g., for active HIT with or without thrombosis and in patients with a history of HIT requiring subsequent anticoagulation. To date the greatest experience is with rivaroxaban. For patients with acute HIT and thrombosis, rivaroxaban at a dose of 15 mg twice per day for 3 weeks followed by 20 mg once per day is suggested. For patients with acute HIT without thrombosis, rivaroxaban 15 mg twice per day until platelet recovery (usually a platelet count of at least 150 x 10⁹/L) followed by 20 mg once per day is recommended if there is an indication for ongoing anticoagulation.


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