Your next publish window will be from 05-May-16 to 19-May-16. Click on the Production Calendar tab above for details.

Announcements

**GSHP Webinar**

May 12, 2016 – 12 noon-1:00pm

Updates in the Management of Chemotherapy-Induced Nausea and Vomiting

1. Review the pathophysiology of nausea and vomiting
2. Discuss the different phases of chemotherapy-induced nausea and vomiting (CINV)
3. Describe the appropriate pharmacological management of CINV in high, moderate, and low emetogenic risk chemotherapy
4. Analyze the literature supporting the use of the combination of netupitant and palonosetron, as well as olanzapine, in management of CINV

Speaker: Katherine Brumfield, PharmD
Grady Health System
PGY-1 Pharmacy Resident

Georgia Society of Health-System Pharmacists is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education. This program is approved for 1 hour (0.1 CEUs) of continuing pharmacy education credit. Proof of participation will be posted to your NABP CPE profile within 4 to 6 weeks to participants who have successfully completed the post-test. Participants must participate in the entire presentation and complete the course evaluation to receive continuing pharmacy education credit. UAN # 0228-0000-16-086-L01-P; 0228-0000-16-086-L01-T

This is a member service of GSHP. There is no charge for members to attend. Non-members will be charged $20.

To register: https://attendee.gotowebinar.com/register/909584555492287514
Headlines

GSHP News

- Zika Information from the CDC
- Poster Presenters at the GSHP Spring Meeting
- Outstanding Poster 1
- Outstanding Poster 2
- Clinical Article

ASHP News

- ASHP’s Midyear Clinical Meeting Wins Multiple Trade Show Accolades
- ASHP Names 37 Members as ASHP Fellows for 2016
- ASHP Publishes Third Edition of Guide to Compounding Special Formulations
- Substances Doubtful for Bulk Drug Substances List Could Be INDs
- Drug Disposal Kiosks Help Hospitals Serve Their Community

Pharmacy News

- How Hospital Pharmacists Improve Care Without Breaking the Bank
- Hospitals See On-Site Pharmacies as Revenue Generators as Medication Management Pays Off
- Do Armed Guards Make Health-System Pharmacies Safer?
- Bridging Pharmacy Automation and EMRs
- Local Pharmacy Partnership to Prevent Pediatric Asthma Reutilization in a Satellite Hospital
- IU to Offer One of the First Data Science Courses to Use Real Clinical Trial Data
- EHR ‘Gaps’ Hinder Patient Medication Adherence
- Hospitals Dealing With Drug Price Increases
- New Naloxone Training Program for Pharmacists Takes Aim at Opioid Epidemic
- Mississippi Database Tracks Prescription Drug Abusers

GSHP News

Zika Information from the CDC

The arrival of Zika in the Americas demonstrates the risks posed by this and other exotic viruses. CDC’s health security plans are designed to effectively monitor for disease, equip diagnostic laboratories, and support mosquito control programs both in the U.S. and around the world. If you would like to stay informed of the latest news regarding CDC’s response efforts or to learn more about Zika virus, please visit [www.cdc.gov/zika/](http://www.cdc.gov/zika/).

The recent CDC Clinician Outreach and Communication Activity Webinar may be another helpful resource for information about Zika Virus. The webinar can be accessed here:


Poster Presenters at the GSHP Spring Meeting

The GSHP Education Committee evaluated posters submitted for recognition and designation as "Outstanding GSHP Poster". There will be three categories recognized: 1) Best Pharmacy Student Poster; 2) Best Pharmacy Resident Poster; 3) Best Pharmacy Practitioner Poster based on the credentials of the primary (first) author. Below are the Outstanding Posters 2016.
Purpose: Kcentra, a 4-Factor Prothrombin Complex Concentrate (4F-PCC), contains the vitamin K-dependent coagulation factors. Use at Athens Regional Medical Center (ARMC) is restricted to warfarin-induced life threatening bleeding and reversal of warfarin therapy due to urgent surgery. As warfarin is commonly used and 4F-PCC is expensive, it is important to maximize the efficacy and safety of its use, which was the goal of this evaluation at ARMC.

Methods: Retrospective chart review of patients receiving 4F-PCC at ARMC from April 2014 through October 2015. Information collected includes patient demographics, anticoagulant indication, baseline labs, type of bleed or surgery, dose given, concomitant therapies, outcomes, and discharge details.

Results: Chart review was performed on 28 patients. 25% (7 of 28 patients) of 4F-PCC use did not meet ARMC restriction criteria. 3 patients were on a novel oral anticoagulant. 2 patients received 4F-PCC before planned surgeries. 2 patients had bleeds that were not life threatening. All target doses (mg/kg) were correct based on patient’s INR and actual body weight. 21.4% (6 of 28 patients) of doses were rounded incorrectly based on ARMC protocol. One patient did not receive Vitamin K along with 4F-PCC. There were 2 cases of thrombosis and 2 cases of in hospital mortality documented after 4F-PCC use. ARMC total excess cost was $27,875.
**Conclusion:** More education is needed for providers and surgeons on appropriate use and rebound thrombosis risk associated with 4F-PCC. Simplifying the ARMC 4F-PCC rounding policy would eliminate errors. Educating pharmacists to adhere to ARMC policy when verifying 4F-PCC orders would be beneficial to prevent inappropriate use in the future.

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**Outstanding Poster 2**

**Impact of the Emergency Medicine Pharmacist’s Interventions On Outcomes In Patients With Sepsis**

Samantha Rosenthal, PharmD, BCPS; Jerri Glasgo, PharmD, BCPS; Erica Merritt, PharmD, BCPS; Allison Powell, PharmD, BCPS; Tiffany White, PharmD, BCPS St. Joseph’s/Candler Health System; Savannah, GA

rosenthals@sjchs.org

**Purpose:** Sepsis is a complex disease process which requires a great deal of provider attention. Early recognition and treatment of sepsis is crucial to reduce morbidity and mortality; this has led the Centers for Medicare and Medicaid Services to implement performance measures to evaluate various interventions in the sepsis treatment pathway, including prompt administration of antibiotics. Considering the busy nature of the emergency department and pharmacists’ unique knowledge of optimal medication regimens, emergency department pharmacists are key players in the development of treatment plans and selection of antibiotics. This study aims to evaluate the emergency medicine pharmacist’s impact on time to antibiotic administration, administration and selection of medications, and overall patient outcomes.

**Methods:** A retrospective, observational study was conducted to evaluate the impact of pharmacist interventions on adult patients (18 years and older) who received a diagnosis of sepsis during their emergency department visit. Patients were assigned to either the intervention group (documented evidence of a pharmacist intervention) or the control group (no evidence of a pharmacist intervention). The primary endpoint was time to antibiotic administration.

**Results:** Sixty seven patients met criteria for inclusion; 27 in the intervention group and 40 in the control group. There was a statistically significant decrease in time to antibiotic administration in the intervention group compared to the control group (2.52 hours vs. 3.39 hours, p=0.033), as well as an increase in the number of patients with antibiotic administration within 3 hours of presentation (67% vs. 40%, p=0.032). The pharmacist assisted with antibiotic selection in 74% of patients and administration in 41%. There were no significant differences in mortality between the intervention and control groups (15% vs. 7.5%, p=0.427).

**Conclusion:** Emergency department pharmacists involvement in the care of patients with sepsis significantly decreases time to antibiotics and increases instance of antibiotic administration within 3 hours of presentation.
Clinical Article

Flibanserin (‘Little Pink Pill’) for the Treatment of Hypoactive Sexual Desire Disorder in Women

Authors: Erika Tillery, Student Pharmacist Mercer University, and Kendra Manigault, Pharm.D., BCPS, BCACP, CDE

Female function relies on somatic, psychosocial, and neurobiological factors; therefore, a problem with any of these components can lead to sexual dysfunction.1 The Diagnostic and Statistical Manual of Mental Disorders (DSM)-IV defines hypoactive Sexual Desire Disorder (HSDD) as a deficiency or absence of sexual fantasies and desire for sexual activity that leads to distress or interpersonal difficulty not accounted for by a medical, substance-related, psychiatric or other sexual condition.1,2 A 2008 survey of 701 U.S. women revealed HSDD had an overall prevalence rate of 7.4% and occurred more frequently in premenopausal than postmenopausal women.3 HSDD may present as a lifelong issue (patient has never felt much sexual desire) or be acquired (e.g. menstrual cycles, hormonal contraceptives, oophorectomy, etc.).2,4 The most recent version of the DSM, DSM-V, merged HSDD and female sexual arousal disorder (FSAD) into one disorder, female sexual interest/arousal disorder (FSIAD), emphasizing the connection of several systems in sexual dysfunction.1 Sexual dysfunction in women can be connected with happiness and emotional status; therefore, female HSDD can greatly impact quality of life. 4

HSDD treatment historically consisted of behavioral therapy or off-label use of pharmacotherapy such as bupropion, testosterone, or dopaminergic agents (e.g. bromocriptine).5 Couples therapy results in significant improvement in desire when therapy involves the male partner; however, therapy does not always result in increased frequency. Lack of conclusive data and potentially harmful adverse effect profiles makes the use of unapproved pharmacotherapy undesirable. Flibanserin (Addyi™), also known as the little pink pill, was approved by the FDA on August 18, 2015 for the treatment of HSDD in premenopausal women.6,7 Initially, flibanserin underwent clinical trials for the treatment of depression, but failed to show efficacy. During these trials, Boehringer Ingelheim noted an improvement in sex drive among patients; therefore, the company decided to pursue FDA approval for the treatment of HSDD in 2010.6 The FDA rejected the application due to concerns regarding safety and efficacy. Sprout acquired Boehringer Ingelheim’s rights to flibanserin in 2012 and overcame safety concerns after additional clinical trials.

To continue reading the article: https://www.gshp.org/resources.aspx? a=viewPost&PostID=30204

ASHP News

ASHP’s Midyear Clinical Meeting Wins Multiple Trade Show Accolades

Trade Show Executive and Trade Show News Network Honor ASHP Meeting with Distinctions

3/30/2016

ASHP recently received three accolades honoring its annual Midyear Clinical Meeting and Exhibition.

Trade Show Executive (TSE) awarded ASHP’s Midyear Clinical Meeting its coveted distinction of Trade Show Executive Fastest 50 Award, ranking the meeting among the 50 fastest-growing shows by growth of exhibit programs. TSE also honored the meeting by naming it a Fast Tracker, listing it among the so-called Next 50, an honor based on a meeting’s growth by total attendance. In addition, the Trade Show News Network (TSNN) listed the Midyear Clinical Meeting on its 2015 Top 250 Trade Shows List, ranking it at No. 172.

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ASHP Names 37 Members as ASHP Fellows for 2016
3/28/2016

ASHP has recognized 37 of its members for their practice leadership with the designation “Fellow of ASHP” (FASHP).

Members who have achieved FASHP status have successfully demonstrated sustained commitment or contributions to excellence in practice for at least 10 years, contributed to the total body of knowledge in the field, demonstrated active involvement and leadership in ASHP, and have been actively involved in and committed to educating practitioners and others. The program has recognized 875 Fellows since it began in 1988.

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**ASHP Publishes Third Edition of Guide to Compounding Special Formulations**

Expanded Reference Includes More Than 40 New and Updated Monographs

3/24/2016

To help practitioners treat patients who need medication dosages and forms that are not commercially available, ASHP recently published Extemporaneous Formulations for Pediatric, Geriatric, and Special Needs Patients. The third edition of this comprehensive resource includes evidence-based formulations for 197 medications, including 39 new and two updated monographs.

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**Substances Doubtful for Bulk Drug Substances List Could Be INDs**

[April 15, 2016, AJHP News]

Cheryl A. Thompson

BETHESDA, MD 24 Mar 2016 - Pharmacists, physicians, and advocacy groups that want patients to use substances unlikely to be on the upcoming "bulk drug substances list" for compounders should consider submitting "treatment" investigational new drug (IND) applications, FDA personnel recently suggested.

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**Drug Disposal Kiosks Help Hospitals Serve Their Community**

[April 15, 2016, AJHP News]

Kate Traynor

BETHESDA, MD 23 Mar 2016 - Patients who need to dispose of unwanted controlled substances and other medications are embracing the convenience of drug disposal kiosks managed by their local health-system pharmacies.

"We've collected a little over two tons, in the last year, of unwanted medications," said Buck Stanford, community pharmacy operations director for Intermountain Healthcare in Utah.

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**Pharmacy News**

**How Hospital Pharmacists Improve Care Without Breaking the Bank**

*Hospitals & Health Networks (03/16) Aston, Geri*

Health reform is motivating hospital pharmacies to improve care and expand services while...
curbing costs. At Lifespan, a Rhode Island health system, pharmacists visit patients who are at-risk of readmission while they are still in the hospital to discuss medications and how the drugs work in the body, says Christine Berard-Collins, director of pharmacy. A clinical pharmacist oversees the transitions-of-care program at Lifespan's Rhode Island Hospital and the Miriam Hospital, and three pharmacists make the patient visits that are followed-up by case-management nurses. Many hospitals are sending patients home with their outpatient medicines in hand to prevent the patient-provider disconnect that exists in the traditional model of hospital pharmacy services, Berard-Collins says. Mark Eastham at McKesson Pharmacy Optimization says rising interest in continuity of care into the outpatient setting is prompting more hospitals to create their own retail pharmacies. Access to patients' electronic health records means hospital retail pharmacists can check physicians' notes, what drugs a patient was on in the hospital, lab values, and the last time a patient visited a hospital clinic. Hospital-owned retail pharmacies also allow hospitals to capture revenue that otherwise would be lost to pharmacy chains. However, careful analysis needs to be done to determine whether a hospital-owned retail pharmacy is financially viable, such as by determining the baseline number of discharges and specialty services needed to cover expenses.

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**Hospitals See On-Site Pharmacies as Revenue Generators as Medication Management Pays Off**

*Healthcare Finance News (03/16/16) Lagasse, Jeff*

More hospital systems consider on-site pharmacy services revenue generators as they seek more efficient and controllable medication delivery to patients. There are two benefits to this approach: the hospital collects more revenue from patients by letting them fill their prescriptions on-site, and it can reduce readmissions and help health systems save even more. "A lot of the initiative is more along the lines of hospitals making sure that patients can access and adhere to their medications," says Penn Medicine's Rick Demers. A key impediment for patients who want to fill prescriptions via a third-party vendor is that those pharmacies may not carry the desired medication, and this problem has grown with the pharmaceutical industry's increasing complexity. Stanford Health Care's John Cunningham says the current situation differs from the early 2000s, when hospitals with on-site pharmacies were beginning to close those operations due to medications being less costly and complicated, and there being little momentum in ambulatory care. The passage of the Affordable Care Act, which penalized hospitals for escalating readmission rates, was a driving factor in the reversal of this trend. On-site pharmacies permit more control on the hospital side, says the Medicines Company's Fred Pane. Such facilities give clinicians direct access to information such as who's prescribing which medications to whom.

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**Do Armed Guards Make Health-System Pharmacies Safer?**

*Pharmacy Times (02/29/16) Ross, Meghan*

Slightly more than half (52%) of hospital security guards currently carry handguns, according to a 2014 International Healthcare Security and Safety Foundation report. This is an increase from a 2011 Hospital Security Survey that found 22% of respondents who were hospital officials in charge of security had their security officers carry a firearm or were considering the use of firearms. Back then, 78% of respondents said they had "no plans to use firearms." For some pharmacists, the question of safety in relation to armed guards depends on the hospital setting. Craig Cocchio, PharmD, BCPS, an emergency medicine clinical pharmacist at Trinity Mother Frances Hospital, has also worked in hospitals both with and without armed guards. He currently works in a health system that allows security guards to carry guns. He noted that the emergency department frequently has law enforcement officers present for a variety of reasons, in addition to the armed security. "Personally, I never thought of my safety being any different with or without armed security guards," Dr. Cocchio said. Beth Lofgren, PharmD, BCPS, who has practiced in home health, long-term care, and hospital pharmacy, said she currently works in a health system that has security guards whose guns are in plain view. "I feel much safer knowing that armed guards are located on our campus," Dr. Lofgren said. A 2015 Healthcare Crime Report released by the International Healthcare Security and Safety Foundation suggested that violent crime in hospitals is on the rise. According to the report, the violent crime rate per 100 hospital beds increased from 2 in 2012 to 2.8 in 2014.

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**Bridging Pharmacy Automation and EMRs**

*Drug Topics (03/10/16) Vecchione, Anthony*
Amid rising consolidation of hospitals and health systems, hospital pharmacy directors must now address interoperability between pharmacy automation and electronic medical records (EMRs). Challenges facing pharmacy directors include connectivity and standardization issues, a shortage of resources, and funding problems. At Southampton Hospital in South Hampton, N.Y., for instance, the hospital’s old legacy computer system was not able to transfer information to a new EMR, according to Jerard West, PharmD, director of Pharmacy. As a result, predefined common orders had to be built from scratch using a 1,600-medication item master. West adds that the pharmacy department also had to design its system to incorporate current workflow practices, perform a Pyxis conversion to the new EMR, implement bar-coding technology, and assist with order set development for the medical staff. Dave Swenson at CareFusion says the company’s enterprise approach is to allow health systems to standardize using a single formulary and to manage users across a health system instead of on a hospital-specific basis. Rich Berner at Allscripts’ Sunrise business unit says medication management is crucial because it can help reduce errors, provide savings, and prevent fraud. Aesynt’s Kraig McEwen estimates that when multiple hospitals merge, "most health systems need to take 20 percent of their cost structure out over the next several years just to remain solvent, so standardization is one of the mechanisms they use to help become more efficient.”

**Local Pharmacy Partnership to Prevent Pediatric Asthma Reutilization in a Satellite Hospital**

*Pediatrics (03/16/16) Sauers-Ford, Hadley S.; Moore, Jennifer L.; Guiot, Amy B.*

A recent study investigated whether a partnership with community pharmacies could help reduce pediatric asthma reutilization (readmissions and emergency revisits) when hospital resources are limited. In this case, the satellite hospital lacked an outpatient pharmacy on site, so the researchers teamed up with community pharmacies, aiming to reduce asthma reutilization by providing medications in-hand at discharge. The median percentage of asthma patients who received medications in-hand rose from 0% to 82% during the study period. Expanding the medication in-hand program to all patients was a key factor, the researchers note, but other changes include expanding the team to evening stakeholders, narrowing the number of community partners, and developing electronic tools to help key processes. Following the intervention, the mean percentage of asthma patients who were discharged from the satellite hospital who had a readmission or emergency department revisit within 90 days dropped to 11% from 18%. The authors report, "When hospital resources are limited, community pharmacies are a potential partner, and providing access to medications in-hand at hospital discharge can reduce asthma reutilization.”

**IU to Offer One of the First Data Science Courses to Use Real Clinical Trial Data**

*IU Newsroom (03/24/16)*

Indiana University (IU) will partner with Eli Lilly to offer one of the first data sciences courses in the U.S. to use real-world clinical trial data. "Our goal is for students to gain a better understanding of the overall drug development process, and specifically the human clinical trial phases," says Eli Lilly clinical data associate Sara Bigelow. "This includes gaining knowledge on the data side of the process--where the data comes from, where it goes, how it’s used, and why it’s so important not only to clinical trial research but also the pharmaceutical industry as a whole. Another key takeaway will be awareness about the privacy process involved in working with patient data." The IU course will be offered as a four-week summer class starting May 2 via the data science master's degree program at the IU School of Informatics and Computing. The trial data will employ anonymized information collected from human subjects during the safe testing of potential new pharmaceuticals. Students enrolled in the new course will have an opportunity to gain hands-on instruction in understanding, refining, and analyzing real-world data of the type used by drug companies in making major business decisions on drug development.

**EHR 'Gaps' Hinder Patient Medication Adherence**

*FierceEMR (03/24/2016) Hirsch, Marla Durben*

Electronic health records (EHRs) and health IT are not improving patient medication adherence, according to a new report in *JMIR Medical Informatics*. Non-adherence can cost the health care industry large amounts of money, and EHRs have been considered as a possible solution. They can use certain tools to help improve adherence and better engage patients. But the report indicated four "gaps" that are stymieing efforts. First, interoperability is underdeveloped and does
not allow patients to connect self-monitoring data to a doctor's EHR. Second, inconsistencies in data definitions make it difficult to determine the validity and efficiency of data sources. Third, National Drug Codes are not yet standardized in EHRs. And fourth, medication management therapy is not handled particularly well by EHRs. To fix the issues, the report outlined a system-based view of medication use, management, and patient adherence. Interoperability should be improved and data definitions should be standardized. Doing so can create a collaborative environment that would benefit patients, physicians, pharmacists, and all others involved in the adherence process.

Hospitals Dealing With Drug Price Increases

Washington Post (03/14/16) Dennis, Brady

Hospitals nationwide are being forced to address higher drug costs. The increases often involved brand-name drugs with little or no competition as well as commonly used generics around for decades. "There's been a huge consolidation of these generic companies ... everybody is buying everybody else," says Gerard Anderson, a professor at the Johns Hopkins Bloomberg School of Public Health. "If there's no competition, the prices go up. We are seeing a lot of [drug] shortages, and also price increases. That shouldn't happen, but it is." Jeff Rosner, senior director of pharmacy sourcing and purchasing at the Cleveland Clinic, says the "challenge is, you don't have a crystal ball." His organization last year faced an unexpected increase of more than $8 million after the prices of two heart therapies surged. Rosner says it is increasingly difficult to anticipate how much the institution will spend on the myriad drugs it buys annually. Hospital officials insist that even when sudden price increases occur, patients receive access to the medicines they need. However, the unpredictable increases wedge their institutions financially, as they cannot immediately pass on the cost if a drug gets more expensive because reimbursement rates for certain procedures already have been set by Medicare and private insurers. That means sharply higher prices can lead to losses.

New Naloxone Training Program for Pharmacists Takes Aim at Opioid Epidemic

Newswise (03/29/16)

The University at Buffalo School of Pharmacy and Pharmaceutical Sciences (SPPS) has partnered with the Erie County Department of Health and the Harm Reduction Coalition to create an online education program for dispensing naloxone. The free course trains community pharmacists about dispensing naloxone without a prescription to the public, including those at risk for opioid abuse, their friends, and families. "This program is a mechanism for getting the antidote out to reduce the number of deaths," says Edward Bednarczyk, PharmD, chair of the SPPS Department of Pharmacy Practice. "Rather than distributing the medication through police stations, schools, and hospitals, pharmacies provide the community with an instant, ready-made network for distributing medicine."

Mississippi Database Tracks Prescription Drug Abusers

Jackson Clarion-Ledger (Mississippi) (02/29/16) Fitzgerald, Robin

In Mississippi, the Prescription Drug Monitoring Program (PMP) is helping pharmacists, physicians, and law enforcement to combat the abuse of legal narcotics. Pharmacists were first to begin using the database of prescription drug records in 2005 and are the only profession legally obligated to enter information into it. At least once daily, they input details about prescriptions they have filled—data that can then help identify anyone who may be fraudulently obtaining drugs to feed an addiction or to sell on the street. Gulfport pharmacist Larry Knox, for example, contacts prescribing doctors if the PMP indicates that a person is already receiving the same medication from other providers or from multiple pharmacies. Doctors, similarly, will see the same data when mining the system themselves to check a new patient's prescription history. Prescription orders originating from outside of Mississippi also raise red flags, but the database can access records from most neighboring states. While a valuable resource for nabbing violators of prescription drug laws, the PMP also takes steps to avoid misuse of the system. Pharmacists who reach out to prescribers about suspicious orders or customers must take care not to trip federal privacy laws, and criminal investigators are prohibited from running checks unless the target is a person of interest in an active case.