AMERICAN COLLEGE OF CLINICAL PHARMACY

ADULT MEDICINE PRN NEWSLETTER

SPRING 2012 VOLUME 7, ISSUE 1

MESSAGE FROM THE CHAIR

AUTHOR: NANCY YUNKER, PHARM.D., BCPS

I VOTED!

In my state, those who vote in a local, state, or national election receive a "sticker" to wear announcing that they have voted. In this presidential election year, I'm sure we all are familiar with the candidates who may ultimately be present on the November ballot. However, as anyone who turns on the TV or radio, accesses the internet or reads the newspaper knows, the determination of candidates who will be on that ballot is decided much earlier than the actual election. So why do I bring this up in the Adult Medicine PRN newsletter? As a PRN member, YOU have an important role - submitting names (including your own if you like) to be considered for next year's officers of the PRN. In March, the nominations committee issues a call for individuals to run for the offices of Chair-Elect and Secretary/Treasurer. I encourage you to think about nominating a person you think would serve the organization well. It is truly rewarding to serve as an officer of the PRN, and I encourage you to consider it (and I promise you there will not be debates involved)! It makes no difference if the nominated individual has been involved with ACCP for a few years or "more than a few", practices in a community setting or at an academic health center. The PRN is a very multifaceted group with over 900 members. The PRN serves you and its diverse membership, and the more "voices" that are heard, the better that the PRN functions.

Not only do the members nominate and elect officers for the Adult Medicine PRN, the PRN also recognizes members who have contributed to the organization and pharmacy profession. The PRN is

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PRN OFFICERS

CHAIR: Nancy Yunker

CHAIR-ELECT: Jessica Starr

SECRETARY/TREASURER: Matt Pike

BOARD LIAISON: Krystal Haase

NOVEL PRACTICE SITE

AUTHOR: CHRISTY BURROWS, PHARM.D., BCPS

Practitioners are being forced to think outside the box to provide optimal patient care while balancing increasing responsibilities as budgets become tighter and hospitals experience prolonged hiring freezes. Dr. Sarah Stephens, Pharm.D., BCPS is one such practitioner. After receiving her Doctorate of Pharmacy from the University of Wyoming in 2001, Dr. Stephens then completed both her PGY1Pharmacy Practice and PGY2 Drug Information residencies at University of Utah Health Care. She is now an Assistant Professor of Pharmacotherapy at the University of Utah College of Pharmacy and practices adult internal medicine at George E. Wahlen Department of Veterans Affairs Medical Center in Salt Lake City, Utah. (Continued on Page 3)

Dates of Importance

May 17-19, 2012

Oncology Pharmacy Preparatory Review Course

Denver, CO

May 22-May 24, 2012

ACCP Virtual Poster Symposium

June 15, 2012

Deadline for submission of abstracts for ACCP Annual Meeting 2012

October 21-October 24, 2012

2012 ACCP Annual Meeting

Westin Diplomat, Hollywood, FL

MESSAGE FROM THE CHAIR

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encouraged to nominate individuals that have provided distinguished service to ACCP and should be recognized as Fellows of ACCP. Fellowship is awarded in recognition of continued excellence in clinical pharmacy practice or research. Nominees must have been Full Members of ACCP for at least 5 years, must have been in practice for at least 10 years since receipt of their highest professional pharmacy degree and must have made a sustained contribution to ACCP. There are several other awards given by ACCP to recognize practitioners, educators and researchers. Please consider any of your colleagues who would be deserving of these awards. All of these award nominations were due by February 15th of this year. If you did not have time to nominate someone this year, just as we have seen in the national nomination process, now is the time to think about who should be nominated for the next time around. With the size of our membership, I'm sure the PRN has many worthy candidates who should be considered next year. You don't have to wait until next year to submit names. If you think of someone, please feel free to send them to me now.

The Adult Medicine PRN also has several awards that are designed to specifically recognize members of our group. The Nominations and Travel & Training Committees are responsible for issuing a call for nominations for these awards in the late summer. These committees are in the process of reviewing the awards criteria and determining which will be awarded this year at the Annual Meeting in Hollywood, Florida this October. Soon these will be posted on the PRN website with associated application forms. At present, these awards include:

- Adult Medicine PRN Outstanding Paper of the Year
- Adult Medicine PRN Distinguished Investigator
  (Alternate years with the Junior Investigator Award)
- Adult Medicine PRN Junior Investigator
  (Alternate years with the Distinguished Investigator Award- Offered in 2012)
- Adult Medicine PRN Mentoring Award
- Adult Medicine PRN Clinical Practice Award
- Resident/Fellow Award
- Student Travel Award

I mentioned earlier that the Adult Medicine PRN membership continues to grow. This is wonderful! In the month of December, many of our new members were currently residents or students. For those of you in practice, please welcome our new members and encourage their involvement in the PRN.

Other exciting upcoming activities that the Adult Medicine PRN is working on include the PRN's educational focus session for the Annual Meeting. Jessica Starr, the Chair-Elect of the PRN, and the Programming Committee have spent time developing a program on COPD that I think you will enjoy. As you may remember from the list-serve posting in the fall, the Adult Medicine PRN and the Infectious Disease PRN are also collaborating on another focus session for this meeting, so stay tuned.

In closing, I want to express my heartfelt thanks to all of the Adult Medicine PRN officers, committee chairs, and members for their support and dedication to the organization thus far this year. They have "voted" by providing their time and talents and for that- a BIG thank you! For others, I encourage all to provide your own unique voice to the PRN by whatever means you can. I promise you will not regret the experience.

NOVEL PRACTICE SITE

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Like many, Dr. Stephens must split time between her practice site and college. Her innovative acute care service evolved after she discovered she was spending about 90% of her time at the practice site- well above the 60% designated by her contract. She also found that the amount of time spent at her practice site was hindering her ability to be a successful faculty member. She found it difficult to offer a complete medicine service when she needed to be away from the site during critical patient times, such as admission and discharge medication reconciliation. Using this to her advantage, Dr. Stephens convinced college administration to place an additional faculty member at her site to provide full patient coverage and allocate dedicated time for faculty responsibilities.

With the two-person team approach, Dr. Stephens and colleague are able to provide coverage 100% of the time. However, she specifically covers her practice site five days total in a two week period. This allows dedicated time for didactic, service and scholarship responsibilities. Dr. Stephens foresees this team approach evolving to cover many acute care areas, such as critical care, transplant and cardiology. She has also experienced additional opportunities in clinical research, largely due to having two faculty members covering the service. Sharing responsibilities with another faculty member insures similar goals and an understanding of each other's roles in both the clinical and didactic settings.

When on-service, Dr. Stephens typically follows an average of ten patients as part of the medical team. In addition to attending morning rounds, typical activities include following up on recommendations, questions, patient education needs, and admission and discharge medication reconciliation. She also provides afternoon topic discussions, "mini-teaching rounds," and scholarship opportunities for both pharmacy students and residents. Despite not being on-service every day, Dr. Stephens has found success in both the clinical and didactic teaching portions of her career. The most commonly made recommendations include drug dosing and selection as well as medication reconciliation issues. Recommendations are made verbally during morning rounds and then documented in the medical record.

This unique practice site enables Dr. Stephens to achieve her vision of having no perceivable difference in patient care between a clinical faculty member and a clinical pharmacist at the same site. The two-person team approach not only provides optimal patient care, but also provides an excellent example for both students and residents. Dr. Stephens gives the following advice for new acute care clinical faculty members: "Be sure to understand your roles and responsibilities at both your practice site and university. Do not be forced into a situation where you must compromise patient care to be successful in your position. There is a way to do both!"

RECENT MEMBER PUBLICATIONS

Deal EN, Hollands JM, Riney JN, et al. Evaluation of therapeutic anticoagulation with enoxaparin and associated anti-Xa monitoring in patients with morbid obesity: a case series. J Thromb Thrombolysis 2011;32:188-94.

Deal EN, Tobin GS. Policy implementation for inpatient management of U-500 insulin resulting in lower incidence of hypoglycemia. Endocr Pract 2011;17:521.

Deal EN, Liu A, Wise LL, Honick KA, et al. Inpatient insulin orders: are patients getting what is prescribed? J Hosp Med 2011;6:526-9.

Gleason BL, Peeters MJ, **Resman-Targoff BH**, et al. An active-learning strategies primer for achieving ability-based educational outcomes. American Journal of Pharmaceutical Education 2011;75:Article 186.

RECENT MEMBER ACCOMPLISHMENTS

Adrienne Carey PharmD, clinical pharmacist at Freeman Health System, recently became BCPS certified.

Lamis Karaoui PharmD, BCPS, was recently appointed Director of Experiential Education in the Department of Pharmacy Practice at Lebanese American University in Byblos, Lebanon. She also has presented posters at three recent societal meetings...

- SCCM 2012: "Efficacy and safety of enoxaparin 20 mg subcutaneously in patients with chronic kidney disease stages 4 and 5 for deep vein thrombosis."
- ASHP Midyear 2011: "Evaluation of diabetes awareness among patients with diabetes mellitus within Lebanese community pharmacy practice settings."
- ACCP Fall 2011: "Implementation and experience with a locally-developed summative exit exam delivered to PharmD students prior to graduation."

WHAT'S THE ACCP PBRN (PRACTICE-BASED RESEARCH NETWORK)?

AUTHOR: RACHEL CHENNAULT, PH.D.

Practice-based research networks (PBRNs) link relevant clinical questions with rigorous research methods in real-life settings and produce scientific information that is not only externally valid, but also easily assimilated into practice. Since its inception only 3 years ago, the ACCP PBRN's infrastructure has been developed and the first study (evaluating and characterizing medication errors identified by pharmacists) completed, thereby showing the feasibility of the network and introducing practice-based research to many who participated and observed this study. In the next few years, we will be leading and collaborating with others in several studies that truly demonstrate the value of the ACCP PBRN in developing research relevant to practicing ACCP clinicians.

As a clinical practitioner, you will find different ways of getting involved with the ACCP PBRN. We facilitate developing grant submissions and undertake funded research projects with independent investigators. Any ACCP PBRN member may contribute to these studies as a study participant, collecting data on questions relevant to clinical practice. For example, we are currently recruiting participants who practice in the Hematology/Oncology specialty area for the *Oncology Drug Shortage Study* to determine the impact of the cytarabine shortage on the timing, dose or selection of chemotherapy drug regimens for adult patients with acute myeloid leukemia (AML), particularly minority patients with AML, relative to a non-shortage period.

This year, we will also be initiating a study with the objective of developing and testing a comprehensive framework for assessing the delivery of clinical pharmacist care in a variety of settings. We anticipate that the identification of clinical pharmacist activities associated with improved outcomes will revolutionize the manner in which clinical pharmacists are taught and practice.

In addition, you may lead or propose your own research study. The PBRN is interested in supporting and working with anyone who has a great idea. If your position makes it difficult for you to lead the research, consider collaborating with an experienced researcher. The researcher can be someone from your own institution, or we can assist in finding someone with similar interests at another institution. When you recommend ideas that are translated into research, your involvement with the research project can be whatever fits your needs, from advisory panel member to a co-investigator to lead investigator. All investigators wishing to collaborate with the ACCP PBRN will be asked to complete a short *ACCP PBRN Project Concept Paper* found at http://www.accpri.org/pbrn/partner.aspx. We want every interested ACCP member to have an opportunity to interact and work with the PBRN.

For more information on how you can get involved with these or other PBRN projects, please contact us by e-mail (pbrn@accp.com) or phone at (913) 492-3311.

RATIONALE FOR INPATIENT DISCONTINUATION/SUSPENSION OF BISPHOSPHONATE THERAPY

AUTHOR: NICOLE CIERI, PHARM.D.

Osteoporosis is a disease characterized by increases in bone resorption and progressive declines in bone density which may lead to an increased risk of fractures.[1] Osteoporotic fractures can be severe and debilitating and often warrant long term therapy in order to increase and maintain bone mineral density.[1] Bisphosphonates (BP) have been shown to be effective in reducing the risk of vertebral and non-vertebral fractures in patients with osteoporosis and are a common, first-line therapy.[1-3]

Gastrointestinal (GI) adverse effects have been reported with several oral bisphosphonate formulations, and they are the primary adverse effect influencing tolerability of these medications.[1,2] Common GI adverse effects may include abdominal pain, constipation, diarrhea, dyspepsia, gastritis and nausea. Large trials report the incidence of GI adverse events including ulcers and erosions to be similar to placebo.[4,5] The FIT trial reports that the incidence of GI adverse events in patients taking alendronate was not significantly different from placebo (any upper-gastrointestinal adverse event occurred in 41.3% of those patients taking alendronate and in 40.0% of those taking placebo p=0.67).[5] Clinical use of alendronate has occasionally been associated with esophagitis and upper-gastrointestinal symptoms, but since the FIT trial found no significant differences in the frequencies of such disorders, they postulated that this was due to the strict administration regimen in the trial.[5] Women with a history of gastrointestinal disease and those taking medication for dyspepsia less frequently than every day were eligible for inclusion in the FIT study, but women with a history of active peptic ulcer disease or complications (such as bleeding) and those using medication for dyspepsia daily were excluded. Another large, long term trial, (the FLEX trial), found no significant difference between rates of upper gastrointestinal or severe upper gastrointestinal events in patients taking a bisphosphonate and placebo.[4]

GI symptoms are thought to be attributed to the direct exposure of the GI epithelium to a BP.[6] Data from preclinical and animal studies suggest that GI adverse effects may be exacerbated by acidic conditions and frequent exposures.[6] Evidence also suggests that daily BP exposure may inhibit the mechanisms of GI epithelium tissue repair and longer intervals between BP administrations allow for time to repair the gastric acid-induced GI epithelial damage.[6,7] Due to this evidence, bisphosphonates have specific administration requirements which limit exposure to the GI epithelium. Oral bisphosphonates are taken with water first thing in the morning and ≥30 minutes before the first food, beverage or other medication of the day. Patients are also instructed to stay upright (not to lie down) for at least 30 minutes and until after first food of the day (to reduce esophageal irritation).[8]

Bisphosphonate therapy may create several unique problems for pharmacy staff. Administration of new BP therapies includes extended dosing intervals of once per week, once per month, once every three months or once per year. The last day of administration for these extended interval agents is often not known and this requires clarification by the pharmacist. Several unique administration issues also exist as a result of GI adverse effects. These are especially true for intensive care patients where proper administration according to recommendations may not be attainable.

The skeletal half life of bisphosphonate medications is thought to exceed ten years. After administration, a portion of bisphosphonate medication is deposited in the skeletal system where it can be released and reabsorbed through the process of bone turnover. It is important to note, however, that most pharmacokinetic studies involving bisphosphonates have lasted less than 1 month.[9] Studies have shown that stopping bisphosphonate therapy may not pose any increased risk of fracture to patients with mild to moderate, non-vertebral osteoporosis.[4,8,10] Due to this, and as administration issues for these medications exist, several hospital systems have undertaken the proposal that bisphosphonate medications with the indication of osteoporosis be held upon admission to the hospital with the option of restarting later in the admission or upon discharge.

References:

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3. Management of osteoporosis in postmenopausal women: 2010 position statement of The North American Menopause Society. *Menopause* 2010;17:25-54.

4. Black DM, Schwartz AV, Ensrud KE, et al. Effects of continuing or stopping alendronate after five years of treatment: the Fracture Intervention Trial Long-term Extension (FLEX): a randomized trial. *JAMA* 2006;296:2927-38.

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8. Fosamax Package Insert. Whitehouse Station, NJ; Merck; 2011 Jan.

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