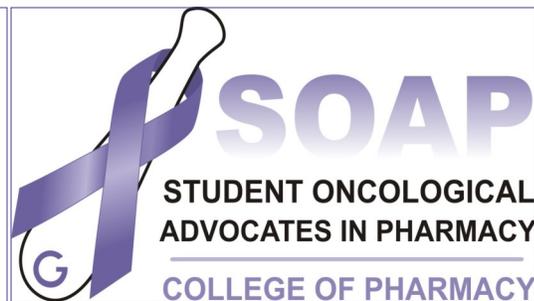




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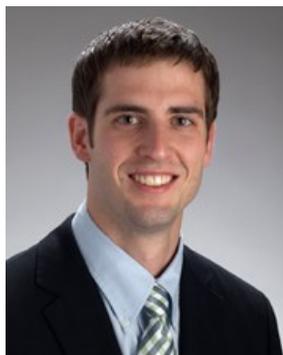


December 2014 - Volume 2, Issue 1
Published by the Student Oncological Advocates in Pharmacy, UGA College of Pharmacy

CAREER SPOTLIGHT: ONCOLOGY PHARMACY ADMINISTRATION

The modern scope of pharmacy practice involves many responsibilities beyond the recognizable role of a drug specialist in clinical settings. Less recognized but still important responsibilities can include but are not limited to cost analysis, education, drug procurement, and policy advocacy. A developing role pharmacists now take, which often incorporates these responsibilities, is called pharmacy administration. To gain a greater understanding of what pharmacy administration in an oncology setting encompasses and of how to obtain such a role, we interviewed Dr. Samm Anderegg, Pharm.D., M.S., the current manager of the Oncology Service Line at the Georgia Regents Medical Center (GRU).

Dr. Anderegg's interest in administration first began during his experiences with pharmacy organizations during his Pharm.D. training at the University of Iowa College of Pharmacy. He realized the significance of bringing people together to complete a project rather than working from person to person. During his fourth year in pharmacy school, he had rotations in administrative pharmacy in an ambulatory care unit as well as an oncology unit. An early career mentor encouraged Dr. Anderegg to seek national leadership opportunities in the American Society of Health System Pharmacists (ASHP). He joined a national committee that helped draft policies. This policy experience further enhanced Dr. Anderegg's interest in working with a team to create programs that help improve patient care. Dr. Anderegg's mentor also steered him



Samm Anderegg, Pharm.D.

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PALLIATIVE CARE: A RISING PLAYER IN CANCER TREATMENTS

Over the years, significant achievements in novel chemotherapy agents, surgical and radiation techniques, and novel immunotherapies have improved outcomes for patients with various cancers. Additionally, there has been increasing evidence to support an increasing demand for palliative care, from both patients and caregivers alike¹.

The World Health Organization (WHO) defines palliative care as "an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering... and other problems, physical,

psychosocial and spiritual"². Palliative care can be provided to patients at any stage of their treatment and can be continued for as long as the patients choose³. Palliative care services incorporate the patient and caregivers into decision making. Palliative care addresses not only the physical aspect, but also emotional and spiritual pain that can accompany these illnesses. From counseling for depression, to exploring and finding a sense of spiritual peace in a particular faith, or reconnecting with friends to maintain one's social and support network, palliative care seeks to provide people with comfort and support throughout their cancer journey³.

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A 2010 study published in the *New England Journal of Medicine* reported that lung cancer patients who received palliative care starting with initial diagnosis and treatment not only showed improved quality of life but also lived longer than those who only received palliative care later in their course of disease management. These patients reported feeling more satisfied with their treatment. As pharmacists, we should continue to utilize emerging data on palliative care to support comprehensive treatment of these patients to improve quality of life even during active treatment approaches.

References:

1) "Palliative Care in Oncology." *American Society of Clinical Oncology*. American Society of Clinical Oncology (ASCO). 16 Mar. 2014. Web. 4 Oct. 2014. <<http://www.asco.org/practice-research/palliative-care-oncology>>.

2) "WHO Definition of Palliative Care." World Health Organization. <<http://www.who.int/cancer/palliative/definition/en/>>.

3) "Palliative Care in Cancer." *National Cancer Institute*. National Institute of Health (NIH). 16 Mar. 2010. Web. 4 Oct. 2014. <<http://www.cancer.gov/cancertopics/factsheet/Support/palliative-care>>.

4) "ASCO Recommends Palliative Care as a Part of Cancer Treatment." *Cancer.net*. American Society of Clinical Oncology (ASCO). 1 Aug. 2014. Web. 10 Oct. 2014. <<http://www.cancer.net/research-and-advocacy/asco-care-and-treatment-recommendations-patients/asco-recommends-palliative-care-part-cancer-treatment>>.

Contributed by Melody Tsao

Pharm.D. Candidate

ORGANIZATION SPOTLIGHT: HOPA POLICY ADVOCACY

The tenth annual Hematology/Oncology Pharmacy Association (HOPA) meeting was held in New Orleans, LA this past March. In addition to educational programming, the conference included discussion on the issue of provider status and two bills promoting the advancement of pharmacy. After the conference, HOPA announced its full support of both the Provider Status and Medicare Coverage Initiatives.¹

In review, both initiatives are bills aiming to amend sections of the Social Security Act (SSA). First, the Patient Access to Pharmacists' Care Coalition (PAPCC), through H.R. 4190, aims to recognize pharmacists as healthcare providers by modifying Medicare's current fee-for-service structure. Second, the American College of Clinical Pharmacy's (ACCP) Medicare Coverage Initiative adds comprehensive medication management (CMM) to Medicare Part B benefits, and recognizes pharmacists as part of the coordinated care team for patients with Medicare coverage.¹

During HOPA's meeting, the impact of these initiatives on hematology/oncology pharmacy was analyzed. HOPA's Board of Directors and members concluded that both pieces of legislation expand pharmacists' role in healthcare. Notably, both bills contribute to HOPA's mission of optimizing the provision of cancer care through hematology/oncology pharmacists²:

"HOPA will support initiatives that advance the role of the hematology/oncology pharmacist as we strive to reach our goal of having a hematology/oncology pharmacist involved with the care of all individuals affected by cancer. We believe that pharmacists are an essential component of patient care and deserve to be recognized as such by all payers, regardless of the payment structure."¹

-HOPA Board of Directors

Because the PAPCC requests that organizations support only one of the two initiatives, HOPA believes it will be unable to join the PAPCC. However, HOPA will continually join ACCP in support of the more clearly defined Medicare Coverage Initiative.³ HOPA is actively advocating for politicians to recognize pharmacists as providers in order to "address gaps in our nation's health care system and increase access to pharmacists' services."⁴

References:

1) Provider Status and Medicare Coverage Initiative. (2014, April 8). Retrieved November 21, 2014, from <http://www.hoparx.org>

2) About HOPA. (n.d.). Retrieved November 21, 2014, from <http://www.hoparx.org>

3) Claycomb, J. (2014, May 10). Notes from HOPA: Not just for oncology pharmacists. Retrieved November 21, 2014, from <http://drugtopics.modernmedicine.com>

4) Hematology/Oncology Pharmacy Association. H. R. 4190: Provider Status Fact Sheet. 2014. Available at <http://www.hoparx.org>

Contributed by Hayley Hodgson

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CLINICAL CASE STUDY: TEST YOUR KNOWLEDGE

A 45 year-old African American female was just diagnosed with high-grade serous ovarian cancer. The surgical oncologist consults that the tumor in its current state is **unresectable** and requires **neo-adjuvant chemotherapy** before surgery can be considered. She is placed on a **six-cycle regimen of paclitaxel IV followed by carboplatin IV**. Three weeks later, her lab results were significant for severe side effects from her drug regimen.

- A. Thrombocytopenia
- B. Leukopenia
- C. Hypokalemia
- D. Anemia
- E. A, B, & D

Which of the following side effects is she most likely experiencing?

See next issue for the correct answer!

Contributed by Ben Albrecht, Pharm.D. Candidate

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CAREER SPOTLIGHT: DR. ANDEREGG, CONTINUED FROM PAGE 1

towards administration residency programs where he later completed a PGY1, PGY2, and M.S. at the University of Kansas Hospital pharmacy residency program in administration.

Dr. Anderegg believes what makes management of oncology pharmacy services is the complexity of oncology and the various therapeutic and administrative variables associated with the specialty. He deals with management of operations in distribution programs, including a new pharmacy for patients at GRU. This pharmacy will help the oncology service line keep track of patients' adherence and side effects to their medications as well as provide bedside delivery of these medications using programs on portable smart tablets. One unique aspect of his role was developing the cost analysis for this new pharmacy. Cancer medications are often extremely expensive and proper management requires precise measurements and analysis to help pharmacies avoid financial burden on the institution and therefore sustain their clinical efforts. Dr. Anderegg also manages the clinical oncology pharmacists by performing evaluations of the pharmacists and technicians as well as educates new employees who start working in the oncology service line and may not have received prior specialty training in oncology. He also serves as a preceptor for APPE students as well as pharmacy residents. Students on this rotation work along side Dr. Anderegg and other medical professionals within GRU to solve a problem during their five-week rotation through resource and cost analysis.

Dr. Anderegg serves as the chair of the Pharmacy Health Information technology Collaborative Value

Set Committee. Health information technology (HIT) is a growing part of clinical practice involving computerized physician order entry (CPOE) and online medical reporting systems to provide for better transition of care between different health professionals and medical settings. As a part of the HIT Collaborative, Dr. Anderegg helps to develop better systems for pharmacists to document their clinical activities with patients, such as medication reconciliation forms, counseling, pharmacokinetics monitoring, and medication regimen recommendations. Currently, there is no universal system that allow pharmacists to report how they impact patient care or allow that information to carry over between points of care, such as between a hospital and a community pharmacy. Dr. Anderegg is also working on an app with ASHP for smart tablets and smart phones that will allow pharmacists to document their patient care interventions.

Dr. Anderegg believes the best way for pharmacy students interested in pharmacy administration in oncology or any other setting is for them to have a well-rounded experience while in pharmacy school. He recommends students get involved in activities such as clinical research, drug utilization reviews for a hospital, or an administration rotation during their fourth-year. Experience with developing and completing a project with a team is beneficial for anyone with an interest in management. Another recommendation is to develop a relationship with a mentor in your program or elsewhere who has some experience with administration or who can introduce you to administrative pharmacists. One final piece of advice from Dr. Anderegg is to, overall, never lose contact with your mentors throughout your education and your future career.

Contributed by Ben Albrecht

Pharm.D. Candidate

EVOLVING TRENDS: HOW OBESITY AND CANCER RELATE

Although many people recognize the link between obesity (BMI >30 kg/m²) and illnesses such as diabetes and cardiovascular disease, many are unaware that obesity is fast replacing smoking as the leading preventable cause of cancer. In fact, around 20% of cancer-related deaths are linked to obesity¹. Also, if every American adult reduced their BMI by only 1%, 100,000 cases of cancer would be prevented by 2030². Being overweight is also associated with increased cancer recurrence rates and a poorer prognosis. Obesity increases the risk for not only GI-related cancers such as colorectal, pancreatic, and esophageal cancer but also prostate, breast, kidney, and endometrial cancers³. This wide range of cancers is due to the far-reaching effects that obesity enacts on the human body.

Obesity impacts the body in several ways which lead to cancer risk. For example, fat tissues generate higher amounts of estrogen than normal tissues, which lead to increased risk of breast, endometrial, and other estrogen-related cancers. These fat cells also produce adipokine hormones, like leptin, that stimulate cellular proliferation and thus heighten cancer risk. Furthermore, fat cells directly and indirectly promote the activity of known tumor growth regulators, such as mTOR (mammalian target of rapamycin). In addition to the effects of increased fat tissue, even non-diabetic obese

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SOAP UPDATE: RECENT AND FUTURE ACTIVITIES

The month of September was filled with many fundraising events and activities. First, SOAP engaged in several activities to raise money for the Winship Cancer Institute at Emory University in Atlanta, Georgia. The members of SOAP gathered together to decorate donation jars for businesses around Athens and canning buckets that were used to request donations in downtown Athens. SOAP also had its first percentage night at Barberitos and held another fundraiser selling college football game day buttons and pins with the slogan, "UGA Pharmacy Loves the Dawgs."

Other philanthropic events included a successful blood drive sponsored by the American Red Cross where an estimated 42 lives were impacted based on the amount of donors. During American Pharmacist Month in October, members of SOAP participated in Dawgtoberfest, the University of Georgia College of Pharmacy's annual health fair, where students were informed on ways to decrease their risk of cancer through educational resources with the theme of "Kiss Cancer Goodbye." SOAP members also helped volunteer at the Athens Free to Breathe Lung Cancer Run/Walk in November.

As we look to next semester, SOAP is excited to announce that the 3rd Annual Tina Borg Classic 5K Benefiting the Winship Cancer Institute will be held on February 21, 2015 at Stegemen Coliseum. After two successful runs in the past, we hope to raise over \$2500 in donations to further research and clinical trials for all types of cancers at Winship.



Contributed by Mackenzie Johnson

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EVOLVING TRENDS, CONTINUED FROM PAGE 3

people generally have increased insulin resistance and therefore higher levels of insulin and IGF-1 (insulin-like growth factor-1). These compounds aid in the development of tumors by inhibiting the nuclear factor kappa-b system modulating DNA transcription².

At the time of cancer diagnosis, the healthcare team should incorporate healthy lifestyle recommendations into the care plan for overweight and obese patients¹. Weight loss is vital to reduce co-morbidities and improve overall health. One intervention is to improve the patient's nutrition – to not only reduce calories but also improve food quality. This involves substituting high fat foods with grilled options and substituting healthier options, such as or olive oil instead of butter. Another intervention is controlled physical activity to aid in losing weight reducing fatigue and lessening muscle loss due to drug therapy. Since lifestyle changes are generally a slow process, continuous support, feedback, and patient accountability from the healthcare team are the keys for the patient to meet his or her goals⁴.

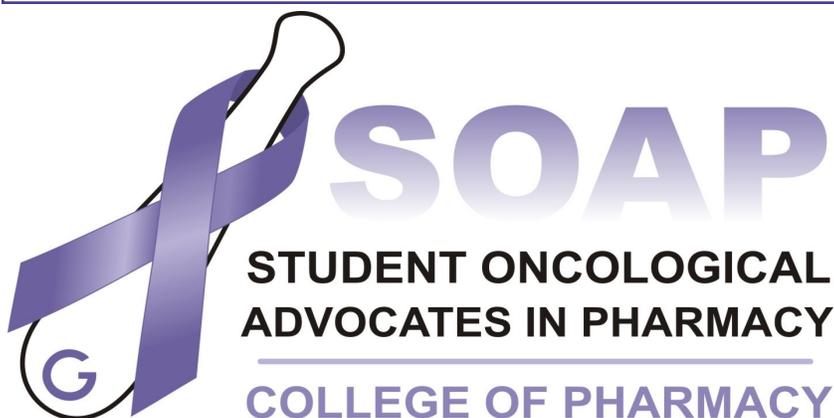
Obesity is associated with several known mechanisms that increase cancer risk, therefore weight loss is a viable intervention to decrease these possibilities². The patient can accomplish weight loss through improving nutrition and increasing physical activity with the guidance and aid of the healthcare team, including the clinical pharmacist⁴.

References:

- 1) Ligibel, Jennifer et al. "American Society of Clinical Oncology Position Statement on Obesity and Cancer." *Journal of Clinical Oncology*. American Society of Clinical Oncology, 1 Oct. 2014. Web. 23 Oct. 2014. <<http://jco.ascopubs.org/content/early/2014/10/01/JCO.2014.58.4680.full.pdf+html>>.
- 2) NCI. "Obesity and Cancer Risk." *National Cancer Institute*. National Institute of Health, 03 Jan. 2012. Web. 22 Oct. 2014. <<http://www.cancer.gov/cancertopics/factsheet/Risk/obesity>>.
- 3) ASCO. "Quick Stats on Obesity's Link to Cancer." *ASCO Daily News*. American Society of Clinical Oncology, 12 May 2014. Web. 23 Oct. 2014. <<http://am.asco.org/quick-stats-obesitys-link-cancer>>.
- 4) ASCO. "Managing Your Weight After a Cancer Diagnosis." *American Society of Clinical Oncology Position*. Conquer Cancer Foundation, 2014. Web. 23 Oct. 2014. <<http://www.asco.org/sites/www.asco.org/files/weightaftercancerdiagnosis-5.pdf>>.

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PUBLISHED BY
THE STUDENT ONCOLOGICAL ADVOCATES IN
PHARMACY AT UNIVERSITY OF GEORGIA
COLLEGE OF PHARMACY

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SPECIAL THANKS TO ALL THE WRITERS AND SOAP ADVISORS WHO HELPED MAKE THIS ISSUE AND WILL HELP MAKE ALL FUTURE ISSUES OF THE ONCOLOGY BULLETIN POSSIBLE.

ANY QUESTIONS, COMMENTS, TOPIC REQUESTS?
 Email Ben Albrecht at balb3@uga.edu

Stay tuned with upcoming meetings and events of SOAP by joining our Facebook page:

<https://www.facebook.com/#!/groups/249856015124116>

From the Editor

I am very happy that the Oncology Bulletin has continued since its first issue in December 2013. Oncology is a growing field for pharmacists to develop a significant role in patient care. I am proud to be able to help create a means, for those who are interested, to expand their knowledge of important practices, therapeutics, and policies effecting pharmaceutical oncology services.

-Ben Albrecht, Pharm.D. Candidate

Clinical Case Study Answer from Volume 1, Issue 1:

D: Both B & C

Some Upcoming SOAP Events:

- **Annual Tina Borg 5k at the Stegeman Coliseum**
- **Valentines Day Goody Bag Delivery to Patients at Winship**
- **SOAP Visit to Emory**
- **Monthly Meetings and Speaker Lectures**

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