Role of the Clinical Pharmacist in EP: Interview With Kristen Campbell, PharmD, CPP, BCPS

Interview by Jodie Elrod

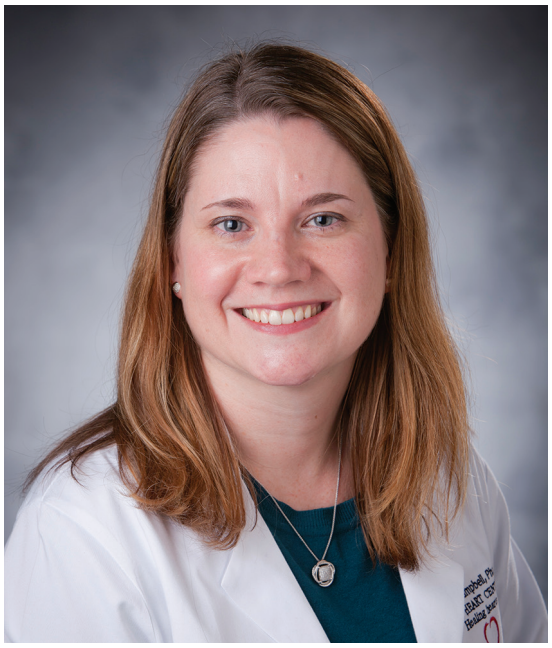
In this interview, we speak with Kristen Campbell, PharmD, CPP, BCPS, about her work as a clinical pharmacist. She also serves as Residency Program Director for the PGY2 Cardiology Pharmacy Residency at Duke University Hospital, and Senior Research Associate in the Duke Heart Center.

Can you share a little about your background and how you became a clinical pharmacist in EP? What interested you about this field?

I graduated from the University of North Carolina (UNC) Eshelman School of Pharmacy in 2002. I then completed a general PGY1 Pharmacy Practice Residency followed by a PGY2 Cardiology Pharmacy Residency at UNC Hospitals between 2002 and 2004. I initially worked in General Medicine and Cardiology at Duke, and joined the EP team in 2009. One of the attending physicians requested a PharmD because "besides oncology, electrophysiology uses some of the most dangerous drugs on the market." This proactive, interdisciplinary approach to patient care is why I love working at Duke!

I have always been interested in EP because I find antiarrhythmics to be fascinating medications requiring a lot of thought "outside the package insert." EP patients have multiple comorbid disease states and complex medication regimens. This requires a lot of consideration in designing optimal medication regimens.

What can you tell us about your role as Residency Program Director (RPD) for the PGY2 Cardiology Pharmacy Residency at Duke University Hospital?



Kristen Campbell, PharmD, CPP, BCPS

PharmD students who want to practice in a specialized field generally need to complete a residency after graduation. There are programs for inpatient, outpatient, and community practice. In the inpatient environment, PharmD graduates first complete a PGY1 Pharmacy Practice Residency, which is similar in concept to the intern year of medical residency.

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Residents rotate through multiple rotations and gain experience in many specialties. The PGY2 year is highly specialized; examples include cardiology, oncology, pediatrics, etc.

I began the PGY2 Cardiology Pharmacy Residency at Duke in 2009. The program is designed to develop the knowledge, practice patterns, and skills necessary to provide excellent care in cardiovascular pharmacy practice. As the RPD, I coordinate all the training for the resident. We are fortunate to have multiple specialties at Duke, including electrophysiology, heart failure, valvular disease, cardiothoracic surgery, and transplant. The resident rotates through these rotations over the 12-month residency. In addition, we provide longitudinal outpatient, research, and administrative experiences. We are accredited by the American Society of Health System Pharmacists, and all our graduates have gone on to take cardiovascular specialist positions. I find the job of RPD to be extremely rewarding; my favorite part is providing mentorship to early career clinicians.

What does a "typical day" look like for you as a clinical pharmacist for the EP Service at Duke?

We have both an inpatient service as well as a consult service at Duke. I round with the inpatient team every morning. I review medication therapies, recommend any needed changes or monitoring, and ensure patients are on optimized guideline-directed medical therapy (GDMT). I also provide education to the multidisciplinary team as well as patients and caregivers. I generally do not have time to round on the consult service, but I am available to the team for any questions they have.

I have an Antiarrhythmic Medication Monitoring Clinic one afternoon a week. In this clinic, I work as a "Clinical Pharmacist Practitioner" (CPP), which is a license certain PharmDs in North Carolina can obtain through a collaborative practice agreement. I monitor patients' antiarrhythmic and anticoagulation medications, as well as their antihypertensive and heart failure regimens. I have authority to prescribe medications and perform monitoring within my protocol. I love the continuity of care we are able to provide in that I see patients when they are initiated on antiarrhythmics during hospitalization and then I can follow them as outpatients.

Beyond my clinical duties, and in addition to my position as Residency Program Director for the PGY2 Cardiology Pharmacy Residency, I also participate in research within the EP division and work administratively on clinical protocols and pathways. Finally, I precept pharmacy students and PGY1 residents on rotation at various points during the academic year.

How have you seen the role of the clinical pharmacist evolve and expand?

In general, I think the role of the PharmD as part of the interdisciplinary team has grown tremendously in the past 10-20 years. I also believe the importance of all team members has become much more recognized. For instance, the importance of physical therapy and occupational therapy has become incredibly appreciated. With regards to pharmacy and complex medication regimens, I received the specialized education that can help guide the team to establish the most optimized regimen for our patients.

I have been fortunate to practice in North Carolina, which is a very progressive state for the field of pharmacy. Pharmacists have had a lot of autonomy for many years, and options such as the CPP license really allow us to practice at the highest level of our degree/training.

Describe some of the main challenges you face in your role.

Again, I am very fortunate in my position. The EP faculty at Duke is incredibly supportive and inclusive. I feel very lucky to have found my place with this group. However, pharmacists continue to struggle with gaining recognition as providers and being given the ability to bill for their services. Some progress has been made in recent years, but we still have a long way to go. I think general challenges we are all facing in healthcare include burnout and difficulty with work-life balance.

Discuss the role of the pharmacist as an integral member of a multidisciplinary team-based approach to care, such as in an atrial fibrillation (AF) clinic. How does this improve patient care and outcomes?

I think I can provide unique insight to designing optimal medication regimens for patients. Patient counseling and education are a big part of the PharmD curriculum, so pharmacists also have the skillset to emphasize the importance of compliance with lifesaving medications. Pharmacist-led clinics have demonstrated better compliance with performing the necessary monitoring for antiarrhythmics. Additionally, they have demonstrated higher success rates in titrating medications to target doses in heart failure and achieving better blood pressure control in hypertension management. Finally, I believe our patients appreciate the continuity of care in seeing someone that they also saw during their hospitalization.

How do you approach medication optimization in patients with AF?

First, I generally address anticoagulation — ensure patients are on it, that it is dosed appropriately, and consider changing (ie, warfarin to a direct oral anticoagulant) if possible. I then make sure rate control is optimized, especially if the patient also has heart failure. If they are on rhythm control, I ensure that the dose is appropriate and the required monitoring is being performed. If the patient is still symptomatic, I make suggestions about alternate therapies they are qualified for. I also look at other disease states and optimize management if needed, since we know that better control of comorbidities such as heart failure and hypertension play a huge role in the treatment of AF. Finally, I like to spend time talking with each patient to ensure they understand the importance of each medication and that there aren't any unidentified barriers to their compliance.

In what ways has the COVID-19 pandemic impacted your role?

Overall, I am fortunate to say that the COVID-19 pandemic did not impact my role very much. I have friends at other hospitals who were put on furlough, or even laid off, but Duke did a wonderful job of allowing flexible work options and redeployment if needed. During the initial months of the pandemic, Duke decreased elective procedures (as many hospitals did) so our rounding service was slower, but I continued to care for those who were admitted. I converted my clinic to telehealth for several months, and continued with my research and administrative responsibilities. When the vaccine became available, I renewed my immunization certification and helped with that effort, which I found very rewarding.

Tell us about your research work at the Duke Heart Center.

I am lucky to work on all different types of research. I frequently work with the EP fellows in areas such as His bundle pacing and ablation outcomes. I also maintain a database of all our antiarrhythmic use and have researched appropriate use of medications, with a focus on dofetilide and sotalol in particular. I really enjoy all aspects of research and hope to see my involvement continue to increase.

What do you love about your job?

Without a doubt it is the people — both my colleagues and patients. I absolutely love working in an environment where everyone's thoughts are appreciated. Plus, I learn something new every day, and that definitely keeps me excited about going to work. ■

Disclosures: Kristen Campbell, PharmD, CPP, BCPS has no conflicts of interest to report regarding the content herein.