

with a major advantage in having expertise in clinical care and pharmacy practice. This makes us invaluable members of any industry team. There are other types of fellowships that focus on applied clinical research like formulary management or antimicrobial stewardship in hospitals, but those are a different type of track and usually include requirements of residency and are not discussed in this eReport. The path to a fellowship is certainly not standard for student pharmacists, and you cannot get there without planning and setting yourself apart to get one of these highly competitive positions.

As a fellow, I work within both a managed care organization (Humana) and a pharmaceutical company (Pfizer) with a focus in health economics and outcomes research. My position is housed at the University of Kentucky College of Pharmacy where I also get to pursue my PhD while doing my fellowship work. To obtain this fellowship, I completed my PharmD at the University of Arkansas for Medical Sciences where I also pursued a concurrent master's degree in health outcomes research. I started my master's degree after my first year in pharmacy school. By the time I had graduated, I had three peer-reviewed manuscripts and four or five conference presentations under my belt. I interviewed for industry fellowships starting in January of my final year of pharmacy school year for positions that were mostly 2-year programs. I chose the Humana-Pfizer Fellowship because it focused on the completion of a PhD program, in addition to the fellowship, over a total of 3 years. I have also been fortunate to network onsite and virtually at each company with over 50 people in the same or similar fields.

The focus of my work is to contribute to joint projects with Humana and Pfizer. These projects ultimately evaluate *value* for each company to answer questions such as "What is the value of Pfizer's medications, and how can both companies work together to provide services that improve the overall health of the Humana members?" The opportunities from these companies' innovative and high-impact studies are a great benefit to any fellow working within this type of environment. One main focus is on current disease states where new and expensive medications are of interest to both companies (e.g., rheumatoid arthritis, oncology, and diabetes) to manage budgets and improve patients' lives. Many studies utilize a type of data known as *administrative claims data*, but there are also ongoing projects using survey methodology as well as prospective, pragmatic clinical trials, which are truly on the cutting edge of innovation.

The process of this work follows a similar pattern to standard all research in any setting: defining study objectives/hypotheses thorough literature review, drafting of a study protocol, data analysis and interpretation, and manuscript writing. Again, the importance of reading and writing can never be overstated as these are the only consistent basic skills you will need. Within the fellowship, a team of individuals including oversight from both companies conducts the research. Thus, instead of working in a research silo, research is thrust into collaboration by a range of coworkers including those with doctorate degrees, pharmacists, and physicians. In this setting, your work will often receive criticism that otherwise would not occur in settings where you are not collaborating with other colleagues. The focus is then on *client management* as you tailor research projects to answer a specific question for either an internal or external client who has a distinct objective for doing research with you (e.g., to help market a new medication).

How to Follow This Career Path

First, realize that the pharmaceutical industry is a business and operates like any other company. Therefore, understanding the basics of business, economics, and eschewing the "industry is evil" mantra is needed. This also implies understanding the healthcare system—including rules and regulations about marketing, insurance benefits, and structure—and keeping up with current healthcare news and trends. My personal favorite resource is HealthCareDrive.com, and I like to follow groups, such as the *American Journal of Managed Care*, on Facebook. These succinct updates will keep you informed on the important trends throughout

the industry. Next, make sure you have something unique in your pharmacy school experience that shows you have a particular interest or expertise. Pharmaceutical and managed care companies use the word *value* frequently when referring to products and services. What value can you add to their team beyond the typical? A summer research experience, introductory pharmacy practice experience, advanced pharmacy practice experience, past entrepreneurial experience, or a nontraditional degree can make you stand out from other applicants.

Much of the work in industry—no matter the focus—boils down to an ability to communicate effectively with words (verbal and written) and numbers (statistics). So, try to focus on experiences that prove you can make the cut, such as research presentations at local, state, or national conferences (tip: get someone to pay for your travel!), peer-reviewed manuscripts, or distinguished leadership positions. Many of your pharmacy faculty are probably engaged in some type of research and would welcome your help. There also may be summer research programs at your college or a summer internship at a managed care or pharmaceutical company. If none of the above is available, break out and pursue your own ideas by developing a work-study objective and find faculty to support and guide you. Also, check into dual degree opportunities that may be available with the PharmD curriculum. Many universities have concurrent master's degrees that, with a bit of extra work, can pay off huge in the long run.

Finally, attend conferences to network with those trying to fill these fellowship positions. Below are other ways for you to shine as a communicator:

- Prepare and master your “elevator speech” and have detailed examples showing how you have prepared for the fellowship.
- Prepare an answer to the question “Why do you want this fellowship?”
- Attend professional meetings (e.g., Academy of Managed Care Pharmacy, ASHP Midyear Clinical Meeting, and International Society for Pharmacoeconomics and Outcomes Research). Professional meetings are your best bets for networking and information. Remember, when all else is equal on paper, your personal connections will make the biggest difference.

One of the most important qualities pursuing this type of industry-focused research is the ability to be a self-starter and self-manager. Although this may seem cliché, it is very important because companies, especially managed care organizations like Humana and UnitedHealthcare, support remote workers (work-from-home positions). For example, my team at Humana has over 100 employees, but only seven employees report to the Louisville offices while the rest are spread out around the country from Phoenix to Boston. As mentioned above, communication is crucial because a project is managed entirely over e-mail and phone calls with individuals that you may never see face-to-face. Managing multiple projects and deadlines can be a day-to-day staple or the bane of your existence depending on how you handle your own schedule and the tasks and dynamic of your team. There is also something to be said about doing cutting-edge healthcare research sitting at home in your sweatpants.

When looking for fellowship opportunities, try to focus on areas that interest you but also look at opportunities to broaden your experiences. If you have already done prior work in health outcomes research during pharmacy school, find a slightly different focus. You will be exposed to new ideas and ways of thinking and broaden your overall network in the same way. As mentioned earlier, jump at every opportunity to present your research, travel to conferences, and take a leading role in projects. These are the best ways to get your name out there and to solidify your role with your coworkers and managers as a leader, even though you are still in training. Take advantage of your connections to set up one-on-one meetings with people throughout the organization to discuss personal and professional aspects of career choices.