

MEDICAL COLLEGE OF WISCONSIN SCHOOL OF PHARMACY STUDENT WRITING CLUB:

Business Member Spotlight: Antimicrobial Stewardship within the Community Division of Froedtert & The Medical College of Wisconsin

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Kelsey Powell, PharmD, a clinical pharmacist specializing in infectious diseases within the Community Division of Froedtert Hospital, brings her expertise in antimicrobial stewardship to two community hospitals. Throughout pharmacy school at the University of Wisconsin-Madison, Dr. Powell was an active member of the Wisconsin Society of Pharmacy Students, an organization created to advance the profession of pharmacy and promote political activism, educate students, as well as provide leadership opportunities. She currently is using the knowledge she developed at University of Wisconsin-Madison to help promote antimicrobial stewardship at Froedtert Menomonee Falls Hospital (FMFH). FMFH is a 207-bed acute care facility located in Menomonee Falls, and Froedtert West Bend Hospital (FWBH), a 90-bed acute care facility located in West Bend, WI. She completed both her PGY1 in Pharmacy Practice and PGY2 in Infectious Disease at Froedtert and the Medical College of Wisconsin-Froedtert Hospital. Currently, as a member of

Froedtert's Antimicrobial Stewardship Team, she can recommend and ensure the best anti-infective therapy is selected for the patients in need. Dr. Powell describes her day-to-day life as having "the best of both worlds," where she can spend time at both community hospitals as well as a large academic medical center.

Each day, the essential tasks of a clinical pharmacist on the Antimicrobial Stewardship Team are extremely variable, starting with prioritizing patients, and utilizing clinical decision support tools within the electronic medical record. Clinical decision support tools such as the acuity clipboard help clinicians to prioritize the workload by a scoring system. Dr. Powell reviews the medical records of hospitalized patients receiving anti-infectives to ensure they are optimal for the patient. In doing so, she ensures the antibiotic is appropriate for the infection, ensures the antibiotic is dosed correctly for patient- and infection-specific needs, assists in determining the best duration of antibiotic use, and provides continual monitoring to identify response to treatment and adverse effects. She also determines whether an antibiotic is

necessary for treatment.

The work environment in the community hospitals is described as friendly and inviting, which allows the chance to form relationships with each member of the interdisciplinary team. The antimicrobial stewardship team consists of an infectious disease (ID) physician and an ID pharmacist. The antimicrobial stewardship team serves as a resource to providers on choice of therapy, dose interchanges and much more, as well as for the pharmacy team.

Dr. Powell, precepts PGY1 and PGY2 ID resident's elective community rotations. On the ID rotation, learners have the opportunity to conduct quality improvement projects and grow communication skills to form meaningful relationships with the team and provide high-quality patient-centered care. Students and residents further develop their clinical abilities as a clinical pharmacist and become more confident with making decisions that are not black and white.

Raising the Bar

As reported by the World Health Organization, antibiotic resistance is one of the top threats to human health worldwide as bacterial resistance is quickly developing to all antibiotics.¹ Antimicrobial stewardship seeks to optimize antibiotic use to help preserve antibiotics for future use by minimizing the development of resistance; stewardship also seeks to ensure optimal treatment of infections for patients while minimizing potential adverse effects from the antimicrobials used to treat those infections.

Hospital systems were encouraged to prioritize antimicrobial stewardship after

Below: Froedtert Menomonee Falls Hospital





Below: Froedtert West Bend Hospital

the Centers of Medicaid and Medicare Services (CMS), through The Joint Commission (TJC), added updated standards for hospitals, critical access hospitals, and nursing care centers in January of 2017.² These updates further increased the need for antimicrobial stewardship initiatives across the country. This practice site is unique because it takes established guidelines from an academic medical center and brings them to the community hospital. This eased the transition for Dr. Powell, as she was able to help form relationships with providers while encouraging the use of updated guidelines. To succeed in this field, Dr. Powell relied on her communication skills with the ability to interact within an interdisciplinary team, focusing on providing the best patient-centered care. The antimicrobial stewardship team is composed of highly trained individuals with years of experience in the field or the completion of advanced residency programs. Normally, this highly skilled team provides inpatient services for official consults. The first large success for the team happened when providers began reaching out for suggestions beyond the normal inpatient focused model. The smaller, more personal environment of the community hospital allowed Dr. Powell to build and maintain interdisciplinary relationships with nurses, pharmacists, physicians, and other healthcare providers.

Bumps in the Road

Preparation has been key when implementing a new practice within an already established workflow. Most of the challenges that come with implementing a new practice model is communicating the information regarding new and changing clinician habits to those on the

team. Administering a new plan can be daunting and may be challenging due to setbacks. To counteract this, establishing strong relationships within the ID team is crucial. The relationships Dr. Powell has created has allowed her to utilize guidelines and literature to help implement services to provide the best quality of life for patients. Being an expert in antimicrobial stewardship has carved a path for her to become the main resource in this area. Dr. Powell and the rest of the antimicrobial stewardship team focuses on making themselves available as a resource to those in need.

Moving Forward

Dr. Powell believes in the near future, clinical pharmacists specializing in ID will expand their role into the ambulatory care and outpatient settings, including nursing homes, rehab facilities, and clinics. One challenge of expanding this service in the outpatient setting would be the limited amount of time available to correctly assess, prioritize, and aid patients requiring additional support. Patients who are residing in nursing homes, rehab facilities, and clinics may require more complex antibiotic regimens, indicating the demand for an antimicrobial stewardship team.

As the field of pharmacy continues to expand, it is important to develop future pharmacists capable to take on new roles. Dr. Powell's advice to students who want to practice in this field is to complete a diverse variety of rotations while you have the opportunity. This gives pre-professionals the chance to cultivate their passion and skill set for this field.

For other pharmacists who want to implement similar plans, her advice is simple; build relationships early, as well as reach out to your team members as soon

as possible to collaborate on a clear and concise plan. When considering practice initiatives, building relationships with people who will impact the process is critical. It is necessary to be received from the team in order to have alignment with the organization's mission. For example, Froedtert's mission focuses on innovative community-academic partnerships, excellence in care and service, along with progressive medical research and education. The pharmacy team assures that patient care is optimized through compliance with quality improvement strategies and TJC standards. The antimicrobial stewardship team at Froedtert Hospital has been at the forefront of community-academic partnership progression within Wisconsin, empowering and educating their healthcare teams with the knowledge and tools to provide the best patient-centered care.

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