# **ACCP MODEL PRACTICE**

# **Clinical Pharmacy Education**

American College of Clinical Pharmacy

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## **Background and Introduction**

Ohio State University has a comprehensive health sciences campus, which includes academic programs in various disciplines and a medical center that provides care to patients with various illnesses. The vision of the Pharmacy Practice and Administration Division (PPAD) is "to be among the top pharmacy practice and administration academic programs in the U.S. by providing leadership in the profession of pharmacy in the areas of teaching, research, scholarship, practice and service."

This vision is realized by the teamwork of 25 faculty members in three academic tracks: tenure track, with a major focus on teaching and research; regular clinical track, with a major focus on teaching and practice; and auxiliary track, with a major focus on teaching, practice, or administrative work.

Monitoring of the external environment (e.g., health care systems, pharmacy practice, national associations' initiatives, accreditation standards) and faculty-driven processes for governance are two key elements that have guided the focused, strategic discussions about the emerging needs in health care and the contemporary issues facing pharmacy educators, such as the need to identify and address high-priority action items.

# **Description of Best Practice**

Developing the ambulatory care pharmacy practice was identified as a high-priority action item. One of the clinical-track faculty members led this initiative, with support from the PPAD, to develop partnerships with surrounding medical centers and a community health system. Since the initiative, 13 faculty members have developed and implemented practice in various areas of ambulatory care. Our academic-practice partnerships include the following (numbered 1 through 9).

#### Ohio State University (OSU) Medical Center

- (1) The OSU Medical Center is the primary site of our clinical practice, teaching, and research programs. The ambulatory pharmacy services implemented by PPAD faculty complement the inpatient services offered by OSU Medical Center practitioners, providing continuation of care. Six faculty members practice in the areas of ambulatory cardiology, family medicine, internal medicine, and neurology.
- (2) The PPAD Division Chair serves as Associate Director of Education within the Medical Center Department of Pharmacy, and the Senior Director of the Pharmacy Department is appointed Assistant Dean for Medical Center affairs at the College of Pharmacy. Several members have cross-appointments on different committees of the two organizations to facilitate the partnership.
- (3) The Columbus Neighborhood Health Systems program provides funding for two PPAD faculty members to offer primary care pharmacy services to the indigent and homeless populations of Columbus. This program also offers a teaching site for one pharmacy resident, who is supported by the College of Pharmacy, and many Pharm.D. students.
- (4) The Kroger Company provides partial funding for one PPAD faculty member who has led the development of the Kroger Patient Care Center (KPCC), which is a clinic located within a Kroger pharmacy that is focused on patient care. Disease management, medication therapy management, and wellness programs have been developed by the KPCC and implemented in multiple Kroger pharmacy locations, both locally and regionally. One pharmacy resident is supported by the College of Pharmacy, and many students receive education and training in KPCC pharmacies.

- (5) The University Health Connection (UHC) is an interprofessional, ambulatory practice site that includes a PPAD faculty member and a pharmacy resident as well as UHC physicians, pharmacists, nurses, and students. The program provides primary care, urgent care, bridge care, disease and medication therapy management, and wellness services to OSU faculty and staff. This program is funded by OSU Managed Health Care Systems, Inc., and the Office of Human Resources.
- (6) Clinical Partners is an ambulatory pharmacy practice with three PPAD faculty members and a pharmacy resident. This pharmacy practice offers anticoagulation, disease, and medication therapy management, including specialty drugs, together with wellness. One pharmacy resident and many students receive experiential training at the site. This College of Pharmacy–operated program is funded in part by reimbursements received for clinical pharmacy services.
- (7) The LifeCare Alliance/Cardinal Pharmacist Visitation program includes one PPAD faculty member, who provides medication therapy management services in the homes of the elderly. This faculty member is funded by Cardinal, Inc., and serves as a preceptor for Pharm.D. students.
- (8) Other outreach programs in medication therapy management are offered in assisted living centers, retirement facilities, and churches. We have provided education about Medicare Part D to physicians' offices and the elderly and have assisted them in selecting prescription drug plans. We offer education about medication use to the staff of Agriculture Extension, located throughout 88 counties of Ohio. Appropriate and inappropriate use of drugs is discussed in K-12 schools, and Pharm.D. students also participate in these programs.

(9) Two practice sites developed by our faculty—the Clinical Partners program and UHC—received the Best Practices Award from the American Society of Health System Pharmacists (ASHP) in 2004 and 2005, respectively. These programs were recognized for innovating and documenting improved health outcomes among patients. The Lifecare Alliance/Cardinal Pharmacist Visitation program was featured as a practice spotlight by the ASHP.

#### **Outcomes Assessment/Impact**

Outcomes assessment includes sustaining funding for faculty salary or services, improving health outcomes, and increasing the number of students and residents trained. Salaries are funded for five faculty members. The remaining faculty members either bill for services or develop an agreement for financial reimbursement with the practice sites.

The ambulatory care practice sites have attracted 45 pharmacy residents from across the country. Almost half of the graduates have taken academic positions, and others are contributing through practice positions. These sites have been popular among Pharm.D. students for clerkship rotations. Ambulatory care faculty members meet every week to share their experiences with regard to improving patient care programs.

# **Applicability and Sustainability**

The program is sustainable because of the need for improved patient care in all communities and the university's ability to make use of those collaborative opportunities. A variety of resources can be sought from various practice sites by demonstrating the cost-effectiveness of the programs offered by the faculty and/or improving the health outcomes of patients. Recently, Medicare Part D also offered to pay the faculty for services.

## **Potential Problems and Possible Solutions**

The three main problems we have encountered have been the need to achieve balance among practice, teaching, scholarship, and services responsibilities of the faculty; the need to negotiate agreements with practice sites about salary recovery or billing for services; and the isolation of the faculty member at each site. The possible solutions have been to choose the right faculty track (tenure, clinical, or auxiliary) for each faculty member and to review and define clearly the distribution of the percentage of effort put forth each year. In the future, the need for a business model may emerge as more opportunities arise for reimbursement for patient care services. Collaboration in practice, research, and administration of the residency program has partially addressed the isolation felt by some faculty members at the sites.

The faculty members also are provided with support (e.g., statistical support for scholarship) for various activities from the PPAD. Each practice site has unique features, which has required a unique agreement between the site and the College of Pharmacy.

The agreement is developed by the PPAD chair, the faculty member, the College of Pharmacy fiscal officer, and the site, and it is reviewed by attorneys at each organization.

# **Future Perspectives**

There is a growing need for expansion of pharmacy services in many ambulatory care settings, especially in community pharmacies. One of our faculty members has developed a "Partner for Promotion" program that pairs a clerkship student with a community pharmacy preceptor and provides mentoring from the PPAD faculty to develop and implement a patient-focused service in the community pharmacy. We

envision an expansion of our residency program and partnerships with additional ambulatory care sites, including community pharmacies.

# **Conclusions**

Our ambulatory care pharmacy practices have been successful at improving patient care, teaching Pharm.D. students and residents, conducting research and scholarship, and providing community services. The programs have also helped develop academic careers for our faculty and prepared pharmacy residents for clinical faculty positions.