Development of a Nontraditional PharmD Program Offered Jointly Between a Private and Public University

William N. Kellya, George E. Franciscob, Paul J. Brooksb and Jonathan G. Marquessa

aSouthern School of Pharmacy, Mercer University, 3001 Mercer University Drive, Atlanta GA 30341-4155; bCollege of Pharmacy, University of Georgia, Athens GA 30602-2351

In 1995, the faculties at the Southern School of Pharmacy at Mercer University, and the College of Pharmacy at the University of Georgia, began developing a joint nontraditional PharmD program. Neither faculty knew if this was even possible because of the major differences (private versus public, high tuition versus modest tuition) between the two schools. However, the project made sense from financial, political, and practical viewpoints. After much work and little compromise, licensed pharmacists in Georgia have an outcome-based, unique, flexible, and efficient nontraditional program. In 1998, each University approved the program and a pilot class of sixteen students began in October of that year. A second class of 15 students started, August 1999.

INTRODUCTION

In early 1995, the Southern School of Pharmacy at Mercer University (Mercer) started exploring the development of a nontraditional PharmD program. A task force looked at the feasibility for such a program. It was immediately clear the program would have a short life span (estimated at 10-15 years) yet require significant resources and work. At the same time, the demand for such a program was unknown.

At this point, it seemed prudent to try to develop a joint program with the University of Georgia (UGA), the other college of pharmacy in the state. The partnership made sense because a joint program would significantly lessen expense, and both programs brought unique strengths to the table. Mercer brought its 18 years of experience in providing a sole, entry-level PharmD program. UGA brought its technology and its recent expertise in developing a new, outcome-based curriculum. A joint program might also look attractive to external funding sources, and using joint faculties, would increase the likelihood of producing a unique and superb curriculum. Last, Georgia pharmacists would feel good about both colleges working together.

EARLY STEPS

Will a joint program work? UGA also saw the benefits of having a joint program. A few interested faculty from each college of pharmacy formed, on a voluntary basis, a working group, which was supported by each college. Many challenges immediately emerged. Mercer is a small-moderate size, comprehensive, private university. The tuition for pharmacy school is steep. UGA is a major, Division I, land grant university. The tuition for pharmacy school is modest. Which university would confer the degree? Is a third entity (new consortium) needed? Who would keep the records? How should tuition be set? How should tuition be shared? Although these were challenging questions, the working group never let them interfere with the dream of a joint program. The deans of each school were encouraging and there was good communication between themselves and the working group.

Is there a need? An early action of the working group was to determine the demand for such a program in Georgia. One member of the working group had recently performed a marketing survey on the need for a nontraditional PharmD program in Pennsylvania(1). He volunteered to do a similar study for Georgia. The project was underwritten by Mercer University. The instrument used in Pennsylvania was improved and mailed to a random sample of 595 pharmacists, licensed and practicing in Georgia. Respondents remained anonymous. This sample used the following facts and assumptions: (i) 8,421 pharmacists licensed in Georgia; (ii) 7,427 (88.2 percent) pharmacists actively practicing in the state; (iii) an expected response rate of 60 percent; and (iv) an error rate of ± 5 percent.

After one mail follow-up, 313 pharmacists had completed the survey (52 percent). Of these surveys, 52 met exclusions, resulting in an actual response rate of 44 percent and a usable response pool of 261 (3.5 percent of pharmacists actively practicing in Georgia). Of those pharmacists responding, 12 percent would definitely enroll, and 32 percent would probably enroll. These results are similar to the surveys completed in Pennsylvania and North Carolina(1-2). Extrapolation to the population meant that roughly 891 pharmacists in Georgia may definitely be interested, and 2,377 may be interested in earning the nontraditional degree if offered.

These numbers were daunting; however someone saying they would complete a program versus doing it is not be the same. Of those responding that they would probably enroll in such a program, 25 percent would enroll within one year, and 51 percent would enroll within three years. The working group decided there was a sizable demand for such a program.

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The next step of the working group was to pass this information to each dean. A preproposal included the purpose of the program, the results of the marketing survey, and a series of concerns and questions. After some time, each university gave approval to continue to develop a joint detailed proposal. With these approvals came a decision to grant the degree from either school, and the academic records would stay at the school granting the degree. At this point, the group agreed to defer decisions about tuition and tuition sharing.

EARLY PRINCIPLES
The working group reached early consensus on the following points:

• The traditional and nontraditional programs would have the same competency outcomes and rigor.
• The delivery of the nontraditional doctor of pharmacy program would be much different and would use new methods.
• There would be respect for the adult learner.
• The program would be as flexible as possible.
• Program participants would get to choose the degree from either University.
• The tuition for the program would be as low as possible but would cover costs.
• The program would initially be offered to pharmacists licensed for 5 years and practicing in Georgia.
• Most advanced practice experiences would be at the candidate’s practice site if possible.

There were several reasons for the two latter principles. First, we wanted to make sure the candidate could see pharmaceutical care working in his or her own practice site. This need would help advance practice in each of the candidate’s site, and in time, would help improve pharmacy practice. A condition would be that the site had to have enough of the patients for each disease state module. In addition, the requirement that pharmacists had to be in practice for five years helped assure that we had seasoned professionals entering the program. Moreover, the program was fulfilling a commitment to those pharmacists who had had less opportunity or no opportunity to receive the PharmD degree while enrolled in their BS pharmacy curriculum.

EQUALITY WITH THE TRADITIONAL ON CAMPUS PROGRAM
The working group quickly decided to make the curriculum outcome-based. Both schools had recently completed a revision of the expected outcome competencies and learning objectives for their traditional, full-time programs. These competencies and learning objectives were combined and meticulously compared to each other. It was determined that 95 percent of the competencies and associated learning objectives were essentially the same between both programs. Where there were differences, new competencies were added to the total list.

Next, ten pharmacists (five community and five hospital) assessed themselves against the outcome competencies. The results were revealing. First, all pharmacists completing a self-assessment felt that they could meet the competencies in dispensing, law and ethics, and lifelong learning. The hospital pharmacists felt they had competency in pharmacokinetics and health care organization. The community pharmacists felt they had competency in OTC’s and substance abuse. Both groups felt they were partially competent in pathophysiology, pharmacology, therapeutics, communication, and drug information. All wanted more knowledge in disease state management, patient assessment and monitoring, pharmacoeconomics, and pharmacoepidemiology and biostatistics. It became clear at this point that every pharmacist entering the program would bring a different competency level.

Based on the self-assessment of pharmacists, ACPE guidelines and curricular requirements of the two pharmacy programs, a committee of faculty and preceptors assigned the master list objectives into three broad sections, making then relevant for the nontraditional PharmD program. The three sections were: (i) objectives that should not be specifically addressed in the NT PharmD curriculum (e.g., dispensing and legal considerations); (ii) objectives that should be mastered prior to beginning the program (e.g., drug information, communications); and (iii) objectives that should represent major portions of the curriculum (e.g., pharmacokinetics, pharmacotherapy and disease management).

CURRICULUM DEVELOPMENT
The task in developing the curriculum was to build courses that would fulfill the outcome competencies, yet do it in a way that respected the adult learner. The working group spent much time finding out the problems adult learners face and how adult learners learn. The strengths and weaknesses identified by the small number of community and hospital pharmacists who assessed themselves against the outcome competencies were also taken into consideration.

Based on the delineation of objectives, the relevant learning was subsequently divided into three parts: pre-curriculum education, foundational courses, and disease state management. The pre-curriculum education was required to make sure candidates entered the program with a set of fundamental knowledge and skills in the area of drug information, basic laboratory tests, communication skills, and general principles in pharmaceutical care. Applicants demonstrate mastery in these areas by completing four continuing education workshop courses (each 1-2 days in length), offered jointly by UGA and Mercer. These workshops are open to all pharmacists, but are specifically designed for the potential applicant as a way to get back into the academic environment and to help bolster the candidate’s confidence and commitment to beginning the program. In other words, the courses are designed to give the candidates some idea of the nature and rigor of the curriculum. Although there is no grade associated with these programs, students had to complete patient care assignments and pre- and post-tests. Alternatively, completing equally stringent programs within the last three years, such as the ASHP Clinical Skills Pharmacotherapy and Drug Information Series can satisfy certain requirements of the pre-curriculum education.

Candidates who successfully complete the pre-curriculum education and a preliminary portfolio of past experience, current practice skills and philosophy of practice are considered acceptable candidates and will eventually be admitted into the program. Applicants are weighted based on several factors such as alumni and preceptor status, and mix of practice environments. Candidates who have met the admission requirements, but who are not accepted because of maximum class size, are assured admittance into a subsequent class. Once a student has been accepted into the program, he or she is given further formal instruction on developing an optional portfolio for possible academic credit in the program based on prior experience and education.
The core curriculum consists of two parts, Foundation Courses and Disease Management Courses. The Foundation Courses represent broad areas of study that serve to prepare the student for the Disease Management Courses. The Disease Management Courses focus on the pharmacy management of various disease states and integrate didactic, application, and experiential learning.

The four foundation courses represent broad areas of study. They include Issues in Pharmacy Care (an orientation course), Physical Assessment, Pharmacokinetics and Therapeutic Drug Monitoring, and Interpreting Pharmaceutical and Patient Care Data (a research design, biostatistics course).

The disease management courses represent a series of disease state categories sequenced into self-study, guided, and experience exercises. The self-directed didactics are facilitated using web-based management software that integrates instruction in pathophysiology, pharmacology, pharmacotherapeutics, pharmacokinetics, and physical assessment. Case study and written examinations are used to test content and application of knowledge. Problem-based learning application workshops are used to assess problem-solving skills and integration of clinical, biological and psychosocial aspects of patient care.

In addition, there is an experiential (clerkship) portion for each disease management course. The experiential portion is designed in a manner that does not require completion under direct supervision. During each disease state module, students are required to develop and carry out pharmaceutical care plans and provide patient education and counseling for a minimum number of patients with various conditions. Students are required to find their own patients at own practice site; however, since pharmaceutical care must be provided to patients with varying conditions, the student may need to follow patients in other practice sites such as in the practice site of a preceptor or fellow student. Students complete and communicate these plans to other health care professionals, monitor and document the response of patients using these plans. They also modify, assess and document health outcomes resulting from their plans. Each of these clerkships is to be completed in a time frame that assures satisfactory progression in the program.

In addition to clerkships that are associated with disease management modules, extra general medicine clerkship experiences are required. Requirements for these experiences are based on an analysis of prior experience and/or limitations with the student’s practice site for following the appropriate number and types of patients required of the curriculum. All students are required to complete at least four weeks off-site. For these rotations, students must be present at the clerkship site for a sufficient amount of time (e.g., one month rotation or two, two-week rotations) to provide continuing care and interact with the preceptor and other health care practitioners as required.

PROGRAM DEVELOPMENT

To be as flexible as possible, a variety of synchronous and asynchronous delivery methods are used in the program: lectures, regional vide conferencing, course work at professional meetings, print materials, videotapes, computer-assisted learning, and web-based management software. Decision on a delivery mechanism is based on the specific course characteristics and student needs. For instance, courses with hands-on skills like physical assessment use web-based instruction, print materials and hands-on workshops. Because the program relies heavily on computer-assisted instruction, students are required to have developed basic computer skills prior to beginning the program. In fact, potential students must download program information and application materials, since these materials are not regularly mailed to potential applicants. Sites have been set up at: www.rx.uga.edu or www.mercer.edu/pharmacy. Other information on the program is also available(3). Computer skills are reinforced and enhanced during the orientation workshop, and students are introduced to web-based course management software at that time.

GETTING STARTED

In all, the total curriculum is 54 semester hours and tuition costs are $13,500 ($250/semester hour). The cost may be less if the student can prove competence in required areas. It will take a student three years to complete the program taking courses part-time. All program requirements must be completed in five years. Orientation for the pilot class began in October 1998. Students in the pilot class helped in providing enough feedback to adjust the program as needed. They also took part in educational research projects that studied alternative ways to deliver instruction. It is hoped that this information on developing a joint external PharmD program between a private and public school will be helpful to others.

SUMMARY

The Mercer University School of Pharmacy and the University of Georgia College of Pharmacy have developed a joint nontraditional PharmD program. This is thought to be the first joint PharmD program venture between a private and public school. Shared resources and faculty were used to develop, and are now used to deliver the program. The program uses the same outcome competencies as the on-campus, traditional PharmD program. It also uses portfolio assessment of competencies, and a variety of methods including the Internet, to deliver didactic learning. Most experiential training is accomplished at the candidate’s own practice site.


References