

# Development of a Community Pharmacy Management Elective Rotation

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In response to the need to develop opportunities to further students' understanding of pharmacy management in an applied manner, Midwestern University-Chicago College of Pharmacy, in partnership with four local pharmacy chains, developed a community pharmacy management rotation. This five-week elective rotation allows students to work directly with district managers and pharmacy managers to focus on how management principles and practices are applied at the corporate and pharmacy level. A checklist developed by faculty and preceptors is used to guide students through topics which should be covered during the rotation. Students are also required to perform one major project and a series of smaller projects during the rotation. From February 1995 to May 1996, 14 students participated in this rotation. Evaluation of the educational experience, preceptors and sites by the students up to this point has been very positive. Preceptors have also been pleased with the opportunity to share their knowledge and experience as well as the abilities and attitudes of the students. This experience could be used by other schools of pharmacy to develop rotations which focus on applied pharmacy practice management.

## BACKGROUND

Many pharmacy students pursue careers in community pharmacy practice settings. Community pharmacy managers often find that while new practitioners are well prepared clinically to care for patients in their pharmacies, they are less well prepared to manage a pharmacy. Given these factors and a desire by students for more "hands on" experience in pharmacy management, Midwestern University - Chicago College of Pharmacy (MWU-CCP) has developed an elective experiential rotation during the third professional year which allows students to focus on the managerial aspects of chain community pharmacy.

Community pharmacists are generally asked to play a role in the management of pharmacy operations (1). Many pharmacists associate management with supervising employees or insuring that inventory is controlled appropriately. However, in today's ever-changing health care environment, community pharmacists at all levels of management need to develop plans to implement new products and services (*i.e.*, the provision of pharmaceutical care services), acquire and organize necessary resources, appropriately direct operations, and establish controls within pharmacies to see that plans are being carried out and business goals and

objectives are being met.

Community pharmacy practitioners need to integrate clinical as well as management skills. While pharmacy education has increasingly emphasized clinical education, surveys of pharmacy school alumni, preceptors, and managers often find that training in pharmacy management is insufficient for their needs(2-8). While AACP has established guidelines for courses in pharmacy administration and management (9), not all schools follow these guidelines and not all students are required to take these courses. This lack of pharmacy management education is especially evident in experiential education (10). While some schools ask preceptors to expose students to management activities during their community pharmacy externship, and at least one school has formally incorporated management activities into a community pharmacy clerkship (11), the extent of pharmacy management education for many students is only their didactic management courses that they may or may not have been required to take.

The faculty, preceptors and students at MWU-CCP share a desire to create opportunities for students to apply the knowledge and skills they have acquired in pharmacy administration courses. The Director of Experiential Edu

cation, working with pharmacy administration faculty and local chain pharmacy district managers, developed a five-week elective rotation in which pharmacy students interested in pursuing careers in management work directly with district managers and pharmacy managers to gain a better understanding of applications of management in community pharmacy practice. This paper describes the development of this rotation, a process used to select students to participate in the rotation, and a preliminary evaluation of the rotation based on student and preceptor comments from 1995 and 1996.

#### PHARMACY ADMINISTRATION AND EXPERIENTIAL EDUCATION AT MWU-CCP

The MWU-CCP curriculum offers a variety of required and elective courses in pharmacy administration before students begin their experiential education. During the first professional year students are required to take Health Care Systems, a three credit (quarter-hour) course which describes the structure and composition of the American health care system, emphasizing the role of pharmacy within the system. Second professional year students are required to take Pharmacy Practice Management (PPM) I and II (three credits each). PPM I introduces students to the role of management in pharmacy practice and exposes them to the concepts of financial management, marketing and promotion, operations management, strategic and business planning, and entrepreneurship. PPM II deals with the social aspects of the pharmacist's role, including how the pharmacist interacts with patients, practitioners, and employees at their practice sites. During the third professional year students may take elective courses which emphasize community pharmacy management, management in organized health care settings, or outpatient drug insurance (three credits each).

Experiential education takes place in the third (PS-III) and fourth (PS-IV) professional years at MWU-CCP. Each year of experiential education consists of four five-week rotations. During the PS-III year, all students must complete a community pharmacy externship, a hospital pharmacy externship, a clinical clerkship, and an elective rotation. Students are allowed to choose each of their rotations from a list of available sites and to rank their choices in order of preference. However, all final rotation assignments are made by the Office of Experiential Education.

During the elective rotation a student may take another community pharmacy externship, hospital pharmacy externship or clinical clerkship, or they may gain experience at a practice which does not fall into one of the three categories of clerkship (e.g., nuclear pharmacy, home health care, drug information center). The community pharmacy management rotation is an elective that a PS-III student may take at any time after they have completed their community pharmacy externship.

#### DEVELOPMENT AND DESCRIPTION OF THE ROTATION

The initial development of the community pharmacy management rotation took place between December 1994 and February 1995. The Director of Experiential Education believed that an elective rotation which focused on community pharmacy management would be valuable, based on her own experience as well as informal discussions she had held with faculty, preceptors and students. At this time she

brought together the MWU-CCP pharmacy administration faculty and district managers from four local pharmacy chains to discuss how the skills that had been learned by students in their classes could be applied in an experiential education rotation. The pharmacy administration faculty identified key management concepts and skills that students had learned in their curriculum which could be applied during a five-week rotation. These managerial concepts include organizational structure, planning, personnel management, financial analysis, marketing, operations management, and the incorporation of pharmaceutical care into community pharmacy practice (9, 12, 13). The district managers described the management functions which they perform, as well as those performed by pharmacy managers in their pharmacies. The concepts taught by the faculty and the functions performed by the district managers were integrated into a checklist of activities and learning objectives. The purpose of this checklist is to guide students and preceptors about what topics should be covered during the five week rotation (see Appendix A).

Local chain pharmacy district managers serve as the primary preceptors for this rotation. Students shadow their preceptors, often directly participating in many of the day-to-day activities of the district manager. While students are with their preceptor they learn about the district manager's role in the organization, his/her daily activities, and the district manager's role in pharmacy operations (i.e., planning, policy development, personnel management, financial management, marketing and promotion, operations management, role of the organization in the provision of pharmaceutical care). Students and preceptors use the checklist to make sure that each of the required topics are discussed at least once during the five-week rotation.

At some point during the rotation, students generally spend between 3-10 days with the pharmacy manager of one of the stores which reports to their primary preceptor. When with the pharmacy manager, students learn about how corporate policies and procedures are applied at the individual pharmacy level (i.e., pricing, purchasing/inventory control, budgeting, marketing and promotion, personnel management, operations management, pharmaceutical care). Students then finish their rotations with the district manager discussing the integration between corporate and pharmacy levels of management.

At every community pharmacy externship, hospital pharmacy externship, and elective rotation at MWU-CCP students must complete at least one major project. These projects are site specific and are assigned to the student by the preceptor. On the community pharmacy management elective rotations, preceptors assign projects that require students to perform research to be used by the district manager or a pharmacy manager to make management decisions. Among the projects that students have completed for this rotation include an evaluation of the impact of pharmacy coupons on sales and profitability, the effect of therapeutic and generic substitution on sales and gross margins, and the development of a new procedure for interviewing staff pharmacists (Table I). Students on this rotation have also performed many other smaller projects in addition to their major project, such as organizing a "brown bag" day at a pharmacy, developing a new policy or procedure, or helping to prepare a promotional campaign for a new product or service. The major project is evaluated by the preceptor using a standardized project evaluation form

**Table I. Projects completed by students on the rotation by objective**

Objective	Student project
<b>1. Understands the District Manager's Role in Organizational Structure</b>	
A. Organizational Structure	No projects performed in this area
B. Daily Activities of the District Manager	<ol style="list-style-type: none"> <li>1. Developed policy statement regarding discounting third-party copayments</li> <li>2. Prepared a information release to pharmacies regarding an upcoming sales promotion</li> <li>3. Developed policy statement regarding double checking the work of technicians</li> <li>4. Performed a quarterly pharmacy inspection</li> </ol>
<b>2. Understands the District Manager's Role in Pharmacy Operations</b>	
A. Planning Pharmacy Operations	<ol style="list-style-type: none"> <li>1. Performed a market analysis of opening a pharmacy in a new grocery store</li> <li>2. Surveyed corporate divisions regarding the role of pharmacy within each division</li> </ol>
B. Personnel Management	<ol style="list-style-type: none"> <li>1. Revised training protocols for technicians and pharmacists</li> <li>2. Surveyed pharmacists who turned down offers of employment</li> <li>3. Updated job descriptions for graduate and summer interns</li> <li>4. Interviewed candidates for summer intern and pharmacist positions</li> <li>5. Developed a personnel management manual</li> </ol>
C. Financial Analysis	<ol style="list-style-type: none"> <li>1. Assessed impact of therapeutic substitution on profitability</li> <li>2. Assessed impact of generic substitution on profitability</li> <li>3. Assessed impact of pharmacy coupons on profitability</li> </ol>
D. Marketing and Promotion	<ol style="list-style-type: none"> <li>1. Developed a promotion for blood glucose meters</li> <li>2. Promoted compounding services to area physicians</li> </ol>
E. Operations Management	<ol style="list-style-type: none"> <li>1. Created an inventory control system for Schedule II-V medications</li> <li>2. Evaluated system used to broadcast information between corporate headquarters and pharmacies</li> <li>3. Developed a third-party manual</li> </ol>
F. Provision of Pharmaceutical Care	<ol style="list-style-type: none"> <li>1. Evaluated reimbursement for compliance-related cognitive services</li> <li>2. Prepared a presentation on patient counseling for staff pharmacists</li> <li>3. Prepared a presentation on asthma for staff pharmacists</li> </ol>
G. Other Issues Faced by District Managers	No projects performed in this area
<b>3. Understands Management Functions Performed by Pharmacy Managers</b>	
A. Integration of Corporate and Store Operations	<ol style="list-style-type: none"> <li>1. Performed a traffic flow analysis</li> <li>2. Wrote a performance review of an employee (x4)</li> </ol>
B. Provision of Pharmaceutical Care	<ol style="list-style-type: none"> <li>1. Developed a Women's Health Fair</li> <li>2. Developed a Brown Bag Day</li> </ol>
C. Other Issues Faced by Pharmacy Managers	No projects performed in this area

which assesses the student's ability to conceptualize, plan, research, carry out, and present the project.<sup>1</sup>

A number of instruments have been developed specifically for this rotation. The checklist used to guide students and preceptors regarding learning objectives and experiences to be covered on this rotation has already been discussed (Appendix A). Two evaluation instruments specific for this rotation have also been developed. The instrument used by preceptors to evaluate and grade student performance on other PS-III rotations at MWU-CCP was modified to evaluate student performance on this rotation. Preceptors are asked to evaluate student performance with respect to each of the rotation's four primary objectives (understands the district manager's role in organizational structure, understands the district manager's role in pharmacy operations, understands management functions performed by pharmacy managers, performs a management project) on a 100 point scale which correlates to letter grades. Preceptors perform a mid-rotation evaluation of the

student during the third week and a final evaluation at the end of the rotation, with only the final evaluation counting toward the student's grade.

Students also have the opportunity to evaluate their preceptors and experiences at the end of the rotation with both general and rotation-specific evaluation forms. The general evaluation form allows the student to rate their preceptor's organizational skills, teaching abilities, attitude, learning opportunities and the physical resources of the site with a series of 47 Likert-type scaled questions. The rotation-specific evaluation form asks students to rate how well the rotation met its specific educational objectives with a series of 15 Likert-type scaled questions. Finally, a form has been developed which allows preceptors to evaluate how well the rotation has been meeting its educational objectives. These forms were developed by the Office of Experiential Education in cooperation with preceptors who serve on the MWU-CCP Experiential Education Committee. The outcomes evaluated on these instruments are based on the Center for the Advancement of Pharmaceutical Education's (CAPE) Professional Practice-Based Outcomes (13), the Scope of Pharmacy Practice study (1), and rotation-specific

<sup>1</sup>Copies of all instruments and evaluation forms developed for this rotation are available upon request from the authors.

**Table II. Student evaluation of preceptor, site and educational experience (n = 12)**

Statement	Likert score <sup>a</sup> (Mean)	SD
<b>Educational Experience</b>		
“This rotation furthered my understanding of the role of the District Manager in the organization.”	4.67	0.49
“The daily activities of the District Manager were defined and explained.”	4.50	0.67
“This rotation furthered my understanding of the role of the District Manager in planning pharmacy operations.”	4.50	0.67
“This rotation furthered my understanding of the role of the District Manager in personnel management.”	4.50	0.67
“The district manager provided an explanation of financial analysis and pharmacy budgets.”	4.58	0.67
“This rotation furthered my understanding of pharmacy marketing and promotion.”	4.67	0.65
“This rotation furthered my understanding of operations management ( <i>i.e.</i> , purchasing, inventory control).”	4.75	0.45
“This rotation furthered my understanding of third-party prescription programs and the impact of managed care.”	4.50	0.52
“This rotation furthered my understanding of the impact of OBRA 1990 on the provision of pharmaceutical care.”	4.42	0.51
“This rotation furthered my understanding of the impact of OBRA 1990 on the operations of the pharmacy.”	4.42	0.51
“This externship experience has help prepare me for practicing pharmacy after graduation.”	4.58	0.67
“The educational quality was high.”	4.42	0.67
<b>Preceptor</b>		
“Provided an orientation to the externship site.”	4.58	0.67
“Explained and clarified information.”	4.58	0.51
“Specified clearly what was expected of me.”	4.33	0.98
“Was accessible and willing to help me.”	4.42	0.79
“Spent adequate time teaching me.”	4.17	0.83
“Encouraged me to make comments and questions.”	4.50	0.52
“Provided useful and timely feedback on my progress.”	4.33	0.65
“Is enthusiastic and interested in his/her practice.”	4.75	0.45
“Seems to be knowledgeable in their practice area.”	4.75	0.45
“Is a good role model for pharmacy students.”	4.67	0.65
“Is an effective preceptor.”	4.58	0.67
<b>Site</b>		
“I would recommend this rotation to others.”	4.83	0.39

<sup>a</sup>Likert Scale: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

criteria established by MWU-CCP and participating preceptors.

#### STUDENT AND PRECEPTOR PARTICIPATION IN THE ROTATION

A total of 14 students participated in the community pharmacy management elective rotation from when it was first offered in the spring of 1995 through the spring of 1996. Five students from the Class of 1995 (class size = 85) participated in the rotation, while nine students from the Class of 1996 (class size = 100) enrolled (four students during the summer of 1995, and five students during the spring of 1996). Fifty-one additional students have asked to take this rotation (24 from the Class of 1995, 27 from the Class of 1996) but were not able to be accommodated due to lack of preceptor and site availability.

Since enrollment in this rotation has been limited, we were challenged to develop a process to ensure that students who were most likely to benefit from this experience would be allowed to register for the rotation. The first step of this process has involved interviews of each student by the Director of Experiential Education before they are assigned to rotation sites. This allows her to find out more about a student's motivation to enroll in a rotation, and helps her match sites to the student's interests. The Director of Experiential Education also works with the pharmacy adminis-

tration faculty to obtain feedback regarding students who they feel would be most likely to benefit from this rotation. In our college catalog, we state that the community pharmacy management elective course (Pharmacy 574) is highly recommended for those wishing to enroll in the community pharmacy management rotation. Academic performance in the sequence of pharmacy administration courses has also been considered as a selection criteria. Finally, preceptors have offered to interview students to help them learn more about the rotation and to help select students to participate.

Five district managers from four local pharmacy chains have served as preceptors for this rotation since it began in 1995. Changes in responsibilities for one of the district managers has resulted in four preceptors representing four chains that remain with the program. The demanding schedules of the district managers occasionally results in times when they are not able to serve as preceptors, even when student demand for these rotations is high.

#### STUDENT AND PRECEPTOR EVALUATION OF THE ROTATION

Every student who has participated in the rotation has been asked to complete an evaluation of their preceptor, site and educational experience. While the number of evaluations reviewed through the spring of 1996 has been relatively small (n = 12; two student's responses were incomplete and

not able to be tabulated), the information that we have gathered has been useful in the continual planning and development of this rotation.

Students that have participated are in agreement that this rotation has furthered their knowledge of pharmacy management, especially in the areas of personnel management, financial management, marketing and promotions, and operations management (See Table II). Many of the preceptors involve their students in activities such as interviewing potential employees (including pharmacists), performing financial analyses, and developing advertising copy and promotional materials. The students' level of satisfaction with their educational experience manifests itself in their confidence that what they have learned on this rotation will help them prepare for pharmacy practice (mean = 4.58, SD = 0.67; 1 = 'strongly disagree', 5 = 'strongly agree').

Participating students also feel strongly about the quality of instruction and guidance they have received from their preceptors (Table II). Preceptors have been rated highly with respect to the orientation which they provide to their sites, as well as their ability to explain and clarify information. Preceptors were also given high ratings with respect to their accessibility, in spite of the fact that they often have many other work-related responsibilities. The students feel that their preceptors are knowledgeable, enthusiastic about their practices, and make good role models for pharmacy students. All twelve students who have completed evaluations up to this time would recommend this rotation to their classmates (mean = 4.83, SD = 0.39).

The lowest ranking attribute of this rotation identified by the participating students has been the amount of teaching time spent by preceptors. While students still generally agree that their preceptors spend adequate time teaching them (mean = 4.17, SD = 0.83), there may be several explanations as to why this attribute ranks lower than the others. District managers generally have numerous other duties, and occasionally spending time with pharmacy students may not be their highest priority. Also, MWU-CCP students on other rotations tend to have a high degree of interaction with their preceptors, especially on their clinical clerkships. However, an expectation of students on the community pharmacy management elective rotation is that they be able to work without the constant supervision of their preceptor. This rotation may not live up to the expectations of students who are used to spending a large amount of time working directly with their preceptor.

Based on our findings from the project evaluations and their overall evaluation of the rotation, the four preceptors have also been pleased with this rotation. They report being impressed with the amount of effort and quality of work performed on the projects. The preceptors also feel that students come to the rotation well prepared in the basics of community pharmacy management, learn about the management functions performed by the district manager as well as pharmacy managers, and have the skills necessary to become effective community pharmacy managers by the time they complete the rotation. These positive comments have been reflected in the students' grades on this rotation (12A's, 2B's).

The preceptors also are positive about their participation in the community pharmacy management elective rotation. They report that the materials developed for this rotation have been useful and that the MWU-CCP faculty and staff have been helpful and supportive. They have been

pleased to have the opportunity to work with students: many have not worked directly with students since they themselves practiced in pharmacies on a daily basis. One positive aspect mentioned by several preceptors has been their ability to explain the rationale for decisions made by higher levels of management. The ability of students to understand corporate policies and work effectively with management will help these future practitioners reach their goals of becoming pharmacy managers.

## DISCUSSION

Based on the feedback we have received from students and preceptors through the spring of 1996, we feel that we have been successful in developing a rotation which allows students who are interested in community pharmacy management to learn more about this area in a very practical and applied manner. While the number of responses from students and preceptors we have received has been relatively small, the information that they have provided at this early point in the development of this rotation has been valuable. However, there are still a number of challenges and opportunities that need to be addressed in the future.

The demand for the community pharmacy management elective rotation has been greater than our ability to supply preceptors and sites. This could be due to the positive attitudes that students and preceptors have had about this rotation, the ambulatory care focus of the MWU-CCP curriculum<sup>^</sup>, or the fact almost 80 percent of MWU-CCP graduates take positions in community pharmacy settings. Thus a major challenge will be to identify other district managers who would be willing to serve as preceptors for this rotation. Positive word-of-mouth from current preceptors and recruitment efforts from representatives of MWU-CCP will hopefully result in additional district managers who are willing to participate.

The process used to select students to participate in the rotation has been difficult at times given the number of students who are interested in community pharmacy management and have taken the prerequisite courses. Even students who are very well qualified and would benefit from this experience have had to have been told that they can not register due to an inability to place them at a site. However, our preceptors stressed in the initial development of this rotation that students not only needed to be interested in pharmacy management, but also needed a solid base of management theory and skills in order to meet the rotations objectives. The high quality of projects completed by students is an indicator that while preceptor expectations of students on this rotation are high, the students who have taken this rotation have had the necessary knowledge and skills to perform well and learn more about pharmacy management.

While this rotation has been developed exclusively with chain community pharmacies up to this point, this practice setting isn't the only area where students may wish to obtain management experience. Pharmacy directors at several local medical centers have taken our students on elective rotations that emphasize institutional pharmacy management. However, given that basic management concepts and functions can be applied in a number of pharmacy practice settings, elective management rotations could also be developed for independent community pharmacy, ambulatory care pharmacy, managed care organizations, and other pharmacy practice areas.

The required management projects provide students with the opportunity to apply the skills they have learned in their didactic pharmacy management classes in a practical manner under the supervision of preceptors who are experienced and understand the value of the information these projects provide. Over the first two years of this rotation, students have performed a number of management projects over a wide variety of topics. However, as community pharmacy continues to change from a product-based to a service-based profession, management projects with assess the need for pharmacist services and develop plans for how these services will be implemented and evaluated will be of great value to both students and their preceptors.

Data collected from student and preceptor evaluations has been useful in assessing if the rotation's learning objectives have been met as well as suggesting improvements in the rotation. While overall student feedback about the rotation has been positive, a few students have noted that their rotation focused on only one or two areas of management and not the broad management experience that they were lead to expect. This data is shared with the preceptors for their benefit and to improve the experience for future students. It is also used by the Office of Experiential Education to evaluate preceptors and sites with regards to future student placement.

Given the changes in pharmacy and the health care marketplace, the need for pharmacists to apply basic pharmacy management concepts and skills in their practices will continue to grow. We feel that management education experiences such as this rotation will help better prepare our next generation of community pharmacy managers. Since many students eventually will have management responsibilities as practitioners, we feel that other schools of pharmacy could benefit by developing similar educational experiences. By working with chain pharmacy district managers, schools are able to tap into a precepting resource that often is not utilized in experiential education. But most importantly, students are able to develop pharmacy management skills that will benefit them as practitioners in a rapidly changing pharmacy and health care environment.

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#### References

- (1) *Delineation of the Practice of Pharmacy*, Prepared as part of the Scope of Pharmacy Practice Project, Professional Examination Service, New York NY (1994).
- (2) Sauer, B.L., Koda-Kimble, M.A., Herfindal, E.T. and Inciardi, J.F., "Evaluating curricular outcomes by use of a longitudinal alumni survey: Influence of gender and residency training," *Am. J. Pharm. Educ.*, **58**, 16-24(1994).
- (3) Bot, J.A. and Schafermeyer, K.W., "Perceived management needs: pharmacists and students," *Pharmacy Business*, **4**, 24 (Summer 1993).
- (4) Carroll, N.V., Erwin, W.G. and Beaman, M.A., "Practice patterns of doctor of pharmacy graduates: educational implications," *ibid.*, **48**, 125-130(1984).
- (5) Smith, H.A., Coons, S.J., McQuinn, L., "Pharmacists' views of congruence of practice and education and related issues," *ibid.*, **53**, 250-262(1990).
- (6) Walker, S.B., Coons, S.J., Smith, H.A. and Shugars, J., "Chain drug executives' views regarding the education and training of pharmacists in management," *Kentucky Pharmacist*, **52**, 72-74 (1989).
- (7) Crahan, K.F., Ozbun and J.M., "Should an externship and clinical clerkship replace all or part of internship requirements?" *Am. J. Pharm. Educ.*, **48**, 37-39(1984).
- (8) Tannenbaum, R.P., Sohn, C.A., Gerbino, P.P., Gans, J.A., "Preceptors views of community pharmacy clerkships: A national survey," *DICP.*, **15**, 766-774(1981).
- (9) *Pharmacy Practice Management Curriculum Guide*, American Association of Colleges of Pharmacy, Alexandria VA (1989).
- (10) Hartzema, A.G. "Evolving Health Care Systems: Academic Implications for Content and Skill," *Am. J. Pharm. Educ.*, **51**, 399-401(1987).
- (11) Weissman, F.G., Oppenheimer, P.R., Adamcik, B. and Mortazavi, E., "The development and implementation of a community pharmacy practice clerkship," *ibid.*, **48**, 170-174(1984).
- (12) Tootelian, D.H. and Gadedeke, R.M., *Essentials of Pharmacy Management*, Mosby, St. Louis MO (1993).
- (13) *Educational Outcomes*, Center for the Advancement of Pharmaceutical Education Advisory Panel. American Association of Colleges of Pharmacy, Alexandria VA (1994).
- (14) Zgarrick, D.P., Desai, A., Slatkin, D.J., Lee, M.L. "The curriculum of Midwestern University, Chicago College of Pharmacy: A commitment to change." *Am. J. Pharm. Educ.*, **60**, 104S (1996).

## APPENDIX A

### MWU Chicago College of Pharmacy Management Elective Student/Preceptor Checklist

The following must be completed prior to the completion of the five week rotation. It is the students' responsibility to have the preceptor go over these items with them. The preceptor is to check off or initial items completed during the various weeks

The following should be discussed:

Wk1 Wk2 Wk3 Wk4 Wk5 NA

#### Understands the District Manager's Role in Organizational Structure

##### Organizational Structure

- Role of the DM in the organization.
- Responsibilities of the DM.
- Whom does the DM report to?
- Overall role of pharmacy in the organization.

##### Daily Activities of the District Manager

- Evaluate pharmacy operations.
- Plan and prepare for meetings.

Write memos and policies.  
Visit/inspect pharmacies

### **Understands the District Manager's Role in Pharmacy Operations**

#### **Planning Pharmacy Operations**

Identification of organizational goals.  
Assess current situation of organization/pharmacy.  
Develop a plan to meet organizational goals.  
Develop policies and procedures.  
Assess success/failure of plans.  
Timeline for planning/goal achievement.

#### **Personnel Management**

Describe characteristics of a successful employee.  
Plan personnel needs.  
Develop job descriptions.  
Recruitment of potential employees.  
Application and interview process.  
Selection of new employees.  
Orientation of new employees.  
Evaluation of employee performance.  
Promotion/termination procedures.

#### **Financial Analysis**

Develop/evaluate individual pharmacy and organizational financial reports.  
Financial trend analysis.  
Develop/evaluate pharmacy budgets.  
Understand how pharmacy financial performance impacts organizational profitability.

#### **Pharmacy Marketing & Promotion**

Role of pharmacy in organization's promotional activities.  
Identify types of promotional activities (advertising, media relations, sales promotion, personal selling).  
Help develop/implement promotional activities.  
Evaluate the effectiveness of promotional activities.

#### **Operations Management**

Understand DM role in purchasing/inventory control.  
Understand DM role in operations management.  
• development of products and services  
• design and layout of facilities  
• determine need for materials  
• acquiring capable labor  
• scheduling tasks  
Understand DM role in quality control.  
Understand management information systems used by the DM.

#### **Organizational Involvement in the Provision of Pharmaceutical Care**

Discuss impact of OBRA '90 on the organization.  
Identify steps the organization has taken to implement pharmaceutical care in their pharmacies.  
Discuss impact that future trends in pharmacy practice may hold for operations and organization.

#### **Other Issues Faced by District Managers**

Impact of managed care and 3rd party prescription programs on the organization.  
Impact of government rules and regulations on the organization.  
Others:

#### **Understands Management Functions Performed by Pharmacy Managers**

##### **Integration of Pharmacy Operations with Organizational Goals and Plans,**

**Policies and Procedures**  
Understand pricing policies.  
Understand/perform purchasing and inventory control activities.  
Role of pharmacy managers in financial analysis and budgeting.  
Role of pharmacy managers in marketing/ promotional activities.  
Personnel management functions performed by pharmacy managers

The following should be discussed:

Wk1 Wk2 Wk3 Wk4 Wk5 NA

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Operations management functions performed by pharmacy managers.

**Impact of Pharmaceutical Care on Pharmacy Practice**

Impact of OBRA '90 on the operations of the pharmacy.

Discuss steps taken by the pharmacy manager to implement pharmaceutical care at the pharmacy. Discuss impact future trends in pharmacy practice may have on the pharmacy's operations.

**Other Issues Faced by Pharmacy Managers**

Impact of managed care and 3rd party prescription programs on the pharmacy.

Impact of government rules and regulations on the pharmacy.

Others:

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