

Curricular and Financial Implications of PharmD Clerkship Placements¹

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The purpose of this study was to reassess curricular and financial aspects of PharmD clerkship programs. Questionnaires were mailed to clerkship coordinators at the 64 U.S. colleges of pharmacy offering PharmD degree programs during academic year 1994-95. The response rate was 91 percent. Increased numbers of schools reported difficulty in maintaining training sites, with required ambulatory care rotation sites the most difficult to find. The number of schools using student-based fees increased from 18 to 28. Ten schools reported using site-based fees compared to two schools in the 1992 survey. Results indicate that the increasing enrollments and the new program offerings are promoting competition for sites. Research is needed to determine the role of individual preceptors and sites in the acquisition and retention of training sites, the effects of inter-school competition, and creative structuring of clerkship rotations.

INTRODUCTION

Three years ago, increasing PharmD program enrollments generated interest in the financial arrangements used by colleges of pharmacy to attract and retain sites used in the experiential component of the programs(1). Fifty of the 59 schools offering PharmD degrees responded to a survey, which solicited information about formal monetary and nonmonetary agreements between colleges and sites. The financial arrangements varied widely, with no "standard" financial arrangement emerging. Program curricular requirements were also discerned.

Since the original survey, the enrollment in PharmD degree programs has continued to increase and was 7,700 for entry-level programs and 2,450 for post-BS programs in Fall 1994(2). The number of colleges offering a PharmD degree has also increased. The number of PharmD degrees awarded has grown, accounting for 18 percent (1,359 of 7,504) of the first professional degree 1993-94 graduates. Additionally, 575 post-BS PharmD degrees were awarded (a 45 percent increase from 1992-93). The emerging nontraditional PharmD degree programs and early experiential components have added new dimensions to the placement needs for colleges of pharmacy. At the same time, little or no apparent progress has been made in determining the true cost (*i.e.*, differentiating site input costs and outputs) of placing students at clerkship sites.

Therefore, a follow-up survey was conducted during the 1994-95 academic year to ascertain trends and monitor the changes in the curricular and financial arrangements for clerkships. The purpose of this paper is to report the results of a national survey of the costs and considerations colleges of pharmacy have in arranging and maintaining clerkship placements. In addition, we compare the findings to those obtained in a 1992 survey, and discuss the implications of the changes.

METHODS

A 21 -item questionnaire was mailed to the clerkship coordinator at each U.S. college of pharmacy offering an entry-level, post-BS, or nontraditional PharmD degree. The 64

schools were identified from the November 1993 AACP Academic Pharmacy's Vital Statistics. The clerkship coordinators were identified from the previous mailing list, the September 1994 AACP PEP-SIG Directory of Experiential Program Directors, or by a phone call to the institution.

The instrument was a modified version of the questionnaire used in the 1991-92 survey. Questions were formulated to allow colleges to provide information about each type of PharmD degree program offered. The new instrument also distinguished between post-BS and nontraditional degree programs and included an item about early experiential training (*i.e.*, offered prior to the final professional year). Questions were formatted in forced choice, fill-in, or open-ended styles. The survey was designed to measure the population of schools offering at least one type of PharmD degree program.

The instrument was pilot tested by one clerkship coordinator, revised, and sent to the person identified as the clerkship coordinator at each college of pharmacy with a PharmD degree program. The first mailing was sent on November 1, 1994, followed by two follow-up mailings to nonrespondents on January 6 and March 1, 1995.

Statistical analyses were performed with the Systat program(3). Data were summarized using descriptive statistics, such as means, standard deviations, medians, percentages, and frequencies. Longitudinal comparisons were made using dependent t tests and Wilcoxon signed-rank tests. The alpha level was set a priori at 0.05.

RESULTS

Subjects

Fifty-eight (91 percent) of the 64 colleges of pharmacy offering a PharmD degree program responded to the survey. Forty-four of the respondents had also participated in the 1992 study, which was 94 percent (44 of 47) of the original respondents. This allowed for longitudinal as well as descriptive data analysis. Fifteen nontraditional PharmD degree

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Table I. Type of PharmD degree program and clerkship characteristics^a

	Type of program		
	Entry-level (N = 41)	post-BS (N = 41)	Nontraditional (N = 15)
Number of students in clerkships	(n = 36) ^b	(n = 41)	(n = 11)
Median ^c	29	8	18
Range	1-195	1-26	1-60
Number of clerkships scheduled	(n = 36)	(n = 40)	(n = 10)
Median	210	69	106
Range	11-1170	8-304	8-225
Number of required clerkships	(n = 41)	(n = 40)	(n = 13)
Median	9	10	8
Range	5-14	5-14	5-10
Length of clerkships (weeks)	(n = 38)	(n = 39)	(n = 12)
Median	4	4	5
Range	4-12 ^d	4-12 ^d	4-8

^aAcademic year 1994-95.

^bThe number of respondents varied due to missing data for the different items.

^cOnly medians and ranges are reported because of outliers.

^dOne school had a 12-week required clerkship rotation.

Table II. Comparison of summary information for the 1992 and 1995 surveys

	Academic year	
	1991-92	1994-95
Total number of students placed in clerkships		
Median	14	16 ^a
Range	2-190	5-197
Total number of clerkship rotations needed		
Median	135	170 ^b
Range	18-1,200	40-1,329
Total annual student-based fees (n = 16)	(n = 27)	
Median	\$5,610	\$9,200
Range	\$500-222,400	\$1,500-251,500
Total annual site-based fees (n = 2)	(n = 10)	
Median	\$4,800	\$14,750
Range	\$2,100-7,500	\$1,200-66,000

^aWilcoxon signed-rank test showed significant increase ($P = 0.005$).

^bWilcoxon signed-rank test showed significant increase ($P = 0.033$).

programs were also represented. Twenty-seven institutions offered one type of degree program, 23 institutions offered two types of programs, and eight offered all three programs. Five of the entry-level PharmD degree programs and four of the nontraditional PharmD degree programs had not yet placed students in clerkships.

Clerkship Characteristics

The characteristics of the different PharmD degree programs are shown in Table I. The results show wide variability in the number of students placed by type of degree program and by school. Students enrolled in nontraditional programs appear to have fewer, but longer clerkships.

A summary of comparisons for total placements and rotations as well as total annual fees for academic years 1991-92 and 1994-95 are shown in Table II. Five programs

Table III. Required clerkships by different PharmD degree programs

	Entry-level (n = 14)	Post-BS (n = 39)	Non-traditional (n = 13)
Ambulatory Care ^a	38 (93) ^b	33 (85) ^b	11 (85) ^b
Community Practice	35 (85)	10 (26)	4 (31)
Internal Medicine	34 (83)	33 (85)	11 (85)
Institutional Practice	31 (76)	9 (23)	4 (31)
Drug Information	22 (54)	25 (64)	7 (54)
Adult Acute Care	21 (51)	17 (44)	5 (38)
Pediatrics	13 (32)	16 (41)	6 (46)
Psychiatry	10 (24)	7 (18)	3 (23)
Geriatrics	7 (17)	2 (5)	3 (23)
Pharmacokinetics	6 (15)	10 (26)	3 (23)
Administrative	3 (7)	2 (5)	0
Long Term Care	3 (7)	1 (3)	1 (8)
Research	2 (5)	6 (15)	0
Surgery	1 (2)	3 (8)	1 (8)
Industry	1 (2)	1 (3)	0
Nutrition	1 (2)	2 (5)	0
Oncology	1 (2)	1 (3)	0
Cardiology	1 (2)	2 (5)	0
Infectious Disease	0	2 (5)	0

^aOrdered by frequency required in entry-level PharmD degree programs.

^bPercent of schools requiring the rotation in parentheses.

used combinations of four and eight week long rotations, with one program scheduling a required 12 week long rotation. Another program scheduled rotations of varying lengths in order to match the academic semester calendar. The predicted total clerkship placements for the 1995-96 academic year showed the median increasing to 24 with a range of four to 220 students.

Over one-half of each of the three types of degree programs had one to one student-preceptor ratios. Two to one student-preceptor ratios were the second most common, followed by less than 15 percent of any program placing more than two students to one preceptor.

The results describing required clerkship rotations are shown in Table III. Ambulatory care and internal medicine clerkships were the two most commonly required rotations in all three types of degree programs. Students enrolled in entry-level programs were required to take two rotations traditionally used for externships (*i.e.*, community practice and institutional practice) in over 75 percent of the schools. This was in contrast to the post-BS and nontraditional programs, which required those two clerkships in less than one-third of the schools. No single type of clerkship was required by all schools. The required clerkships varied widely from school to school.

Twenty-two programs listed an early experiential component; however, five of these appeared to be externships associated with BS degree programs with "track-in" PharmD degree options and were excluded from further analysis. This reduced the number with early training components to 17/58 (29 percent). Twenty-one examples were reported within these 17 programs. Six programs offered observational (*e.g.*, shadowing) or clerkship experience to students in their first professional year, five offered programs during the second year or during the summer between the second and third professional year, and six programs offered clerkship experience during the third professional year. Four programs offering early experience to professional students

did not specify the year in which the experience was offered.

If offered in the first professional year, the experience was usually restricted in the length of the experience or by the extent of the activities performed by the student. Results for post-BS and entry-level programs were reported separately because of the different length of programs and the amount of experience and education a pharmacy student would have in the first year of the program. Schools with post-BS degree programs used several different methods to provide early training. One college began clerkships during the second semester of the second year, resulting in more than 12 months of on-site training for the students. Another school used "mini-clerkships" and placed students at sites for three to five hours a week with full time clinical faculty. A third school had students complete three rotations in the first professional year, but did not describe the rotations. Two entry-level PharmD degree programs also reported first year experiences. One school provided students with visits to pharmacies one to five days during the first year. Another school had community and hospital externships the first year, followed by another externship the second professional year.

Student training programs offered during the second and third years included a longitudinal care experience which spanned two years and involved a group of eight to 10 students who observed and delivered pharmaceutical care to a patient under the supervision of a mentor. One program provided one-half to one day on-site experience for the third professional year students. Other programs offered a parenteral therapy, hospital, or community externship. Two programs provided externships or clerkships during the summer between the second and third professional year. The length of the training experiences varied from one day to eight weeks. One program described weekly half-day site visits over one semester, but did not specify the year.

Financial Arrangements

Forty-five out of 58 (78 percent) schools reported having at least one formal financial arrangement (*e.g.*, split-funded positions or fees) with at least one clerkship site. This represents an increase of 12 institutions with such contracts since the 1992 survey. Twenty-seven of the 45 schools (60 percent) with financial agreements reported an increase in the number of such contracts. The types of financial arrangements used other than split-funded faculty or resident positions included fees which were site-based, student-based (*i.e.*, per student per rotation), or a combination. The total nonsalary fees paid by 36 schools of pharmacy during the 1994-95 academic year ranged from \$1,500 to \$251,500 with a median of \$16,700. Six schools paid both student-based and site-based fees. Five schools used other fee arrangements such as region-based fees or payments directly to preceptors. One school paid \$14,400 to place one student for one year at a site with multiple clerkship rotations, while another paid \$150,000 to place 200 students for one year at \$750 per student.

A breakdown of the student-based fees by type of rotation is provided in Table IV. Almost half of the schools used student-based fees for at least one placement. Twenty-five of the schools paid the same fee regardless of the site or type of rotation, while four schools used two or three different fee payments. The fees and clerkship rotation lengths both varied widely among the schools.

The total annual payments of student-based and site-

Table IV. Student-based fees^a by type of clerkship and dollars

Clerkship rotation	Number ^b	Median fee (\$)	Range of fees (\$)
Adult Acute Care ^c	12	375	278-2700 ^d
Infectious Disease	11	400	278-750
Ambulatory Care ^c	10	350	278-500
Drug Information ^c	9	350	278-750
Internal Medicine ^c	9	350	278-500
Pediatrics	8	325	278-900
Nutrition	7	350	278-750
Oncology	7	400	278-750
Pharmacokinetics	7	400	278-900
Geriatrics	5	350	278-500
Psychiatry	5	400	278-500
Surgery	5	350	278-500
Cardiology	4	325	278-750
Home Health Care	3	300	300-500
Community Practice ^c	2	675	350-1000
Institutional Practice ^c	2	600	200-1000
Administrative	1	278	—
Long Term Care	1	350	—
Research	1	278	—

^aStudent-based fees are the number of dollars paid per student per clerkship rotation.

^bThe number of schools using a student-based fee for a specific type of site.

^cRequired rotation in more than 50 percent of the entry-level programs.

^dLength of \$2700 required rotation was 12 weeks.

based fees are presented in Table V. The number of schools paying student-based fees has increased, even though the range of the fees has stayed virtually the same since the 1992 survey. When annual costs are averaged over the number of placements there is still a variation in fees that is not accounted for by type of clerkship, school, or degree program. Ten schools paid site-based fees, a five-fold increase from the 1992 survey. The number of students placed in clerkships with this type of fee was not well defined. These fee payments also varied widely, and the type of site or clerkship did not account for the variation.

Site Acquisition and Retention

Ambulatory care sites were most frequently named as the most difficult to find required clerkship site by 21/58 (36 percent) of the schools. Other required clerkship sites that were named as difficult to find were internal medicine, drug information, psychiatry, pediatrics, and pharmacokinetics.

The level of difficulty experienced by the colleges in obtaining new sites or retaining current sites was measured on a seven-point scale, with 1 = not at all difficult to 7 = extremely difficult. Thirty-three of the 58 (57 percent) schools responded five or greater when asked about difficulty in obtaining new sites (mean = 4.60, SD = 1.64). When asked how difficult it would be to maintain sites if the current number of rotations remained constant, 13/57 (23 percent) responded five or greater (mean = 3.19, SD = 1.74). A pair-wise comparison with the 1992 survey results showed an increase in both the difficulty in obtaining new sites and maintaining current sites. The increase in the level of difficulty in maintaining sites was statistically significant ($P = 0.011$).

Fifty percent of the respondents reported losing at least one clerkship site during the 1994-95 academic year. The number of sites lost ranged from one to 30 with a median of

Table V. Dollars expended on student-based fees and/or site-based fees during the 1994-95 academic year

School	Student-based fees (SBF) (\$)	Number of placements	SBF/placements ^a	Site-based fees (\$)	Number of sites	Degree program ^b
1	1,500	5	300	1,200	1	P
2	2,200	4	550			E,P,N
3	2,500	5	500			P
4	2,600	6	433			E,P
5	3,300	11	300			E,P
6	3,500	7	500			E,P,N
7	3,900	13	300			E
8	4,400	11	400			P
9	4,550	12	379			E
10	6,300	21	300			E
11	6,520	16	407.5			E,P,N
12	8,000	15	533	66,000	2	E,P,N
13	8,050	23	350			E
14	9,200	39	234			E
15	14,000	93	150.5	11,500		E,P
16	14,500	29	500	14,500	2	E,P
17	15,000	75	200			E
18	16,400	41	400			E,P
19	17,400	58	300	60,000	1	E,P
20	22,400	27	830			P
21	26,500	35	757	4,000	10	P,N
22	40,000	100	400			E,N
23	108,100	194	557			P,N
24	108,420	390	278			E,N
25	251,500	187	1345			E,P
26	NA	—	—	1,500	5	P
27	NA	—	—	13,400	3	E,P
28	NA	—	—	15,000	1	E,P
29	NA	—	—	40,000	1	E,P

^aThe average dollars per placement is for comparison purposes only. It may not reflect the true division of the total annual dollars spent by the school. ^bDegree programs designated by E = entry-level, P = post BS, N = nontraditional.

three. When asked why the sites withdrew, 14 of the 29 respondents cited loss of the preceptor as the most common reason. This number included volunteer as well as paid faculty preceptors. Staffing shortages due to staff downsizing and increased workloads was cited as the second most common reason for losing sites (10/29). This was followed in frequency by seven of the 29 institutions reporting loss of a training site due to closure, sale, merger, or downsizing of the business site. Three respondents lost sites because of the attitude of the professional staff, such as a lack of involvement due to burn-out or not valuing the need to train students while two others lost sites when administrators (not staff pharmacists) did not want to participate. Lack of financial support to the site was another reason three schools lost sites. One school lost 10 clerkship sites due to competition from another school in the area and another school lost five sites due to competition from schools in other states placing nontraditional students in the area.

Nonmonetary Support

Thirty-three percent (20/58) of the respondents provided details about the nonmonetary support used by their institution including: commodities (e.g., computers, computer software and online services, reference books, travel, meeting support, and pre paid postage), adjunct appointments, fee waivers for continuing education (CE) credits or college credits, and preceptor recognition. Computers and computer support were used by 11/20 of the schools providing nonmonetary reimbursement. The second most common

method was CE or college tuition fee waivers (8/20). Reference books and travel grants were offered by 4/20 and 3/20 schools. One school had a fund for all preceptors to request reimbursement for travel and other clerkship-related expenses. Some commodities were provided directly to preceptors whereas other arrangements benefitted an entire site. Types of rotations receiving nonmonetary support also varied with no apparent pattern.

Comments and Concerns

Written comments by respondents indicated that clerkship coordinators are concerned about obtaining and paying for sites. Frustration was evident in one respondent's comments that additional sites will be extremely difficult to obtain ... and they will be needed as we transition to all PharmD and add nontraditional PharmD programs. Want my job?" Several respondents indicated that the school was not currently paying fees to training sites, but that was probably going to change. Other respondents indicated that sites were now requesting fee reimbursements for training students. One clerkship coordinator reported that the school was asked to pay a fee to the practice site for training students because another school of pharmacy in the area was paying a fee. The fee was secured when the school administrators were convinced that the fee payment would cost less than hiring another clinical faculty member to act as preceptor. Additional comments are presented in Appendix A.

DISCUSSION

Financial Implications

An increased number of schools are using monetary reimbursement as a means of securing clerkship training sites. The agreements varied greatly. It is not clear why three out of four schools now use some form of a financial arrangement to provide for student placement. Respondents identified several factors that may indicate why this is a growing trend, including a presumed cost to the site for training students, competition for sites, and reimbursement for the non-salaried preceptors' time.

The body of research literature describing studies of the cost of training students is inconclusive(4). Some studies show that sites benefit when students are present(5,6), others show cost associated with training (7,8). The inconsistencies are due to incomplete economic analyses, confused study perspectives, or the use of input measures (e.g., time) as measures of output(4,9). Failure to consider the effect of the student-preceptor work relationship on the cost of training was an additional source of error(4). Schools using these studies as a guide for establishing fees may be misled.

The maximum dollars expended did not change from the 1992 survey to the current survey. However, this could be explained by the existence of other budgetary clerkship-related expenses, such as clinical faculty salaries, which were not examined in this study. If additional faculty lines are added when the non-salary expenses of programs reach a "critical level," the range of total non-salary expenses would tend to remain stable. Further, the use of different salary agreements, such as split-funded positions or residencies was not examined in this study.

One of the recurring themes in the data analysis was the blurring of preceptors and sites when respondents were discussing financial arrangements, site withdrawals, and comments. Schools were contracting with practice sites to place students, but the number one reason clerkships were lost was due to a preceptor leaving the site. Fees were paid to sites, but it was unclear how, or if, the preceptor was compensated with the fees collected by the site. A study of volunteer preceptors by Beck *et al.*, provides insight into how reimbursement fees paid to the site may be distributed to preceptors. Some sites placed the collected fees into a special fund that was intended for use by the preceptors for professional and resource development (e.g., purchasing reference books or supporting travel). Communicating the existence of benefits, such as special funds, to volunteer preceptors was important because preceptors were often unaware of the availability of such funds(10). Anderson found that one-third of the respondents perceived no tangible benefit from participating in the program, even though the institution was receiving fee-per-student reimbursements(11).

Loss of training sites was most often due to preceptor or site factors. However, competition between programs was also cited as a reason. Student placements from another school in the area or a nontraditional program were given as examples of how competition caused loss of training sites. Competition is also playing a role in the establishment of fee reimbursements arrangements for other schools. Apparently some practice sites have initiated the fee agreements based on the fees they receive from other schools in the area. The fees appear to be set on the basis of practice site demand, rather than the actual cost of training students which is not known. Such competition may not be new,

however, the potential for more sites demanding fees will increase as BS degree programs convert to entry-level PharmD degree programs and nontraditional degree program enrollments grow.

Curricular Implications

No single type of clerkship rotation was required by all PharmD degree programs. This finding may be due in part to the differences between the listings used in the survey and the names used by individual schools. However, it is most likely due to schools requiring different clerkship rotations. Whether the actual learning experiences vary is not clear since studies of clerkship rotations in medicine and pharmacy have shown discrepancies in the types of activities, amount of time spent on activities, or levels of student supervision occurring at different sites supposedly offering the same clerkship experience(12-14).

There is also no consensus about the length of clerkship rotations. Schools using the same length for all clerkship rotations, regardless of type or status (e.g., ambulatory care or drug information, required or elective) seemed to favor a shotgun approach, exposing students to as many different four week experiences as possible during their clerkships. Based on research in other health care professions, four weeks may be too short. Students in occupational therapy fieldwork clerkships required three to five weeks at a site before they were sufficiently trained to contribute to the output of the site(6,15). Since increasing the length of each rotation would decrease the number of rotations a student could take, schools must decide if the number or the length of rotations contributes more to the students' learning.

Description of early experiential components of the curricula were diverse and creative. The impact of scheduling these early experiences will become more apparent over the next several years. Hopefully, schools will share their successes and failures as they implement and evaluate their programs.

Student-Preceptor Ratios

Given the need for increased numbers of clerkship placements, the number of students placed at a site or with a preceptor may be a negotiable item. Exactly what a one-to-one ratio means is not clear. A one-to-one ratio seems to imply that the student works with only one practitioner. This assumption has been contradicted by observations that students worked alone and were supervised by more than one practitioner during a rotation. Occupational therapy fieldwork preceptors spent, at most, one-third of their time with students(5). Pharmacy students described as being in a one-to-one ratio spent no more than about 20 percent of a day with the preceptor of record and worked independently over 50 percent of the time(13,16). Student-preceptor ratios do not account for the additional supervision and interaction provided by other practitioners at a site.

If additional training sites are difficult to find, options such as sending students in groups of two or three should be explored. The effect of more than one student on the quality of the clerkship learning experience and the effect on the workload of the practitioners interacting with the students is not known. Once again the presence and contribution of other practitioners is also not known. Training a group of two or three students in an existing clerkship program should not result in additional costs to the site unless the increased number of students requires hiring more professional

staff (17,18).

CONCLUSIONS

Early trends show increasing numbers of students, PharmD degree programs, and formal financial agreements between sites and schools. As PharmD program enrollments grow, so will the need for more clerkship placements. Early experiential components of curricula may add to this growing demand. Research is needed to determine the role of the site and the preceptor in formal financial agreements created between schools and practice sites.

The current structure of the experiential component appears to be based on assumptions and should undergo critical review. Arbitrary decisions about clerkship length and content may be occurring more frequently than colleges would like to admit. Some unknowns are the optimal student-preceptor "ratio", the role of practitioners (other than the preceptor of record) in supervising students, and ideal length of clerkships. Cooperation, rather than competition, should be encouraged by sharing ideas and information.

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APPENDIX A. COMMENTS BY RESPONDENTS

1. "Some sites wanted to increase the fees, but we couldn't pay it. The money is not available."
2. "So far, we have been spared having to pay anything."
3. "We anticipate paying more sites in the future."
4. "This is a very serious issue. Education is viewed as an expense by hospital administrators. Colleges of pharmacy are going to need to pay for people's time."
5. "We pay for required clerkships and externships only. All electives are still voluntary. Even with payments to sites, it is going to be very difficult to provide enough rotations for next year."
6. "Although we have not paid for clerkship rotations in the past, we are facing the issue for 1995-96."
7. "We have lost approximately 15 sites but gained approximately 20. We utilize about 440 volunteer faculty."
8. "We pay \$350 per rotation for community pharmacy clerkships, but no money for community pharmacy externships."
9. "We tend to rely on either full-time faculty or volunteers to precept students on PharmD rotations. We are in the process of increasing our number of 'joint' types of positions—but information about monetary support is not known outside of the Dean's office."
10. "We are attempting to set up sites as clerkship sites to be used for any of the three types of students (*i. e.*, entry-level, post-BS, or nontraditional student). We will try to find ways to provide nonmonetary support for preceptors and are well aware of what we need to address. However, things seem to move very slowly in this regard."
11. "Our program is growing rapidly, necessitating an increased use of non-paid adjunct faculty. These preceptors will be paid \$300 per student per rotation."
12. "When the program expands from 22 to 85 students, the placement of the additional students will be handled by external sites that will be reimbursed \$400 per student per month." (The current program places most students with clinical faculty).
13. "We are planning to convert to an all PharmD program within the next two to four years. Developing adequate sites to accommodate 60 students will be a challenge. The most difficult to sites to find/develop will be ambulatory sites with strong primary care focus.... It is imperative that the college of pharmacy share funding with appropriate sites."
14. "We use split-funded positions as our sole means of payment to sites outside the university medical center complex."
15. "We develop contracts with institutions for faculty placement and reimbursement of faculty services. At this point, we have not had to pay individuals for taking students."
16. "We have supported positions rather than pay for clerkships. Our purpose has been to promote development of services which then yields clerkship sites. In many instances, the sites would not exist without this salary support."
17. "We have 'agreements' to 'hold harmless' with all clerkship sites (>100 such sites)."
18. "We have added sites. However, I foresee that with quality assurance programs and cost containment programs vital to the existence of health care facilities this will quickly change to 'fee for students' or no access to teaching site."