National Survey of Introductory Pharmacy Practice Experience Programs

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Abstract

Objective: The objective of this study was to identify commonalities and provide a descriptive overview of key program elements and oversight of U.S. introductory pharmacy practice experience (IPPE) programs.

Methods: A Web-based questionnaire, consisting of 40 questions, was sent to 91 schools of pharmacy. The questionnaire addressed the following IPPE program topics, in addition to school demographics: program oversight, experience site selection, program structure, relationship to didactic curriculum, and quality assurance issues.

Results: Forty-six schools of pharmacy responded resulting in a response rate of 50.5%. Results identified commonalities in each of the key areas, as well as identifying multiple discrepancies in interpretation of the 2007 Accreditation Council for Pharmacy Education (ACPE) Standards and Guidelines (Standards 2007) for IPPEs. Only 21 of 42 respondents indicated they believed their IPPE program was currently in compliance with Standards 2007.

Conclusion: The survey results demonstrate a need for clarification by ACPE stakeholders in several areas addressed within the Standards 2007. No other previous research surveys were found addressing the key issues identified in this survey, revealing the need for additional research on IPPE programs within pharmacy school curricula.

Key Words: Introductory pharmacy practice experience, IPPE, pharmacy experiential learning surveys, Accreditation Council for Pharmacy Education, Standards 2007

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Objective

The objective of this study was to identify commonalities and provide a descriptive overview of key program elements and oversight of introductory pharmacy practice experience (IPPE) programs throughout the country. The research was designed to address the study question: How are colleges and schools (hereafter referred to as "schools") of pharmacy directing, coordinating, structuring, assessing, and interpreting compliance with the 2007 Accreditation Council for Pharmacy Education (ACPE) standards and guidelines (Standards 2007).

Introduction

ACPE is the national agency for the accreditation of professional degree programs in pharmacy. ACPE revised existing accreditation standards and guidelines (Standards 2000) with new standards which became effective in July 2007. Schools of pharmacy evaluated by ACPE beginning in the academic year 2007-2008 were required to comply with Standards 2007.[1]

A variety of factors led to the revision of Standards 2000, including experience from accreditation reviews, feedback on quality improvement initiatives, reports from the Institute of Medicine outlining changes needed in the U.S. healthcare system, and healthcare legislation that expanded the patient care role for pharmacists. A complete explanation of the reasons for revision is outlined in Standards 2007.[1] Written comments were solicited from ACPE stakeholders, Web-based surveys were distributed to deans of schools of pharmacy, and a series of open hearings were conducted at national pharmacy meetings. Comments received led to modification of Standards 2000 and to development of the revised guidelines.[1] Standards 2000 No. 11 Guideline 11.5, which originally established the requirement for schools of pharmacy to offer introductory practice experiences, provided little direction.[2]

Standards 2007 for IPPEs are more prescriptive, but logistics of compliance remain difficult for many schools in certain areas, such as: 1) How to provide a sufficient quantity of mandated institutional experiences, particularly when there is no medical facility associated with the school, 2) The issue of no remuneration for experiences, which eliminates opportunities for paid internships to count as IPPEs and adds financial strain to many students' budgets 3) Types of activities and teaching methodologies that count as IPPEs and the relationship of IPPEs to the didactic curriculum (e.g., Do laboratory activities involving real patients or other simulations count as IPPEs?), 4) The development of accurate assessment tools and how to determine which students should qualify for IPPE exemptions. Interpretation of the new IPPE standards varies among schools of pharmacy. Speedie describes the introductory practice experiences as one of the most problematic new standards to implement in Standards 2007. In addition, the outcome competencies that should result from the experiences are ill-defined, leaving huge variation among school programs.[3]

The 2008 American Pharmacists Association (APhA) House of Delegates Report of the Policy Committee urges pharmacy stakeholders to collaborate on the development of a blueprint that evaluates, streamlines and consolidates experiential education requirements. The committee noted difficulties when implementing the new Standards 2007, resulting from a global lack of coordination and consistency among experiential education stakeholders.[4] Our research serves as a foundation to design such a blueprint.

Review of Literature

An extensive search for related published literature using keywords: Introductory Pharmacy Practice Experience, Pharmacy Experiential Learning Surveys, Accreditation Council for Pharmacy Education, Standards 2007, and Pharmacy Education Surveys yielded no articles that identified commonalities or provided a descriptive overview of key program elements and oversight of the nation’s current IPPE

programs. Several stakeholders have described the need for identifying commonalities in experiential programming.[3-5] O'Sullivan et al called for the need for information on administrative and support staff necessary to administer experiential education programs and noted a lack of information about methods used by experiential education programs to track student progress, communicate with preceptors, and establish new sites. O'Sullivan et al further recommended that surveys or other variable measurements be conducted so experiential education programs can work most efficiently.[6]

Several articles describe how schools of pharmacy are facing a critical situation in terms of developing and/or maintaining adequate experiential sites due to increased demand and diminishing supply.[3-6] Calligaro noted how experiential education models should include expansion of acceptable practice sites into non-traditional healthcare settings and social service professions.[5] Other than opinion papers, the majority of published literature on IPPEs describe individual introductory experiences and/or course sequences and assessment methods.[7-15] Nemire and Meyer noted the importance of all doctor of pharmacy (PharmD) programs meeting the same national standards to achieve accreditation, but that numerous acceptable approaches to this end exist. This variability results in innovation and experimentation with strategies that only improve a program's quality.[16]

Methods

Two Butler University PharmD candidates developed a list of questions used to survey IPPE directors about specific aspects of their IPPE programs for a PharmD project (see Appendix A). Thirty-four pharmacy schools responded to their Web-based survey. Results from the Butler students' PharmD project survey were considered during the development of a new collaborative research project between Purdue and Butler Universities.

Content validity for the new survey tool was addressed through a variety of methods. Key areas for inclusion in the questionnaire were identified by review of both schools' experience during the establishment of their respective IPPE programs, from AACP Pep-Sig list-serve questions, from IPPE program requirements in Standards 2007, and published literature. Primary areas of interest and contention were noted during the annual 2007 ACPE experiential roundtable discussions involving IPPE and clerkship program directors, pharmacy school department heads and deans, and other interested stakeholders.

The results from the initial Butler questionnaire were used to provide face validity within the new questionnaire through examination of responses to determine if the questions actually described what the researchers desired to know. Questions were refined or removed and additional topic areas were explored and included. The Bulter survey results were also compared to the final questionnaire results to retrospectively evaluate reproducibility (study reliability). Both schools' Institutional Review Boards approved (exempted) the survey method and Web-based questionnaire. Participants were anonymous to the researchers; however, demographic questions identified the respondents' states and student body sizes in order to identify trends in the data.

Prior to questionnaire distribution, an attempt was made to locate current e-mail addresses of the entire population of IPPE program directors from ACPE-accredited U.S. schools of pharmacy. The AACP 2006-2007 Roster of Faculty and Professional Staff, follow-up phone calls, and university Web sites were used to compile the list of e-mail addresses. According to AACP's publication describing academic pharmacy's vital statistics, as of January 2008, there were 100 U.S.-based schools of pharmacy with accredited (full or candidate status) professional degree programs.[17] Our investigation yielded 91 valid e-mail addresses with representatives from 46 schools responding to the questionnaire.

The Web-based tool Survey Monkey was employed for data collection and summary. An e-mail message with a link to the survey instrument was used. Microsoft Excel® software was used for statistical analysis. Respondents were allowed to omit responses if desired and were not required to complete the entire

questionnaire. The questionnaire consisted of 40 questions which addressed the following IPPE program topics in addition to school demographics: program oversight, experience site selection, program structure, relationship to didactic curriculum, and quality assurance issues.

Results

Population Demographics

Forty-six of the 91 schools of pharmacy responded, resulting in a response rate of 50.5 %. Eighty-five percent of those who chose to participate in the survey responded to every question (39 of 46 respondents). The 46 schools characterize a broad geographic distribution from 33 states (see Table 1). The pharmacy schools' class graduate sizes ranged from a minimum of 48 to a maximum of 300, mean=115 and SD (standard deviation)=48. Participants were asked to estimate the percentage of their professional students that have pharmacy experience (not including brief shadowing experiences) prior to entrance into the professional program. Forty-one of 46 participants responded with ranges from 0-100%, with an average of 52.5%, SD=25.

Table 1: Pharmacy School Respondents by Region

Region[a]	n=46	Percent of Survey (%)
Midwest	14	30.4
Northeast	7	15.2
South	15	32.6
West	10	21.8

[a]Regions delineated from the United States Census Bureau[18]

Program Oversight

On average, schools employed 1.64 full-time equivalent (FTE) faculty plus 0.62 FTE professional and 0.64 FTE clerical staff for an average of 2.90 FTEs to manage the schools' entire IPPE program (based on an average graduating class size of 115 students). In addition, program directors were asked the question, "Based on your current IPPE program curricula, how many, if any, additional staff are needed to effectively run your IPPE program? (Report in FTEs)." Figure 1 depicts, on average, the number of additional staff needed as reported by directors, delineated by graduating class size. Responses ranged from 0-3 additional FTEs, with an average of 1 FTE reported in each class size category. Demographics of IPPE directors are provided in Table 2.

Site Selection

Participants indicated that half of the programs assigned students to specific IPPE sites. The remainder of schools allowed students to select their own sites (5.0%), used a semi-structured approach where students select from a predetermined list (12.5%), or used a combination of student-selected and school organized sites (32.5%), depending on the program year. Approximately half of the respondents believed that assigned sites were superior to student-selected sites (52.5%) with the remaining half (47.5%) believing that site quality was generally equal (see Table 3).

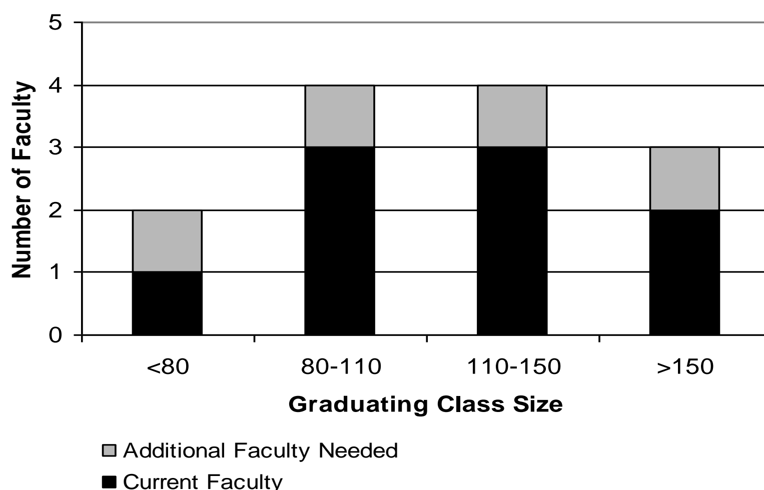

Figure 1: Current Staff and Staffing Needs among IPPE Programs[a]
[a]Presented using median data

Program Structure

Standards 2007 do not specify how IPPE programs are structured within the curriculum. A variety of pre-experience requirements are shown in Table 4 below.

Standards 2007 specify that IPPE programs constitute no less than 5% of the curriculum, equating to at least 300 hours of practical experience.[1] The average hourly IPPE requirements for the 41 schools responding were 118 and 106 hours of community and institutional experience, respectively. Of the responders, 51.2% reported requiring additional career path experience. Four of 39 (10.3%) schools reported offering IPPEs prior to the first professional year and 4 of 39 schools (10.3%) offered IPPEs after the third professional year prior to clerkship rotations. A variety of experiences were used to fulfill IPPE requirements (see Table 5).

The survey results demonstrate that 59.5% of schools structure IPPEs as its own course, 21.4% of schools include IPPEs as part of another course, and 19.1% designate IPPEs as a graduation requirement. Types of IPPE assessment involved assigning letter grades (28.6%), pass / no pass (38.0%), satisfactory / unsatisfactory (16.7%), or no grade was assigned (16.7%).
When respondents were asked if they believed that students should be allowed to use pharmacy employment and paid internship experiences as IPPEs, half answered yes. Although Standards 2007 Appendix C specifically allows exemptions from IPPEs, all but 2 schools surveyed reported they do not allow exemptions for prior experience.

Standards 2007 state that didactic course work itself should not be counted toward the curricular requirement of introductory pharmacy practice experiences; however, 16.7% of respondents count laboratory experiences as IPPEs. Similarly, 26.2% count components of didactic/classroom work and 38.1% count some written assignments as IPPEs (see Table 6).

Table 2: IPPE Director Demographics

IPPE Director	n		%
Appointment	42		
Faculty		39	92.9
Staff		3	7.1
Education	40		
PharmD		31	77.5
MS		6	15.0
PhD		1	2.5
BS or less		2	5.0
Scholarship Responsibility	42		
Yes		30	71.4
No		12	28.6
Percent of Time Devoted to IPPE	42		
Less than 25%		11	26.2
26-50%		20	47.6
51-75%		5	11.9
76-100%		6	14.3
Directs APPE and IPPE Programs	42		
Yes		22	52.4
No		20	47.6
Serves on Executive Committee	42		
Yes		11	26.2
No		31	73.8
Utilizes an IPPE Committee	42		
Yes		23	54.8
No		19	45.2

Quality Assurance

Of the directors surveyed, nearly three-quarters have a structured preceptor training program in place. Approximately half of the schools require students to create portfolios to document their experiences. Eighty-five percent of schools reported performing site visits minimally once per year. A commonly used method to ensure that experiential hours are completed as claimed is the submission of written documentation forms (see Table 7). Table 8 provides a breakdown of which program participants are evaluated and by whom.

Only 21 of 42 respondents indicated they believed their IPPE program was currently in compliance with all requirements in Standards 2007.

Table 3: IPPE Practice Site Selection Criteria (n=40)

IPPE Site Selection	n	%
Practice Site Selection		
Student-selected	2	5.0
School organized	20	50.0
Combination[a]	13	32.5
Semi-structured[b]	5	12.5
Quality of Sites		
Student-selected better quality	0	0.0
School-selected better quality	21	52.5
Generally equal in quality	19	47.5
Use of Computer Software for IPPE Placement		
Yes	20	50.0
No	20	50.0
Allow International Experiences for IPPE		
Yes	5	12.5
No	35	87.5

[a]Students may be assigned or find their own sites
[b]Students choose sites from a list provided by the school

Table 4 : IPPE Pre-Experience Requirements (n=41)

IPPE Requirement	n	%
Criminal Background Check	27	65.9
Malpractice Insurance	24	58.5
Immunizations	35	85.4
HIPAA Training	38	92.7
CPR Training	6	14.6
Drug Screen	5	12.2
Blood Borne Pathogen Training	4	9.8

Table 5: Examples of IPPE Experiences (n=33)

Types of Experience	n	%
Patient Interview / Medication Histories	27	81.8
Service Learning	25	75.8
Health Fairs	20	60.6
Healthcare Provider Shadowing	14	42.4
Medication Therapy Management	12	36.4
Attendance at Professional Organizations	11	33.3
Immunization Training	7	21.2
Board of Pharmacy Meetings	6	18.2

Discussion

Program Oversight

Our questionnaire results revealed that pharmacy schools, on average, use approximately 3 FTEs to manage an IPPE program. When results were stratified based on graduating class size, the number of FTEs used did not correlate linearly as logic would imply. Many variables may influence this discrepancy, including the use of technology, use of student-driven site selection, and whether the school is currently in compliance with Standards 2007. At the time of reporting, almost half of the schools reported noncompliance with the revised standards and indicated a need for additional staff to assist with IPPE programming, regardless of class size. The majority of IPPE directors devote 50% or less of their time to IPPE program oversight due to other responsibilities, such as concomitant oversight of APPE programs, scholarly responsibilities, and/or teaching/academic responsibilities. These results clearly demonstrate that IPPE programs, in general, are understaffed. In a 2008 Policy Committee Report, APhA urged schools and colleges of pharmacy to dedicate financial and human resources to experiential education proportional to the number of credit hours students spend in this portion of the curriculum.[4]

The questionnaire also revealed that only a quarter of IPPE directors are members of the schools' Executive Committee. Standards 2007 (Appendix C) states that experiential program directors should serve on or be ex-officio members to key committees where input can be most effective, since introductory and advanced experiential programming comprise a minimum 30% of the curriculum.

Site Selection

Although half of responders felt school-selected sites were superior to student-selected sites, no responders felt that student-selected sites were better. However, many advantages exist for utilization of student-selected sites. Students' satisfaction and engagement with the site may be improved due to the students' ability to locate a site of interest and choose an ideal location and schedule meeting their individual needs. Allowing students to pursue sites assists the director in increasing the "pool of sites" and aides in site development. This method also decreases time spent on tedious student placements. The ability to provide preceptor training prior to a placement, develop site-specific objectives, and review site performance history are all advantages of school-selected sites. Additionally, students who desire structure often prefer being placed at a site.

Table 6: IPPE Program Structure (n=42)

IPPE Structure	N	%
Component in Curriculum		
Part of an Existing Course	9	21.4
Separate Course	25	59.5
Stand-alone Graduation Requirement	8	19.1
Use Structured Rotation Blocks[a]		
Yes	19	45.2
No	23	54.8
Grading		
Letter Grade	12	28.6
Pass/No-Pass	16	38.0
Satisfactory/Unsatisfactory	7	16.7
No Grade Assigned	7	16.7
IPPE Assigned Credit Hours		
Yes	32	76.2
No	10	23.8
Laboratory Experiences Count as IPPE Hours		
Yes	7	16.7
No	35	83.3
Components of Didactic Coursework Count as IPPE Hours		
Yes	11	26.2
No	31	73.8
Students Complete Written Assignments that Count Toward IPPE Hours		
Yes	16	38.1
No	26	61.9

[a] A structured rotation block is defined as an IPPE that is the student's primary academic responsibility (little or no simultaneous didactic coursework).

Table 7: Quality Assurance

Quality Control Issue	n		%
Structured IPPE Preceptor Training Program Exists	42		
Yes		30	71.4
No		12	28.6
Frequency of Faculty Site Visits	39		
Never		6	15.4
Once Yearly		27	69.2
More Than Once Yearly		6	15.4
How Experiential Hours are Reported	39		
Directors Contact Preceptors Following Student Form Submission		2	5.1
Preceptors Submit Written Documentation		28	71.8
Document Requires Preceptors' Original Signature		20	51.3

Table 8: Evaluation and Feedback (n=39)

IPPE Evaluations	n	%
Students Evaluate:		
Themselves	7	17.9
Preceptors	32	82.1
Sites	32	82.1
IPPE Director	9	23.1
IPPE Program	16	41.0
Preceptors Evaluate:		
Students	37	94.9
IPPE Director	3	7.7
IPPE Program	14	35.9
IPPE Director Evaluates:		
Students	11	28.2
Preceptors	25	64.1
Sites	29	74.4
IPPE Program	13	33.3

Standards 2007 state that IPPEs must involve actual practice experiences in community and institutional settings. One school reported requiring no community experience and 3 schools did not require institutional experience, which demonstrates noncompliance with Standards 2007. Many schools reported difficulty in locating a sufficient quantity of institutional sites and are therefore forced to require students to find and participate in brief, observational-only shadowing experiences to comply with Standards 2007.

Although international introductory experiences have been described in the literature, most schools do not allow international experiences to count as IPPEs.[19] Standards 2007 designates that core advanced practice experiences must be completed in the United States or its territories but does not specify a similar requirement for IPPEs.[1] Participants may have responded negatively to this questions because their school has not developed international IPPE opportunities.

Program Structure

Standards 2007 state that IPPEs should begin early in the curriculum, but do not specifically address credit for IPPEs prior to entrance into the professional program[1]. Approximately 10% of schools surveyed allow experiences in the prepharmacy curriculum to satisfy IPPE requirements. Although 90% of schools do not use the prepharmacy time period to begin IPPEs, there are benefits of doing so. The process of professionalization, including curricula on the development of empathy, ethics, professional attitudes and behaviors, oral and written communication skills, collaboration, and problem-solving skills can all be taught within early experiences.[20] Patient interviews, shadowing healthcare professionals, healthcare-related service-learning, and public health projects are all potential avenues for learning prior to entrance into a professional program. Development of these abilities and attitudes not only serves as a foundation upon which to build a professional identity, but also encourage students to engage with their local communities. [20]

ACPE Guideline 14.3, which states students must not receive remuneration for any pharmacy practice experiences (introductory or advanced) for which academic credit is assigned appears to assume that academic credit is always awarded for IPPEs; however, survey results indicate that over a fourth of the schools surveyed do not assign credit to these experiences. This may be due to the assumption that if credit is not awarded for IPPEs, then students may receive remuneration for the experience, as implied. When asked if participants believed that students should be allowed to receive IPPE credit for pharmacy employment or paid internships, half responded positively. This may be the single most controversial issue regarding Standards 2007 for experiential learning stakeholders. Reasons to preclude payment for experiences include: 1) promotion of a true academic learning experience versus performing duties of an employee, 2) inequities among students who work for pay and receive credit for experience versus those who cannot, e.g., some international students, and 3) incentive for sites to take students. Arguments supporting remuneration for experience include: 1) lack of data demonstrating that paid experiences are less valuable than non-paid experiences or that outcomes cannot be met 2) increased willingness of pharmacists to mentor a potential long-term employee versus a student on rotation for a short period time, 3) site regulations prohibiting access to medical records unless students are employed (for liability or confidentially reasons), and 4) limitations on students' income or inability to participate in paid summer internships.

Although Standards 2007 state that exemptions for past experiences are permitted assuming outcomes can be documented, they do not specify the nature of exempted experiences, e.g., paid versus unpaid, maximum length, or types of experiences permitted.

An additional area unclear to directors identified through survey results is the use of laboratory experiences and/or simulations as IPPEs, particularly those involving real patients. Standards 2007 states that didactic coursework itself should not be counted as IPPEs and provides an extensive list of acceptable activities involving off-campus experiences, but does not specifically address laboratories or simulations.

It is also unclear as to whether Standards 2007 promote early experiences primarily with pharmacists or whether they encourage interdisciplinary experiences precepted by other healthcare professionals. The introductory years seem a logical place to promote interdisciplinary learning since students lack pharmacy knowledge, but are capable of making significant patient care contributions. Understanding the role of physicians, nursing staff, and providers such as dieticians, is essential in today's practice of holistic patient care. Experience in these areas also provides students with insight into the expectations other healthcare professionals have for pharmacists.[21]

Quality Assurance

ACPE Standard 14.1 requires that schools ensure preceptors receive orientation, training, and development. Although the majority of schools report having a structured preceptor training program, almost one-third of schools report that no such training exists, demonstrating an area of non-compliance with Standards 2007. No directives currently exist on the type of training required.

ACPE Standard 15 requires that students, preceptors, practice sites, faculty, and programs must be assessed and evaluated, though again, not all schools are in compliance, as evident in Table 8. Half of responders indicated their programs are not currently in compliance with Standards 2007. One potential explanation is that compliance is not mandated for some schools until their next accreditation. Lack of resources (including personnel, sites, and monetary resources) and difficulty with interpretation of Standards 2007 are other issues negating compliance. Also, implementation of Standards 2007 may require a curricular redesign, imposing yet another barrier.

Study Limitations

Although there does not appear to be a consensus in the literature as to an acceptable response rate for Web-based questionnaires, it is generally thought that response rates below 50% become a study limitation, resulting in respondents who self-select.[22] This questionnaire yielded a response rate of 50.5%, representing 46 schools of pharmacy. Approximately half of fully accredited schools of pharmacy were not represented in the results, making non-response error a consideration. Information from non-participating schools may have differed, influencing interpretation of the results.

Specific item-level response rates as seen in the tables were lower than others. A review of these items indicates that a question may not have been clear, that not all possible choices may have been represented as options, or that the participant did not know the answer to the question. For example, 5 participants did not answer question number 3 when asked to estimate the percentage of professional students having pharmacy experience prior to entrance into the professional program. It is postulated they failed to answer because they did not have this data readily accessible. Additionally, participants may have had difficulty using the Web site or non-purposeful omissions may have occurred.

Direction of Future Research

Our study left many issues for further exploration, including descriptions of exemplary practice models, correlations between school demographics and ability to comply with Standards 2007, expectations and quality control among sites, remuneration by schools to preceptors and/or pharmacy sites, how to define and assure outcome competencies are met, the role of service learning in IPPEs, how to deal with the challenges of preceptor training, retention rates, and resources, legal and liability constraints, competition among schools for sites, and scheduling challenges of IPPEs within an established curriculum. These and other issues are described in an American Pharmacists Association publication on experiential education.[23]

The survey identified a high level of noncompliance within several areas of Standards 2007 on IPPEs, however, respondents were not asked to identify their specific barriers when attempting to meet a Standard.

The investigators feel that while 300 hours of experience is both reasonable and obtainable and that having a variety of experiences is valuable, the requirement that schools provide an early institutional experience for every student may not be feasible. This will be particularly difficult for schools who have no affiliation with or are not located near a large teaching hospital. Competition with advanced pharmacy practice experiences (clerkships), coupled with the reluctance of institutions to spend time and resources integrating large numbers of students poses serious placement issues for pharmacy schools. Further research is needed to determine whether supply can realistically meet demand.

Conclusion

In conclusion, our results identified commonalities in program oversight, site selection, program structure, and quality assurance as well as identifying discrepancies in interpretation and lack of compliance with Standards 2007 in pharmacy programs around the country. Common barriers to compliance include understaffed programs, difficulty in locating institutional sites, preceptor training methods, defining IPPE outcomes, and restriction on pharmacy employment as IPPEs. Discrepancies in interpretation of the ACPE Standards 2007 involve issues related to course credit, site placement, minimal time requirements in community and institutional settings, the use of laboratory experiences and simulations involving real patients, international IPPEs, and the use of interdisciplinary experiences with non-pharmacist preceptors. These results identify a need for clarification within Standards 2007 and insight into barriers limiting compliance with the ACPE Standards 2007. This research should serve at a catalyst for further research in specific areas of experiential pharmacy curricula.

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Appendix A*

1. In which state is your pharmacy school located?

2. Each year, how many students graduate with a Doctor of Pharmacy degree from your program?

3. Approximately what percentage of your professional students has pharmacy work experience (not including brief shadowing experiences) prior to entrance into the professional program?

4. Is your primary IPPE director/coordinator Faculty or Staff?
   Faculty
   Staff

5. How many full time FACULTY members coordinate or assist with management of your IPPE program?

6. How many full time PROFESSIONAL STAFF coordinate or assist with management of your IPPE program?

7. How many full time CLERICAL STAFF assist with your IPPE program?

8. Based on your current IPPE program curricula, how many, if any, additional staff members are needed to effectively run your IPPE program (in FTEs)?

9. What is the highest educational level of the primary IPPE director/coordinator?
   BS Degree
   PharmD
   MS Degree
   PhD
   Other

10. Does the primary IPPE director/coordinator have scholarship responsibilities?
    Yes
    No

11. What percent of the primary director or coordinator's times is devoted to IPPE?

12. Do you have /utilize an IPPE committee to make programmatic decisions?
    Yes
    No

13. Is your IPPE director/coordinator part of the School's Executive Committee?
    Yes
    No

14. Are your IPPE and APPE director/coordinator the same person?
    Yes
    No

15. Are the IPPE sites student-selected, school organized, a combination, or semi-structured?
    Student selected: students locate own sites
    School-organized: students are assigned sites
    Combination: student may be assigned or may find their own sites
    Semi-structured: students choose sites from a list provided by the school
    None on these (please specify)

16. How do you think the quality of student-selected sites compares to the quality of school-organized sites?
    Student-selected sites are better
    School-organized sites are better
    They are generally equal in quality.

17. How many IPPE hours do you currently require your students to complete in COMMUNITY settings?

18. How many IPPE hours do you currently require your students to complete in INSTITUTIONAL settings?

19. Do you require experiences other than community or institutional?
    Yes
    No, all hours must be in either community or institutional settings
    No, but additional experiences are allowed.

20. What are your IPPE pre-experience requirements? (Check all that apply)
    Criminal background check
    Malpractice insurance
    Immunizations
    HIPAA training
    Other (please specify)

21. Do you allow international experiences to count toward IPPE requirements?
    Yes
    No

22. Is computer software used for IPPE site placement?
    Yes
    No
    If so, what type?

23. In which time period do IPPEs occur? (Select all that apply)
    Prepharmacy
    Summer prior to 1st year
    During 1st year
    Summer prior to 2nd year
    During 2nd year
    Summer prior to 3rd year
    During 3rd year
    After the 3rd year but before APPEs

24. Are IPPE hours set as a rotation block, in which the experience is the student's primary academic responsibility (little or no didactic coursework)?

Yes
No
If so, how many hours are in one IPPE rotation block?

25. What types of experiences are counted as IPPE hours other than community and institutional pharmacy distribution? (Check all that apply)
Service learning
Immunization training
MTMs
Health fairs
Professional organizations or attendance
Board of Pharmacy meetings
Healthcare provider shadowing
Patient interviews and medication histories
Community presentations
Mentoring or shadowing APPE students
Other (please specify)

26. What type of grade do students receive for IPPEs?
Letter grade
Pass/No-pass
Satisfactory/Unsatisfactory
No grade is assigned

27. Does your IPPE program allow for student exemptions for past experiences?
Yes
No
If so, may student be paid for their experiences? (Y/N)

28. Do you believe that students should be allowed to receive IPPE credit for pharmacy employment and paid internship experiences?
Yes
No

29. How are IPPEs structured?
IPPE is part of a larger course
IPPE is its own course
IPPE is a stand-along graduation requirement
Other (please specify)

30. Are IPPEs assigned credit hours?
Yes
No
If yes, what are the total credit hours given for the entire IPPE requirement?

31. Are your students required to complete IPPE portfolios?
Yes
No

32. Do any laboratory experiences count toward IPPE hours?
Yes
No

33. Do you interpret the ACPE standard to mean that IPPEs are only legitimate if conducted in real (community based) practice settings (opposed to simulations or a lab experiences)?
    Yes
    No

34. Does any didactic/classroom work COUNT toward IPPE hours?
    Yes
    No

35. Are students given written assignments that COUNT toward IPPE hours?
    Yes
    No

36. What methods are in place to insure that experiential hours are completed as reported by students? (Check all that apply)
    Preceptors are contacted following submission of student forms
    Preceptors are required to submit documentation forms
    Documents must be submitted with preceptors original, uncopied signature
    None of these
    Other (please specify)

37. Which IPPE program participants are evaluated and by whom? (Check all that apply)

	Students	Preceptors	Sites	IPPE Director	IPPE program
Students evaluated					
Preceptors Evaluate					
IPPE program/director/coordinator evaluates					
Other (please specify)					

38. How often does an IPPE faculty member or staff perform individual site visits?
    Never
    Once per year
    More than once per year

39. Do you have a structured preceptor training program?
    Yes
    No
    If so, how often do sites complete training?

40. Do you feel that your program currently complies with all aspects of the new ACPE standards?
    Yes
    No

*The format survey shown here was slightly different from the orginial Web-base survey, but the content was the same.