

**AACP Task Force on IPPE Competencies
Report to the AACP Board of Directors
May 2009**

Background

The AACP Task Force on Introductory Pharmacy Practice Experience (IPPE) Competencies was charged by the AACP Board of Directors to develop a nationally defined set of IPPE competencies and mechanisms to evaluate the outcomes of those competencies based on feedback AACP has received from the ACPE. ACPE had asked the Academy to consider an effort that brought education and practice stakeholders together to address IPPE competencies and assessment. The Task Force met February 3, 2009. A list of Task Force members and staff observers is attached as Appendix A.

Methods

The Task Force addressed what competencies students should either be exposed to or have mastered during the IPPE through the use of two surveys and extensive discussion. The first survey was completed by all Task Force members and a staff representative from each of the stakeholder organizations before the Task Force's meeting. A second survey, which included several new competency statements and revisions of statements from the first survey, and a different ranking system, was only completed by Task Force members.

The pre-meeting survey was compiled using a set of competencies that was created from a number of sources. These included competency areas and activities identified through AACP's Experiential Education Section, the AACP Professional Affairs Committee, and the AACP Center for Advancement of Pharmacy Education (CAPE), information provided by individual schools/colleges of pharmacy, pharmacy practice associations, and a literature review. The competency statements did not attempt to distinguish between Advanced Pharmacy Practice Experiences (APPEs) and IPPEs. While the competency statements may not be exhaustive, Task Force members believe them to be comprehensive.

In the pre-meeting survey directions, Task Force members were asked to select the level of mastery a pharmacy student should have after completing IPPEs, and to add any additional competencies not contained in the list. The following rating scale was used to identify what level of mastery a pharmacy student should have achieved in each competency area outcome after completing IPPEs:

- Selection # 1: Observation/familiarity
- Selection # 2: Basic proficiency/skills developed
- Selection # 3: Competency attained to perform
- Selection # 4: Not applicable to an IPPE

After reviewing and discussing results of the pre-meeting survey at the Task Force meeting, Task Force members agreed that the survey be readministered after appropriate corrections, deletions and additions, using a new ranking system, and the ranking of each competency to be based on whether a student entering into their APPEs needed have basic or mastery competency, and whether the competency was essential or optional. Results showed a clear pattern of consensus and are attached as Appendix B.

The competency statements in the second survey were organized according to three general CAPE outcomes. Task Force members were asked to rate each competency statement in one of six ways:

- Selection BE: Basic proficiency/skill of this essential competency attained before APPEs
- Selection BO: Basic proficiency/skill of this optional competency attained before APPEs
- Selection ME: Mastery of this essential competency attained before APPEs
- Selection MO: Mastery of this optional competency attained before APPEs
- Selection AO: APPE competency
- Selection DD: Delete from list

Results and Discussion

The results of the pre-meeting survey demonstrated that there was some confusion as to how the competencies should be ranked. Some Task Force members attempted to rank the competencies as just those emanating from completing the 300-hour required IPPE. However, most Task Force members found that this was difficult, if not impossible, and ranked the competencies based on pre-APPE requirements. During Task Force meeting discussion, a consensus developed that the attainment of a definitive set of competency statements could not be attributed directly to the IPPE experience, specifically the five percent or 300-hour experience, the majority of which has to be completed in institutional and community practice settings. Instead, the Task Force focused its efforts in attempting to define a set of competencies that must be attained before a student begins APPEs.

In the pre-meeting survey analysis, there was reasonable consensus that students had to *achieve mastery* in areas such as obtaining and using drug information, providing self-care counseling, prescription processing, and professionalism prior to entering APPEs. There was also consensus that students had to demonstrate *basic familiarity* in areas such as developing, implementing and monitoring drug therapy, documentation, interprofessional communication, public speaking, management, and practice improvement. There was less consensus with *mastery* in areas such as ethical reasoning, problem solving, medication system improvement, and continuous quality improvement (CQI).

In the post-meeting survey, the Task Force members agreed on *mastery* of certain competencies, on *basic proficiency/understanding* on certain competencies, and on designating some competencies for the APPE experiences. There were few competencies selected as either *mastery optional* or *basic proficiency optional* (MO or BO.) There were differences of opinion amongst the Task Force members on a number of competency

statements, and in some cases, these differences were split almost evenly between *mastery essential* or *basic proficiency essential* (ME and BE.) A similar situation occurred between some of the competency statements with a split between *basic proficiency essential* (BE) and an APPE competency (AO.) In those situations where Task Force members selected to delete a competency from the list (DD), indicating the statement was not germane, others picked it as an APPE competency (AO.) In attempting to best illustrate these differences of opinion, we developed five categories:

Category	
BE	A student must have a basic understanding in the competency area prior to entering APPEs
BEME	A student must have basic and possibly mastery in the competency area prior to entering APPEs
ME	A student must have mastery in the competency area prior to entering APPEs
BEAO	A student may have a basic understanding in the competency area prior to entering APPEs or will have mastery of this competency upon successful completion of APPEs
AO	A student will have mastery of this competency upon successful completion of APPEs

In the post meeting survey using the new ranking system, competency areas where students should acquire *mastery* (ME) *prior to their APPEs* include:

- processing and documenting the prescription/drug order
- professional behavior
- understanding of dosage forms and devices and how their use should be communicated to patients
- patient self-care
- some public health competencies

Competency areas where students should acquire *basic understanding prior to their APPEs* or *have mastery of the competency prior to entering their APPEs* (BE/ME) include:

- more complex drug therapy management activities,
- patient referral to other health professionals
- resolving conflict in practice

- communicating toward a team approach to care
- vendor/product/formulary management, and more complex personnel and systems management

Competency areas where students should acquire *basic understanding (BE) prior to their APPEs* include:

- some patient-specific information
- communication with other health professionals about a patient's therapy plan
- understanding medical devices and their appropriate use and counseling patients
- dealing with ethical dilemmas
- dealing with emergency/overdose situations

Competency areas identified *most appropriately for APPEs (BE/AO, AO)* include:

- practice improvement activities
- complex medication use system/improvement activities
- DUE guidelines
- QA activities

As competence increases while students move from observing to doing and integrating, there are many teaching techniques and learning environments that may be used. In many states, students are gaining additional practice experience as they complete required paid internships. After considerable discussion, the Task Force agreed they would focus on the minimal set of competencies that students must have attained before they begin their APPE experiences, regardless of learning environment or teaching technique. The Task Force noted that many of the competencies required prior to APPEs may be more effectively and efficiently learned via methods other than an introductory pharmacy practice experience.

Further, with regard to service learning, the ACPE representative noted this could be used in the IPPE but not for the entire 5% IPPE requirement. He also noted ACPE would consider leadership opportunities related to pharmacy as part of the IPPE requirement. This is reflective of guidance in Appendix C of the ACPE Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree (Effective: July 1, 2007). As noted in Appendix C, IPPEs may use various formats, including: shadowing of practitioners or APPE students; interviews of real patients, service learning (as discussed in Appendix C); real practice experiences in community, institutional, long-term care pharmacies; etc. The ACPE Board of Directors adopted an IPPE Policy Statement on January 8, 2009 that also states, "The majority of students' assigned IPPE time (minimum of 300 hours) must be balanced between pharmacists' activities within community pharmacy and institutional health system settings."

Difficulties caused by State Board internship requirements and the new IPPE/APPE standards were noted by the Task Force. There are different standards for each state regarding internship hours. In some cases, a college/school's practical experience component meets the entire Board internship requirement. While in others, internship hours are required in addition to the IPPE/APPE requirements. Several Task Force members noted that some IPPE experiences are being moved into the summer, which consequently interferes with the student's ability to obtain State Board required internship hours or employment during the summer. Task Force members believe state boards of pharmacy should look at their internship requirements, in consultation with their schools/colleges, to ensure goals are met with the least burden. However, paid internships may be a reasonable way to acquire some competencies if coupled with a good overall assessment of skills and knowledge even though they would not be acceptable to fulfill IPPE hour requirements. Discussion at the NABP/AACP District Meetings was suggested. Perhaps recommending this to NABP should be considered.

Key Messages for ACPE

Key messages Task Force members believe should be conveyed by the Academy to ACPE include that:

- Simulation may be a very effective way to teach some pre-APPE competencies and should be considered as a substitute for a portion of the 300-hour IPPE requirement. A definition of simulation, a literature search on its use and effectiveness in other health profession's education, and development of assessment methods should be undertaken by the Academy.
- ACPE must consider preceptor burden, site saturation, and school resources in determining how IPPE hours are established and evaluated.
- ACPE must allow experimentation by schools to determine which instructional strategies work best to assist students in attaining specific competencies. Some schools/colleges view the current IPPE hour requirements and the ACPE interpretation of what is acceptable as an IPPE experience to greatly limit experimentation and innovation. Some Task Force members noted pharmacy schools/colleges (and their students) may be better served by curricula that do not have the artificial delineation between IPPE and APPE. In fact, a continuum of experiences throughout the curriculum was the initial goal of the first PharmD accreditation standards. The fact that some colleges/schools were not meeting this initial standard did not mean the goal was inappropriate or unenforceable. Arbitrarily assigning an hour requirement to separate IPPE and APPE requirements, while much easier to evaluate, changed the focus from outcomes of pharmacy education, to inputs. The key is how the various curricular components interface with each other to produce competent practitioners, which will vary among institutions. However, all should be held to the same outcome competencies.

The ACPE representative asked for feedback from the schools/colleges regarding the "optimal" number of hours for IPPEs as they continue experimentation with integration

of practice throughout the curriculum. Given that an hour requirement is an inappropriate measure of attaining competence in any area, the Task Force declines to provide an optimal number.

With regard to simulation as a teaching technique for IPPEs, the Task Force recommends the Academy undertake a project to describe/define effective simulation techniques, how they are defined, how they have been used in higher education and in health education in particular, how they can be used for teaching/learning pharmacy practice skills, how they should be evaluated to assure quality education and learning, and other appropriate analysis to serve its members in utilizing simulation effectively. Simulations may also promote greater uniformity in the teaching and learning of practice skills, whereas learning of these skills will be varied when completed at a large number of practice sites and preceptors across the country.

Assessment Methods

Task Force members agreed there was not one “magic bullet” to assess outcomes related to the competencies. Rather, several assessment methods and multiple assessors should be used. Assessment should be continuous, preceptor efficient, and appropriate to the level of the activity and the competency being evaluated. Some of the specific methods discussed include: preceptor evaluation (not by itself, however), faculty evaluation, Objective Structured Clinical Examinations (OSCEs), student self-reflection, and student portfolios. Further research is needed and recommended by the Academy to validate various assessment methods.

The Task Force hopes their work to construct a comprehensive competency document will help guide schools/colleges in their IPPE/APPE pharmacy practice implementation and assessment.

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Appendix A

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