



AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY

Development of a Profile System to Display Exemplary Pharmacy Practice Experiential Sites

**Academic-Practice Partnership Initiative project completed September 2005
Supported by a grant from Merck & Company, Inc.**

Project Team: Auburn University Harrison School of Pharmacy
Robert E. Smith, Project Director
Debbie C. Byrd
Bernie R. Olin
April Staton

The purpose of this project was to develop profiles of exemplary pharmacy practice sites. These sites would be desirable as high quality experiential teaching sites for fourth year Doctor of Pharmacy students and would be optimum for Advanced Practice Experiences. They would be considered “benchmarks of excellence” to which colleges and schools of pharmacy could aspire as they develop and implement their advanced clinical education programs.

Three levels of criteria were used to determine the essential elements necessary for a pharmacy practice site and preceptors at those sites to be considered exemplary.

Level I relates to the five overarching principles or core competencies reported in the 2001 Institute of Medicine report *Crossing the Quality Chasm: A New Health System for the 21st Century*. The integration of these five core competencies (listed below) into health professions education was the focus of a 2002 IOM Summit Conference. A complete discussion of findings of this Conference can be found in the 2003 IOM publication, *Health Professions Education: A Bridge to Quality*.

Level II incorporates the AACCP CAPE (Center for the Advancement of Pharmaceutical Education) Educational Outcomes for Doctor of Pharmacy Programs released in 2004. These outcomes were revised from the 1998 edition to reflect the five core competencies outlined in the IOM reports. Subsequently the Accreditation Council of Pharmaceutical Education used the AACCP CAPE Outcomes as a source for their draft ACPE 2005 Standards for the Accreditation of Doctor of Pharmacy programs. Thus the core competencies have been integrated into two primary documents that outline what pharmacy students are expected to be able to do in regards to the provision of pharmaceutical care.

Level III incorporates the essential, specific criteria necessary for an exemplary site and the preceptors found therein to provide the patient care activities required to sustain an experiential education program centered on the IOM core competencies.

The five Level I core competencies, taken from the previously mentioned IOM Report, provide the overarching framework for this work. They are:

- The site must provide **patient-centered care**
- When possible, the site must involve **interdisciplinary teams**
- The site must employ **evidence-based practice**
- The site must apply **quality improvement** principles
- The site must utilize **informatics**

These five core competencies or characteristics were also integrated into the AACP Center for Advancement of Pharmaceutical Education's (CAPE) Pharmacy Education Outcomes (available at <http://www.aacp.org/site/page.asp?TRACKID=&VID=1&CID=1031&DID=6074>).

The Accreditation Council on Pharmaceutical Education used the CAPE Outcomes as a source when they developed the draft version of the 2005 ACPE Pharmacy Education Accreditation Standards (available at www.acpe-accredit.org). These educational outcomes describe what a Doctor of Pharmacy graduate should be able to do upon graduation and are therefore an essential factor in the selection of exemplary pharmacy practice sites. Both documents are available online. The AACP CAPE Pharmacy Education Outcomes and the 2005 ACPE Pharmacy Education Accreditation Standards are listed below.

AACP CAPE Pharmacy Education Outcomes®

Pharmaceutical Care

*Provide patient-centered care

- Design, implement, monitor, evaluate and adjust pharmaceutical care plans that are patient-specific and evidence based.
- Communicate and collaborate with prescribers, patients, care givers, and other involved healthcare providers to engender a team approach to health care.
- Retrieve, analyze, and interpret the professional, lay, and scientific literature to provide drug information to patients, their families, and other involved health care providers
- Carry out duties in accordance with legal, ethical, social, economic and professional guidelines.
- Maintain professional competence by identifying and analyzing emerging issues, products and services that may impact patient-specific therapeutic outcomes.

*Provide population-based care

- Develop and implement population-specific, evidenced- based disease management programs and protocols based upon analysis of epidemiologic and pharmaco-economic data, medication use criteria, medication use review and risk reduction strategies.
- Communicate and collaborate with prescribers, population members, care givers, and other involved health care providers to engender a team approach to health care.
- Retrieve, analyze and interpret the professional, lay and scientific literature to provide drug information to other health care providers and to the public.
- Carry out duties in accordance with legal, ethical, social, economic and professional guidelines.
- Maintain professional competence by identifying and analyzing emerging issues, products and services that may impact population- based therapeutic outcomes.

Systems Management

*Manage human, physical, medical, informational and technological resources

- Apply relevant legal, ethical, social, economic and professional principles/issues to assure efficient, cost-effective utilization of human, physical, medical, informational, and technological resources in the provision of patient care.
- Communicate and collaborate with patients, prescribers, other health care providers, and administrative and supportive personnel to engender a team approach to assure efficient, cost-effective utilization of human, physical, medical, informational, and technological resources in the provision of patient care.
- Carry out duties in accordance with legal, ethical, social, economic and professional guidelines.
- Maintain professional competence by identifying and analyzing emerging issues, products and services that may impact management of human, physical, medical, informational and technological resources in the provision of patient care.

*Manage medication use systems

- Apply patient- and population-specific data, quality assurance strategies, and research processes to assure that medication use systems minimize drug misadventuring and optimize patient outcomes.
- Apply patient- and population-specific data, quality assurance strategies, and research processes to develop drug use and health policy, and to design pharmacy benefits.
- Communicate and collaborate with prescribers, patients, caregivers, and other involved health care providers and administrative and supportive personnel to identify and resolve medication use problems.
- Carry our duties in accordance with legal, ethical, social, economic and professional guidelines.

- Maintain professional competence by identifying and analyzing emerging issues, products and services that may impact medication use systems, to develop use and health policy, and to design pharmacy benefits.

Public Health

*Assure the availability of effective, quality health and disease prevention services

- Apply population-specific data, quality assurance strategies, and research processes to develop, identify and resolve public health problems.
- Communicate and collaborate with prescribers, policy makers, members of the community and other involved health care providers and administrative and supportive personnel to identify and resolve public health problems.
- Carry out duties in accordance with legal, ethical, social, economic and professional guidelines.
- Maintain professional competency by identifying and analyzing emerging issues, products, and services that may affect the efficacy or quality of diseases prevention services to amend existing or develop additional services.

*Develop public health policy

- Apply population-specific data, quality assurance strategies, and research processes to develop public health policy.
- Communicate and collaborate with prescribers, policy makers, members of the community and other involved health care providers and administrative and supportive personnel to develop public policy.
- Carry out duties in accordance with legal, ethical, social, economic and professional guidelines.
- Maintain professional competence by identifying and analyzing emerging issues, products and services that may affect public health policy, to amend existing or develop additional policies.

ACCREDITATION STANDARDS AND GUIDELINES FOR THE PROFESSIONAL PROGRAM IN PHARMACY LEADING TO THE DOCTOR OF PHARMACY DEGREE ®
ADOPTED: JANUARY 15, 2006.

The complete version of the revised standards can be viewed at www.acpe-accredit.org.

Standard 12: Professional Competencies and Outcome Expectations

Professional pharmacist competencies that must be achieved by graduates through the professional degree program curriculum are the ability to:

1. Provide pharmaceutical care in cooperation with patients, prescribers, and other members of an inter-professional health care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social, behavioral, and clinical sciences that may impact outcomes.
2. Manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution; and to improve therapeutic outcomes of medication use.
3. Promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an inter-professional team of healthcare providers.

These professional competencies must be used to guide the development of stated student learning expectations for the curriculum. To anticipate future professional competencies, outcome statements must incorporate the development of the skills necessary to become self-directed lifelong learners.

The site and preceptor expectations for exemplary pharmacy practice sites were developed using the five core competencies described in the IOM Report, the CAPE Educational Outcomes and the 2005 ACPE Accreditation Standards. A profiling document for exemplary pharmacy practice sites was developed by asking the following general questions.

For exemplary sites, criteria were developed to document what an exemplary site was expected to **HAVE**. In addition, while not always essential as descriptors of excellence, site demographics and characteristics are also important to complete an accurate description of an exemplary pharmacy practice site.

The most important factor relating to “benchmarks of excellence” is the preceptor at the site. Criteria for excellence were established regarding what an exemplary preceptor is expected to **BE** and **DO**. As with exemplary sites, demographic and descriptive information related to each preceptor is important to complete an accurate description of an exemplary preceptor.

Benchmarks of Excellence for Exemplary Pharmacy Practice Sites

For purposes of this project, pharmacy practice sites were interpreted to mean those practices where pharmaceutical care was provided to patients. These sites would include but would not necessarily be limited to the following:

- Community pharmacies
- Acute care institutions such as hospitals and clinics
- Ambulatory care clinics
- Specialty pharmaceutical care practices in both institutional and ambulatory care settings including pediatrics, geriatrics, cardiology, infectious disease and other medical specialties.
- Drug information and poison control centers
- Skilled nursing facilities, extended care facilities and nursing homes
- Pharmaceutical care services provided in patients’ homes.

Site-specific criteria of excellence

The site/practice must:

- Have the ability to provide experiences that meet educational outcomes for SOP advanced experiential programs
- Be patient-centered and have pharmaceutical care as the focus of the practice
- Be adequately staffed to provide quality pharmaceutical care to patients
- Have an adequate number and sufficient variety of patients
- Provide opportunities for students to learn:
 - Specific disease-therapy-management
 - Provider-patient communication skills
 - Ethical behavior related to the provision of pharmaceutical care
- Demonstrate a caring attitude towards patients
- Have the pharmacist is a part of a multidisciplinary team of healthcare providers
- Utilize technology (informatics) sufficiently to support the pharmaceutical care mission of pharmacy
- Have library and learning resources sufficient to support optimum patient care
- Have a professional image
- Ensure patient privacy and confidentiality issues are protected via structural design of pharmacy and is in compliance with all HIPAA requirements.

- Meet or exceed all state and federal laws related to the practice of pharmacy
- Receive support from the site ownership or administration for providing student pharmacist learning experiences
- Have site ownership or administration that encourages quality improvement programs

<p>Preceptor-specific criteria of excellence</p>

The practitioner/preceptor must:

- Be a role-model practitioner in:
 - Providing patient-centered pharmaceutical care
 - Ethical decision making
 - Patient care problem solving
 - Providing medication, diseases and health education to patients
 - Professional and patient care behavior
- Be an effective, organized, and enthusiastic teacher by:
 - Teaching by example
 - Demonstrating patient assessment skills
 - Demonstrating and discussing his/her own clinical reasoning process
 - Demonstrating ethical behavior and high personal character
 - Having a strong command of drug therapy knowledge
 - Demonstrating a caring attitude towards students and patients
 - Teaching patient-provider communication skills including empathic listening skills
- Encourage self-directed learning of the student with constructive feedback by:
 - Identifying and responding to each student's specific learning needs
 - Challenging the learning process in each student pharmacist
 - Coaching student pharmacist behavior through effective constructive and timely feedback.
 - Making student pharmacist teaching an important focus of practice site
 - Treating students as colleagues-in-training
- Have well developed interpersonal/communication skills
- Possess leadership/management skills by:
 - Demonstrating effective managerial and leadership relationships with pharmacist colleagues and staff.
 - Demonstrating aspects of humility related to his/her own limitations
 - Monitoring quality of professional practice and teaching activities
 - Demonstrating nondiscriminatory behavior and practice
 - Being active in professional organizations (e.g., ACA, AMCP, ACCP, APhA, ASCP, ASHP, NCPA, etc)
- Embody his/her practice philosophy by:
 - Demonstrating personal motivation and inspiring pharmacists to develop pharmaceutical care practice (determined by interview questions)
 - Having a mission or vision statement of pharmacy

- Patterning his/her practice after standard guidelines or other model practices
- Beginning services and progression time table to present state of practice
- Insisting that ownership or administration supports pharmaceutical care services

Preceptor and Site Descriptive Criteria and Demographics

- **Preceptor**

- Degree in pharmacy (BS, PharmD, MS, MPH, MBA)
- Licensed pharmacist, in good standing
- Residency/fellowship training (length and type)
- Preceptor-specific training
- Certification (CDE, BCPS, CDM, CGP, CACP, etc)
- Certificate training programs (CPR/ACLS)
- Years of experience (practice, precepting)

Site Descriptive Criteria and Demographics

- Practice demographics
 - Location/neighborhood
 - Types of patients
 - Pharmaceutical care services offered
- Dispensing/pharmaceutical care service metrics:
 - Average number of prescriptions dispensed per day
 - Average number of patients seen per day
 - Intervention data related to pharmaceutical care services
 - Square footage or size of pharmacy
 - Pharmacy layout including pharmacy department and other areas
 - IV/Compounding/robotic services
 - Description of all patient services provided
- Staffing of pharmacy
 - Number of pharmacists
 - Number of technicians
 - Number of residents
- Technology/Documentation/Payment
 - Website or publications on practice/site
 - Pharmaceutical care documentation and transmittal system (manual or electronic)
 - Specific documentation format, i.e., Problem Oriented Medical Record
 - Economic aspects of pharmacy practice including billing system/insurance/private pay, etc.
- Workflow and facility design:
 - Digital photographs of pharmacy
 - Description of organized workflow (describe the patient care process from a patient's entry into the pharmacy to their exit)

- Marketing:
 - Description of marketing approaches to expand practice to patients and other healthcare providers including physicians.
- Education/Training/QI
 - Process for additional pharmacist and staff pharmaceutical care skill development including impact of formal post graduate education on scope of practice, and other continuing education activities
 - Continuous quality improvement efforts

References:

Greiner, AC., Knebel, E., eds, Institute of Medicine of the National Academies, *Health Professions Education: A Bridge to Quality*, Washington, DC: The National Academies Press; 2003.

Tindall, WN, Millonig, MK, *Pharmaceutical Care: Insights from Community Pharmacists*, Boca Raton, FL: CRC Press; 2003.

Center for the Advancement of Pharmaceutical Education, Educational Outcomes 2004, http://www.aacp.org/Docs/MainNavigation/Resources/6075_CAPE2004.pdf

Revision of ACPE Standards 2000, Draft 1.2, January 2005, http://www.acpe-accredit.org/pdf/ACPE_Revised_Standards_Draft_1.2_with_Appendices.pdf

Littlefield LC, Haines ST, Harralson AF, Schwartz AH, Sheaffer SL, Zeolla MM, Flynn AA. AACP Reports: Academic pharmacy's role in advancing practice and assuring quality in experiential education: Report of the 2003-2004 professional affairs committee. *Am J Pharm Ed* 2004;68(3):1-21 (Article S8).

Boh LE, Pitterle, ME, Schneider F, Collins CL. Survey of experiential programs: Course competencies, student performance and preceptor/site characteristics. *Am J Pharm Ed* 1991 Sum;55:105-113.

Erstad BL. How to be an effective clerkship or internship preceptor. *Am J Hosp Pharm* 1993 Mar;50:434, 439.

American Society of Health-System Pharmacists. ASHP accreditation standard for specialized pharmacy residency training (with guide to interpretation). *Am J Hosp Pharm* 1988;45:1924-30.

Campagna KD, Boh LE, Beck DE, Brown TA, Caiola SM, Johnson SJ, et al. Standards and guidelines for pharmacy practice experience programs. *Am J Pharm Edu* 1994 Win;58 Suppl:35S-47S.