AMERICAN COUNCIL ON PHARMACEUTICAL EDUCATION

INTRODUCTION

The American Council on Pharmaceutical Education (ACPE)

The American Council on Pharmaceutical Education (ACPE) is the national agency for accreditation of professional degree programs in pharmacy and for approval of providers of continuing pharmaceutical education. The ACPE was established in 1932 for accreditation of preservice education. In 1975, its scope of activity was broadened to include continuing pharmaceutical education. The ACPE is an autonomous and independent agency whose Board of Directors (the decision and policy-making body) includes pharmacy educators, pharmacy practitioners, state board of pharmacy members/executives, and public representation. A three-membered public interest panel also provides public perspectives in the policy and decision making processes of accreditation.

Accreditation

Accreditation is the public recognition accorded a professional program in pharmacy that is judged by ACPE to meet established standards through initial and subsequent periodic evaluations.

Accreditation Standards

Accreditation standards reflect professional and educational qualities identified by ACPE as essential to quality professional programs of Colleges and Schools of Pharmacy and serve as the basis for program evaluation. Standards are set by the ACPE in accordance with a procedure which provides adequate time and opportunity for all parties significantly affected by the accreditation process to comment on such standards prior to their adoption. Advance notice is given whenever revision of standards is proposed by ACPE. The initial standards were published in 1937 and revisions have been effected, on the average, every seven years, in keeping with changes in pharmaceutical education and practice. The standards and guidelines in use prior to those presented herein were adopted in July 1984 and became effective in January 1985. These standards and guidelines are presented in the <u>ACPE Accreditation Manual</u>, 8th Edition (3rd Printing), January 1995.

New Standards: Accreditation Standards and Guidelines as Adopted June 14, 1997

New accreditation standards and guidelines were adopted June 14, 1997. The revision process leading to <u>Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree</u> was initiated in September 1989 and conducted in accord with the <u>Procedure and Schedule for the Revision of</u>

Accreditation Standards and Guidelines, issued January 7, 1990 (see Appendix). This Procedure and Schedule involved a step-wise, decade-long process. The early years were devoted to study and formulation of proposed revisions and the later years provided for two comment periods, each affording open hearings and opportunities to submit written comments. Final consideration of the last iteration of proposed revisions, Proposed Revision, January 15, 1996, was given during the June 1997 meeting of the ACPE. The Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree, as adopted June 14, 1997, will be contained in the next edition of the ACPE Accreditation Manual. Copies of the new standards and guidelines may be obtained by writing the ACPE office at 311 West Superior Street, Chicago, Illinois 60610, and may be found on the Internet at URL http://ourworld.compuserve.com/homepages/ACPE.

The American Council on Pharmaceutical Education (ACPE)

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STANDARDS FOR MISSION, PLANNING, AND ASSESSMENT

Standard No. 1. College or School of Pharmacy Mission and Goals

The College or School of Pharmacy should have a published statement, formulated within an ethical context, of its mission, goals, and objectives¹ in the areas of education, research, service, and pharmacy practice. This statement should be congruent with the mission of the University; the term "University" includes independent Colleges and Schools of Pharmacy. This statement should include a fundamental commitment to the preparation of its students for the general practice of pharmacy with provision of the professional competencies² necessary to the delivery of pharmaceutical care³. This statement should also demonstrate sensitivity to the importance of diversity in its commitment to the educational preparedness of its students for a health professional career. Goals should be compatible with the general and specific objectives of pharmaceutical education in keeping with the scope of pharmacy practice and as reflected in the accreditation standards⁴ and guidelines⁵.

Guideline 1.1

The mission statement of a College or School should include the College's or School's educational philosophy and how its professional program in pharmacy is designed to insure that graduates will be health care providers prepared for the present and evolving scope of practice of pharmacy, such as primary care. This mission statement will be considered in the light of the College's or School's own stated purposes or aims so long as those purposes or aims demonstrably fall within the expectations of the profession as reflected in accreditation standards.

Guideline 1.2

To facilitate the College's or School's mission statement, an environment for teaching and learning should be fostered that appreciates the diversity of people, values the diversity of faculty role models, attends to the diverse needs of learners, and facilitates the ability of students to work and communicate effectively with diverse colleagues and patients.

¹ See Glossary, Page 44

² See Glossary, Page 44

³ See Glossary, Page 44

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⁵ See Glossary, Page 45

Guideline 1.3

The goals and objectives established for a College or School should set forth the detailed intentions of the College or School, including consideration of required resources, processes, and outcomes for educational, research, service, and pharmacy practice programs.

Guideline 1.4

The mission statement of a College or School should acknowledge pharmaceutical care as an evolving mode of pharmacy practice in which the pharmacist, in concert with other health professionals, takes an active role on behalf of patients in making appropriate drug choices, by effecting distribution of medications to patients, and by assuming direct responsibilities to empower patients to achieve the desired outcomes of drug and related therapy. professional program in pharmacy should provide educational preparedness so as to enable the pharmacist to collaborate with other health professionals and to share in responsibility for the outcomes of drug and related therapy. professional program in pharmacy should promote the knowledge, skills, abilities, attitudes, and values necessary to the provision of pharmaceutical care for the general practice of pharmacy in any setting. The College or School should assure an understanding of pharmaceutical care by its students early in the professional program in pharmacy. The philosophy of practice as well as the necessary professional attitudes, ethics, and behaviors should evolve during the course of study. Moreover, the College or School should insure the professionalization of students, including the provision of a positive outlook for all aspects of pharmacy practice.

Standard No. 2. Systematic Planning

The College or School of Pharmacy should have a plan and deploy a systematic planning process to facilitate and continuously improve achievement of the College's or School's mission, goals, and objectives. Plans and planning processes should benefit from the support and cooperation of the University administration.

Guideline 2.1

The systematic planning process should include review and revision, where necessary, of the College's or School's mission statement. The review procedure for the mission, goals, and objectives should be inclusive, involving administrative leaders, faculty, students, and practitioners.

Guideline 2.2

The planning process should be strategic in that it is ongoing, broadly-based, including students and practitioners, and considers financial and academic planning within the context of societal and professional changes occurring and contemplated.

Standard No. 3. Systematic Assessment of Achievement

The College or School of Pharmacy should establish and maintain a system that assesses the extent to which its mission, goals, and objectives are being achieved. Formative and summative indicators of achievement should be identified and employed in a continuous and systematic process of evaluating the outcomes of the educational, research, service, and pharmacy practice programs. Evaluation should extend beyond the acquisition of knowledge by students to the application of knowledge and skills in the care of patients in improving medication use. The College or School should show evidence of using analysis of outcome measures throughout the educational, research, service, and pharmacy practice programs, for purposes of continuing development and improvement, including revisions in curriculum, and modifications of faculty and student policies.

Guideline 3.1

Information regarding the effectiveness of the professional program in pharmacy, particularly in the form of student achievement, should be gathered systematically from sources such as students, alumni, state boards of pharmacy and other publics, professional staff of affiliated practice facilities, and a variety of other practitioners. The results of student exit interviews, preceptor evaluations, alumni surveys, and standardized licensure examinations should be appropriately employed in the assessment system of the College or School; other indicators of programmatic and student achievement that assess the extent to which the mission, goals, and objectives are being achieved should be developed and appropriately applied.

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⁶ See Glossary, Page 45

⁷ See Glossary, Page 45

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STANDARDS FOR ORGANIZATION AND ADMINISTRATION

Standard No. 4. College or School of Pharmacy and University Relationships

The University should provide a College or School of Pharmacy adequate financial, physical, faculty, and administrative resources so as to enable it to meet required professional program responsibilities, to ensure program stability, and to insure continuous program quality improvement. The administrative structure of the College or School should provide for a Dean, who serves as the chief administrative and academic officer. The Dean should have ready access to the University President and/or other University officials charged with final responsibility for the College or School. The College or School should participate in the governance of the University in a manner consistent with the needs of the institution in general and the welfare of the College or School in particular.

The College or School should be afforded a reasonable degree of autonomy by the University. Responsibility and authority for administration of the professional program in pharmacy should be vested in the College or School. The definition and delivery of the curriculum should be a responsibility of the College or School, within the framework of institutional policies and authorities.

Standard No. 5. Organizational and Administrative Relationships in University and Affiliated Health Care Facilities

The University should support the development of suitable relationships with other academic and service units of the University for instruction, research, and patient care. University support should also be provided to expand affiliations with various pharmacy practice settings external to the University.

So as to foster educational outcomes related to teamwork in health care delivery, organizational structure and administrative patterns in University or University-affiliated health care facilities should promote integrated educational, research, service, and pharmacy practice activities, provide a clearly understood relationship between service and educational units, insure the necessary blend of educational and patient care activities in a variety of practice settings, and assure that appropriate authority for the control and supervision of academic activities is vested in the College or School of Pharmacy.

Standard No. 6. College or School of Pharmacy Organization and Administration

The College or School of Pharmacy should be organized in a manner which facilitates the accomplishment of its overall mission, promotes the goals and objectives of the professional program in pharmacy, supports pharmacy disciplines, and effectively deploys resources. The College's or School's organizational and administrative structure should clearly identify lines of authority and responsibility. There should be evidence of a spirit of collegiality as well as evidence of mutual understanding and agreement among the faculty, the Dean, and other administrative leaders of the College or School on its mission, goals, and objectives as well as evidence of acceptance of the responsibilities necessary to their achievement.

Guideline 6.1

Where the College or School faculty is organized into departments, divisions, or other sub-units, administrative leaders, such as Chairs or Heads, should be invested with the authority necessary to discharge their responsibilities. Goals and objectives should be established which articulate with the mission statement of the College or School. Systematic evaluation of the College's or School's mission, goals, and objectives should assess the effectiveness of each organizational unit in and of itself, as well as how each contributes to the College or School as a whole in achieving desired outcomes. Departments, divisions, or other sub-units should be evaluated on the basis of their goals and objectives, including the effectiveness of their contribution to the professional program in pharmacy.

Guideline 6.2

Criteria should be established and a mechanism should be in place for the development and periodic review of the Dean and other administrative leaders of the College or School. The review process should be broadly-based, including faculty, students, and practitioners.

Guideline 6.3

The College or School should adopt, consistent with University policies and procedures, a set of bylaws that delineates the method of faculty governance and clarifies faculty and administrative responsibilities. Opportunity should be afforded for all faculty to participate in the governance system and in the affairs of the departments or divisions, where such sub-units exist. The College or School should assure a system for communications among all of its components and for informing alumni and other interested parties of its work.

Guideline 6.4

The faculty should meet with suitable regularity, and a committee structure should exist to assist in the work of the College or School. Committees should include students, voluntary faculty, and/or pharmacy practitioners. Minutes of faculty meetings and written records of committee actions should be maintained and be available.

Standard No. 7. Responsibilities of the Dean of the College or School of Pharmacy

The Dean should demonstrate progressive, constructive academic and professional leadership and effectively unite and inspire faculty and students toward achievement. The Dean is responsible for assuring: development, articulation, and implementation of the mission statement; recruitment, retention, and development of a competent faculty and staff; development, implementation, and evaluation of the educational, research, service, and pharmacy practice programs and their enhancement; initiation, implementation, and management of programs for the recruitment and admission of qualified students; establishment and implementation of standards for academic performance and progression; resource acquisition and allocation; and continuous enhancement of the visibility of the College or School both on campus and to external constituencies.

Guideline 7.1

The Dean should be qualified to provide leadership in pharmacy education, in research and scholarly activities, and in pharmaceutical care. Among indices of positive and effective leadership of the Dean are: a commitment to teaching and research, including pedagogy and scholarly concern for the profession generally, and pharmacy practice, in particular; a sustained record of scholarship; a knowledge of health care systems and directions; active and ongoing participation in the affairs of professional or scientific societies; and an assertive advocacy on behalf of the College or School to the University administration.

Guideline 7.2

In instances where the Dean is assigned other substantial administrative responsibilities within the University, arrangements for additional administrative support to the office of the Dean should be made so as to assure effective administration of the affairs of the College or School.

Guideline 7.3

In support of the Dean, the responsibilities of the administrative leaders of departments, divisions, or other sub-units that may exist, such as Chairs or Heads, should include advancing the respective pharmacy discipline(s), mentoring and developing faculty, assuring effective delivery of the respective course offerings, managing operations and budgetary affairs, and setting and evaluating goals and objectives consistent with the College's or School's mission and as a part of the College's or School's systematic planning and assessment. The administrative leaders should function as a team and should play a key role in the development and improvement of the professional program in pharmacy. Adequate administrative and other support should be provided to the administrative leaders of departments, divisions, or other sub-units that may exist.

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STANDARDS FOR CURRICULUM

Standard No. 8. The Curriculum in Pharmacy

The College or School of Pharmacy should offer a curriculum in pharmacy intended to prepare its graduates to become generalist practitioners of pharmacy. The goals and objectives of the curriculum in pharmacy should embrace the scope of contemporary practice responsibilities as well as emerging roles that ensure the rational use of drugs in the individualized care of patients as well as in patient populations. The organized program of study should provide students with a core of knowledge, skills, abilities, attitudes, and values that are necessary to the provision of pharmaceutical care and should provide opportunity for selection by students of courses and professional experiences in keeping with particular interests and goals. The need for life-long learning should be reflected as an integral theme of the curriculum.

Standard No. 9. Curricular Organization and Length

The curriculum in pharmacy should provide sufficient content for the achievement of the professional competencies necessary to the general practice of pharmacy and to satisfy educational requirements for licensure as a pharmacist, and should meet the requirements of the institution for the doctor of pharmacy degree. The College or School of Pharmacy's organized plan of study should focus upon the content, sequence, process, and outcomes of the curriculum. The curriculum for the professional program in pharmacy requires a minimum of four academic years or the equivalent in order to ensure achievement of the professional competencies necessary to become a generalist practitioner who renders pharmaceutical care.

Standard No. 10. Professional Competencies and Outcome Expectations

<u>Professional competencies</u> that should be achieved through the College or School of Pharmacy's curriculum in pharmacy are an ability to:

- a) evaluate drug orders or prescriptions, accurately and safely compound drugs in appropriate dosage forms, and package and dispense dosage forms;
- b) manage systems for storage, preparation, and dispensing of medicines, and supervise technical personnel who may be involved in such processes;
- c) manage and administer a pharmacy and pharmacy practice;
- d) apply computer skills and technological advancements to practice;
- e) communicate with health care professionals and patients regarding rational drug therapy, wellness, and health promotion;

- f) design, implement, monitor, evaluate, and modify or recommend modifications in drug therapy to insure effective, safe, and economical patient care;
- g) identify, assess, and solve medication-related problems, and provide a clinical judgment as to the continuing effectiveness of individualized therapeutic plans and intended therapeutic outcomes;
- h) evaluate patients and order medications and/or laboratory tests in accordance with established standards of practice;
- i) evaluate patient problems and triage patients to other health professionals as appropriate;
- i) administer medications;
- k) monitor and counsel patients regarding the purposes, uses, and effects of their medications and related therapy;
- 1) understand relevant diet, nutrition, and non-drug therapies;
- m) recommend, counsel, and monitor patient use of nonprescription drugs;
- n) provide emergency first care;
- o) retrieve, evaluate, and manage professional information and literature;
- p) use clinical data to optimize therapeutic drug regimens;
- g) collaborate with other health professionals; and
- r) evaluate and document interventions and pharmaceutical care outcomes.

Outcome expectations⁸ for student performance in the professional competencies stated above should be set forth and measured by the College or School. The process of measuring outcome expectations should include student self-assessments of performance in the stated professional competencies.

Standard No. 11. Areas and Content of Curricular Core

The areas and content of the curriculum in pharmacy should provide the student with a core of knowledge, skills, abilities, attitudes, and values which, in composite, relate to the professional competencies and outcome expectations set forth in <u>Standard No. 10</u>. <u>Professional Competencies and Outcome Expectations</u>. The areas and content of the curriculum in pharmacy should be in phase with one another and should be balanced in accord with the College or School of Pharmacy's mission, goals, and objectives. The areas and content of the curricular core are as follows:

<u>biomedical sciences</u>, including content in anatomy, physiology, pathophysiology, microbiology, immunology, biochemistry, molecular biology, and biostatistics;

<u>pharmaceutical sciences</u>, including content in medicinal chemistry, pharmacognosy, pharmacology, toxicology, and pharmaceutics which encompasses physical/chemical

⁸ See Glossary, Page 45

principles of dosage forms and drug delivery systems, biopharmaceutics, and pharmacokinetics;

behavioral, social, and administrative pharmacy sciences, including content in health care economics, pharmacoeconomics, practice management, communications applicable to pharmacy, the history of pharmacy, ethical foundations to practice, and social and behavioral applications and laws pertaining to practice;

pharmacy practice, including content in prescription processing, compounding and preparation of dosage forms, including parenteral products, drug distribution and drug administration, epidemiology, pediatrics, geriatrics, gerontology, nutrition, health promotion and disease prevention, physical assessment, emergency first-care, clinical laboratory medicine, clinical pharmacokinetics, patient evaluation and ordering medications, pharmacotherapeutics, disease-state management, outcomes documentation, self care/non-prescription drugs, and drug information and literature evaluation; and

<u>professional experience</u>, including introductory and advanced practice experiences acquired throughout the curriculum as a continuum, progressing from the Introductory Pharmacy Practice Experiences through the Advanced Pharmacy Practice Experiences in a variety of practice settings.

Guideline 11.1

Instruction in the use of new and innovative technologies in the provision of pharmaceutical care, such as information systems and biotechnology, should be integrated throughout the areas and content of the core curriculum.

Guideline 11.2

The biomedical and pharmaceutical sciences should be of such depth, scope, timeliness, quality, sequence, and emphasis to provide the foundation for and support of the intellectual and clinical objectives of the professional program in pharmacy. The biomedical sciences should provide the basis for understanding and treating humans in health and disease. Where instruction is provided in the biomedical sciences by other academic units of the University, these areas should be developed in accord with the goals and objectives for the curriculum in pharmacy. Appropriate liaison mechanisms should be established to insure effective instructional delivery and to assure satisfaction of biomedical science objectives for the professional program in pharmacy.

Guideline 11.3

The behavioral, social, and administrative pharmacy sciences should provide the basis for understanding and influencing human behavior in health and disease, in

the management process of pharmacy, and in pharmacy's interrelationships with health care systems. The behavioral, social, and administrative pharmacy sciences should attend to the knowledge, skills, abilities, attitudes, and values necessary to the efficient and effective management of patient-centered practice, including administrative and management matters related to drugs and supplies, as well as administrative and management activities related to personnel and finances. Moreover, the behavioral, social, and administrative pharmacy sciences area should contribute to the development and implementation of care plans and to the management of the patient's drug therapies.

Guideline 11.4

The professional experience should be of adequate intensity, breadth, and duration so as to support achievement of stated competencies as demonstrated by assessment of outcome expectations. Students should be duly enrolled in the College or School of Pharmacy and should not receive monetary remuneration for professional experience so as to assure the primacy of an appropriate student/teacher relationship.

Guideline 11.5

The Introductory Pharmacy Practice Experiences should be offered in various practice settings during the early sequencing of the curriculum for purposes of providing transitional experiential activities and active learning. Such practice experiences should be organized as a curricular progression leading to advanced practice experiences so as to support growth in the student's capabilities to render pharmaceutical care. The scope and breadth of the introductory experiences should involve the initial development of practice skills, and should be consistent with these stated purposes. A quality control procedure should be established in accord with stated purposes and outcome expectations; the Introductory Pharmacy Practice Experiences may be designed in conjunction with didactic courses or as a discrete experiential offering.

Guideline 11.6

The Advanced Pharmacy Practice Experiences should provide active participation and in-depth experiences to acquire practice skills and judgment and to develop, in a graded fashion, the level of confidence and responsibility needed for independent and collaborative practice. Toward this end, a spectrum of practice experiences should be deployed wherein the biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and pharmacy practice are integrated, professional knowledge and skills are applied, and professional attitudes, ethics, and behaviors are developed so as to enable students to provide pharmaceutical care. Advanced practice experiences should enhance

communication and collaborative skills with patients and other professionals, including the ability to work and communicate effectively with diverse colleagues and patients. The advanced practice experiences should also provide experience in prescription processing, compounding and preparation of dosage forms, including parenteral products, drug distribution systems, documentation of services, the taking of drug histories, participating in drug therapy decisions, monitoring, educating, and counseling patients, solving problems, and systematically evaluating drug use. Advanced practice experiences should include application of clinical pharmacokinetic principles in the development and management of dosing and should incorporate knowledge and skills in the searching, analysis, and interpretation of drug information. Students should be under the close supervision of pharmacist role models.

Guideline 11.7

The organization of the Advanced Pharmacy Practice Experiences should provide a balanced series of core and selective experiences that cumulatively provide sustained experiences of adequate intensity, breadth, and duration to enable achievement of stated competencies as demonstrated by assessment of outcome expectations. Generally, the core and selective experiences should be full-time and provide continuity of care, with pharmacy faculty supervision and monitoring. The duration of the Advanced Pharmacy Practice Experiences should ordinarily be the equivalent of one academic year. Core experiences should develop pharmaceutical care capabilities in inpatient and ambulatory care settings, especially community pharmacies. Selective experiences should complement the core experiences and provide adequate and innovative opportunities for students to mature professionally in accord with their individualized interests. The series of core and selective experiences should be philosophically and educationally coordinated to achieve, in composite, the experiential whole of the Advanced Pharmacy Practice Experiences.

Guideline 11.8

The Advanced Pharmacy Practice Experiences should be provided in both ambulatory and inpatient settings and should include primary, acute, chronic, and preventive care among patients of all ages. The core experiences should provide substantial experience in community pharmacy practice and hospital/institutional pharmacy practice, as well as substantial practice experience with general medicine acute care patients. Most of the advanced practice experiences should involve direct patient care. However, some of the advanced practice experiences may involve indirect patient care or may occur in non-patient care areas, such as research and management. Other experiences, such as those in drug information, managed care, and home health care should be available.

Guideline 11.9

A quality control procedure for the Advanced Pharmacy Practice Experiences should be established for core and selective experiences so as to facilitate achievement of stated competencies, provide for feedback, assure reasonable standardization, and insure consistency in evaluation. The College or School should assure that all practice facilities utilized for the advanced practice experiences meet and sustain conditions necessary to the delivery of pharmaceutical care and to the students' learning needs through the establishment of a mechanism such as the use of a review council. This review council, or other established mechanism for quality control, should involve individuals with appropriate expertise and perspectives, such as student, practitioner, and board of pharmacy representation. The core and selective experiences should be organized, administered, and evaluated in accord with their individualized goals and objectives and in keeping with the overall goals and objectives for the advanced practice experiences. General objectives and learning modules as well as site specific guidelines should be established for the core and selective experiences. Specific criteria should be developed so as to enable faculty and students to assess both formative and summative progress. Students should be provided the opportunity to demonstrate achievement of stated competencies as evaluated through the use of reliable, validated criteria.

Standard No. 12. Teaching and Learning Processes

The College or School of Pharmacy should address the ways by which curricular content is taught and learned in the student's achievement of the professional competencies. Attention should be given to teaching efficiencies and effectiveness as well as innovative ways and means of curricular delivery. Educational techniques and technologies should be appropriately integrated to support the achievement of the professional competencies, to foster the development and maturation of critical thinking and problem solving skills, and to meet the needs of diverse learners. Evidence that the educational process involves students as active, self-directed learners and shows transition from dependent to independent learning as students progress through the curriculum should be provided.

Guideline 12.1

The educational process should ensure that students are afforded a broad conceptual mastery of pharmacy practice through the integration of subject matter, literature, theory, and methods. The educational techniques and technologies should sequentially develop and demonstrate the capacity of students to interpret, organize, and communicate knowledge, to engage in critical thinking, and to develop those analytical, ethical, and professional skills needed to practice and advance the profession of pharmacy.

Guideline 12.2

Teaching strategies to ensure the adeptness of critical thinking and problem solving should be an integral part of the educational process. Also, the acquisition of both oral and written communication skills should be integrated throughout the curriculum. The curricular areas of pharmacy practice and professional experience should serve as the mainstay for the application and further development of interpersonal and interprofessional communicative and collaborative skills necessary to the rendering of pharmaceutical care. The teaching and learning of practice skills should be supported by applications of computer technologies, case studies, simulations, and guided group discussions.

Guideline 12.3

The educational process should promote life-long learning through emphasis on active, self-directed learning and the fostering of ethical responsibility for maintaining and enhancing professional competence.

Guideline 12.4

The College or School is urged to offer a curricular pathway for the professional program in pharmacy leading to the Doctor of Pharmacy degree for baccalaureate in pharmacy-degreed pharmacists that is nontraditional in its processes, strategies, and tactics for delivery. This pathway should provide individualized assessments of the professional competencies set forth in Standard No. 10. Professional Competencies and Outcome Expectations for purposes of placement and to enable a customized plan of study. This curricular pathway should be convenient and accessible, taking into account the special needs and concerns of baccalaureate in pharmacy degreed practitioners and characteristics of adult learners. The nontraditional curricular pathway should insure achievement of the professional competencies as documented by assessment of outcome expectations for the professional program in pharmacy. The College or School should experiment with procedures and assessments for admission with advanced standing, teaching strategies and instructional methods for curricular delivery, and techniques and technologies to enable educational economies and efficiencies.

Standard No. 13. Evaluation of Student Achievement

The College or School of Pharmacy should establish principles and methods for the formative and summative evaluation of student achievement. A variety of evaluation measures should be systematically and sequentially applied throughout the professional program in pharmacy. Assessments should measure cognitive learning, mastery of essential practice skills, and the abilities to communicate effectively and to use data in the

critical thinking and problem solving processes. Evaluation processes should measure student performance in all of the professional competencies in accord with outcome expectations.

Guideline 13.1

The system of student evaluation utilized by the College or School should foster self-initiated learning. Testing procedures should condition students for the integration and application of principles, critical thinking, and problem solving rather than for short-term retention or memorization of specific details or isolated facts.

Standard No. 14. Curriculum Evaluation

Evaluation measures focusing on the efficacy of the curricular structure, content, process, and outcomes should be systematically and sequentially applied throughout the curriculum in pharmacy. Evidence should exist that evaluation outcomes, including student achievement data, are applied to modify or revise the professional program in pharmacy.

Guideline 14.1

A system of outcome assessment⁹ should be developed which fosters data-driven continuous improvement of curricular structure, content, process, and outcomes. Evaluation of the curriculum should occur systematically in order to monitor overall effectiveness, to enable the achievement of the professional competencies in accord with outcome expectations, and to provide a studied basis for improvement. The ongoing evaluation process should include input from faculty, students, administrators, practitioners, and state board of pharmacy members and other publics. The curriculum as a whole, as well as individual courses, should be evaluated with respect to the goals and objectives for the professional program in pharmacy. Experimentation and innovation within the curriculum in pharmacy should occur continuously. Experimental or innovative approaches should be adequately planned and coupled with an appropriate evaluation system. Evaluation should assure that the curriculum is responsive to changes in pharmacy practice as well as to changes in educational technologies, and insure that an educational setting and methods of instruction exist that maximize the development of effective and efficient learning experiences.

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⁹ See Glossary, Page 45

Guideline 14.2

A curriculum committee or other appropriate body with defined authorities and responsibilities, should be in place to manage an orderly and systematic review of the curriculum structure, content, process, and outcomes. Duties of this committee should include assurances for coordination of course material, minimization of unwarranted repetition, deletion of outdated or unessential content, and provision of a reasonable course load for students. A curricular editing process should assure that additions are counterpoised with deletions. The appropriateness of emphasis, presentation mode, and proper sequencing should be considered so as to provide the optimal environment for learning. The committee should assess the extent to which innovative teaching methods are effectively deployed, and outcome measures are systematically applied for purposes of improvement.

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STANDARDS FOR STUDENTS

Standard No. 15. Organization of Student Affairs Within a College or School of Pharmacy

An organizational element within the College or School of Pharmacy should be devoted to student affairs. The administrative officer responsible for this organizational element should provide leadership in the development and provision of student services, including activities intended to develop professional attitudes, ethics, and behaviors and to otherwise foster the professionalization of the students. This administrative officer should oversee and coordinate the multifaceted student affairs activities and services, including recruitment programs, administration of the admissions and progression processes, maintenance of records, organization of academic advising and careerpathway counseling, verification of completion of degree requirements, and linkage with University student services.

Guideline 15.1

The College or School should demonstrate that an ordered, accurate, and secure system of student records is maintained. Student records should be confidential with access limited to authorized persons. Students should be informed of the right of access to their own records.

Guideline 15.2

The College or School should demonstrate that reasonable efforts have been made to assist students in obtaining financial aid. In advance of graduation, the students should receive a written statement from the University or the College or School indicating all sources of financial assistance received through the institution for which repayment is required along with the terms and conditions associated with repayment. The College or School should collect and assess information regarding default rates in student loan programs.

Guideline 15.3

The College or School should provide academic advising and personal and career-pathway counseling adequate to the needs of students, including those in nontraditional pathways. Advisor and counselor training programs, adequate personnel, and other support should be provided. Personal counseling should be made available through University resources or by other arrangements.

Guideline 15.4

The College or School should assure access to health services for students, including times of assignment to off-campus sites. Appropriate immunization standards should be established as well as a means for ensuring that such standards are satisfied.

Guideline 15.5

A policy on student affairs, including admissions and progression, that assures non-discrimination on the basis of race, religion, gender, lifestyle, national origin, or disability should exist.

Standard No. 16. Admission Criteria, Policies, and Procedures

The College or School of Pharmacy should establish criteria, policies, and procedures for admission to the professional program in pharmacy. These criteria, policies, and procedures should be published in clearly stated terms and made available to students and prospective students.

Admissions criteria should include the satisfactory completion of post-secondary preprofessional requirements of such length and quality to provide scientific foundations and general education and to prepare for and meet the requirements of the professional doctorate in pharmacy. Admissions criteria should use measures of achievement in the stipulated preprofessional requirements and other postsecondary undertakings, and should employ and set performance expectations for such other tests, evaluations, or interviews, that the College or School has demonstrated to be useful in selecting students who have the potential for success in the professional program in pharmacy and the profession.

Guideline 16.1

The preprofessional requirements should provide basic sciences requisite to the curriculum for the professional program in pharmacy, illustrative of which are general chemistry, organic chemistry, biological sciences, mathematics, computer technologies, and physical sciences. Moreover, sufficient general education, defined as humanities, behavioral sciences, social sciences, and communication skills, should be provided in the preprofessional requirements that encourages the broadening of intellectual powers and interests and facilitates the development of professional practitioners capable of understanding a culturally diverse society and their role in it as health care providers. Elements of general education may be attained concurrent or integrated with the curriculum for the professional program. The preprofessional requirements may include some elements of the biomedical sciences area of the curriculum for the professional program.

Guideline 16.2

The College or School may organize its preprofessional requirements and the professional program in pharmacy as an integrated curriculum or programmatic continuum, in accord with its established mission statement and its published admissions policies and procedures.

Guideline 16.3

Admissions criteria, policies, and procedures should give consideration not only to scholastic accomplishments, but also to other factors such as motivation, industry, and communication capabilities that show the student's potential to become a life-long learner and an effective professional. Efforts should be made in the selection of students to foster diversity.

Guideline 16.4

A recruitment program should be established to provide a pool of well qualified and diverse applicants for the available positions.

Guideline 16.5

Studies are encouraged that relate admissions criteria with student achievement in the professional program in pharmacy and performance in professional practice.

Guideline 16.6

Students may be admitted to the professional program in pharmacy under an early selection program. In such an admissions arrangement, a formal and published agreement should exist between the College or School and the associated institution(s). The early selection student should be admitted to the professional program in pharmacy contingent upon successful completion of entrance requirements and application procedures.

Standard No. 17. Transfer of Credits and Waiver of Requisites for Admission with Advanced Standing

The College or School of Pharmacy should establish transfer credit and course waiver policies consistent with University policies. Generally, credits toward completion of the professional program in pharmacy may be transferred from another ACPE accredited degree program in pharmacy, and requisites may be waived on the basis of rational procedures and defensible assessments.

Graduates of an ACPE accredited baccalaureate in pharmacy program should have all credits of the baccalaureate in pharmacy degree program transferred to the professional program in pharmacy and should be admitted with advanced standing. Moreover, requisites should be waived based upon an educationally sound assessment of the professional competencies set forth in <u>Standard No. 10</u>. <u>Professional Competencies and Outcome Expectations</u> which may have been achieved through continuing pharmaceutical education, all other postgraduate education and training, and the quality and quantity of previous pharmacy practice experience.

Guideline 17.1

The plan of study for baccalaureate in pharmacy-degreed pharmacists should be customized in accord with the results of the candidate's individualized assessments deploying educational economies and efficiencies and assuring comparability of the professional competencies and outcome expectations. Curricular areas and content determined to be essential may be accessed through traditional and/or nontraditional educational methods. The professional experience should be organized in a manner that enables continuity in the care of patients and optimizes the characteristics, capabilities, and resources of adult learners. A continuing pharmaceutical education sequence may be set forth that prepares for and supports successful completion of the professional program in pharmacy.

Standard No. 18. Progression of Students

The College or School of Pharmacy should establish and publish criteria, policies, and procedures for academic progression as well as for academic probation, dismissal, and readmission. The student's responsibilities and rights to due process, including appeal mechanisms, should be published and made available.

Guideline 18.1

An ongoing monitoring system of student performance is necessary for the early detection of academic difficulty. The College or School should provide a system of access for individualized student services, such as tutorial support.

Standard No. 19. Disclosure of Program Information

A current and accurate description of the professional program in pharmacy and its postsecondary preprofessional requirements should be made available to prospective and enrolled students.

Guideline 19.1

A current catalog and/or other documents should be available which include at least the following: the mission, goals, and objectives of the professional program in pharmacy; the curricular plan, courses, and credit hours; resources available to effect the curriculum; admissions and progressions criteria and policies; off-campus curricular requirements; graduation requirements; tuition and fees, including refund policies; graduation and placement rates; current accreditation status of the program; recent pass rates on standardized licensure examinations; and expectations for attitudes, values, traits, and ethics as put forth by the profession.

Standard No. 20. Student Representation

The College or School of Pharmacy should show evidence that student representation exists on appropriate committees and policy-development bodies of the College or School, including the curriculum committee. Students should be given the opportunity to be heard during regular faculty meetings.

Guideline 20.1

The College or School should have a student government as well as suitable committees, such as a student/faculty relations committee, to develop student leadership, to insure a forum for student dialogue, and to assure adequate communication of student opinions and perspectives.

Standard No. 21. Student Perspectives in Program Evaluation and Development

The College or School of Pharmacy should provide evidence that student opinion is sought in program evaluation and development. Moreover, the College or School should demonstrate that student input is systematically encouraged and considered in order to foster active student participation in the development and improvement of the professional program in pharmacy.

Guideline 21.1

Instruments and techniques, such as student evaluation questionnaires and exit interviews, should be systematically employed for purposes of obtaining student opinions of faculty, curriculum, and other aspects of the professional program in pharmacy. The evaluative data so obtained should be systematically applied for purposes of continuous improvement. The College or School should indicate to

the students the outcomes of their participation in the systematic process of program evaluation and development.

Standard No. 22. Student/Faculty Relationships

Evidence of harmonious relationships between faculty and students should be demonstrated. Faculty should mentor students in their academic pursuits, nurture a positive attitude about the provision of pharmaceutical care, provide guidance on various career pathways and encourage student involvement in affairs of the profession. The College or School of Pharmacy should provide an environment and culture that supports the professionalization of students, is conducive to good student morale, and inculcates attitudes, ethics, and behaviors congruent with professional standards.

Guideline 22.1

Faculty should actively encourage student involvement in various professional organizations, serve as role models, and support student attendance at national, state, and local meetings. Organized efforts should exist to broaden the horizons of students, including scientific inquiry, scholarly concern for the profession, and post-graduate education and training, through such means as guest lecturers, and participation in curricular and extracurricular activities.

Guideline 22.2

Faculty/student interactions should be facilitated through informal activities. Faculty attendance at student functions, both professional and social, is urged as an effective means of fostering harmonious relationships and serving as role models.

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STANDARDS FOR FACULTY

Standard No. 23. Faculty and Staff, Quantitative Factors

The College or School of Pharmacy should have sufficient faculty and staff resources to meet its mission, goals, and objectives in the areas of education, research, service, and pharmacy practice. The faculty of a College or School consists of individuals who have a range of academic titles, full- or part-time appointments, and serve with or without compensation. A critical nucleus of full-time faculty to support the pharmacy disciplines and each area of the curriculum in pharmacy is required. This nucleus may be complemented by part-time faculty, co-staffed or co-funded faculty positions with affiliates, post-doctoral personnel, and voluntary faculty. Voluntary faculty should have adjunct or other appropriate academic titles. The College or School should have a faculty/student ratio sufficient to effectively deliver and evaluate the professional program in pharmacy and to provide time for faculty to engage in faculty development and to pursue research and scholarly activities. The curricular area of professional experience requires close supervision of and significant interaction with students, and thus a greater faculty/student ratio should be provided during this aspect of the professional program in pharmacy.

Guideline 23.1

The faculty/student ratio for the professional experience area of the curriculum in pharmacy should be adequate so as to provide individualized instruction, guidance, and evaluative supervision by pharmacy faculty. Important factors to be considered to assure these goals are the number of students each faculty member is assigned during the Introductory Pharmacy Practice Experiences, and, particularly, during the Advanced Pharmacy Practice Experiences, the nature of the practice setting, and the character of instructional delivery.

Guideline 23.2

The several responsibilities of faculty need to be in balance so as to enable the pursuit of faculty responsibilities to scholarship.

Guideline 23.3

Adequate staff resources, such as administrative assistants, secretaries, student affairs personnel, teaching assistants, and laboratory technicians, should be provided to support effective operation of the College or School. Other staff resources such as telecommunication, audiovisual, and computer personnel should be available.

Standard No. 24. Faculty and Staff, Qualitative Factors

The faculty of the College or School of Pharmacy should possess professional and academic expertise in the components of the professional program in pharmacy for which they are responsible, and demonstrate contemporary knowledge and abilities in current educational philosophy and techniques. Faculty, individually and collectively, should demonstrate a commitment to the mission, goals, and objectives of the College or School and to the professional program in pharmacy. Those faculty whose responsibilities include the practice of pharmacy should satisfy all professional licensure requirements which apply to their practice sites.

The College or School should have an organized professional development program for full-time, part-time, and voluntary faculty, consistent with their respective responsibilities and should demonstrate the effectiveness of this professional development program. The professional development program should enhance teaching and assessment skills and should assist faculty in efforts to become and remain productive scholars. Additionally, the professional development program should support the acquisition of skills needed for teaching diverse learners.

Guideline 24.1

Faculty members, where consistent with their academic responsibilities, should be involved in the provision of pharmaceutical care. This activity not only contributes to the maintenance and enhancement of the skills of practice, but it is also of fundamental importance in the development of those skills in students. In the Advanced Pharmacy Practice Experiences involving direct patient care, it is necessary to have practice faculty who are role models of professional attributes and behaviors so as to effectively mentor, monitor, and evaluate students. Faculty members whose academic responsibilities do not involve the provision of pharmaceutical care should be encouraged to visit various practice settings so as to heighten sensitivity to and understanding of pharmacy practice and the delivery of pharmaceutical care.

Guideline 24.2

The faculty should have the capability and continued commitment to be effective teachers. Effective teaching requires knowledge of the discipline, effective communication skills, and an understanding of pedagogy, including construction and delivery of the curriculum in pharmacy. Faculty should deploy educational technologies and techniques that support various modes of educational delivery, such as simulations and case studies, and evaluation, such as test construction and clinical performance assessments. Educational support systems should be provided to practitioners serving as voluntary faculty in the professional experience program.

Guideline 24.3

Faculty and staff should be selected in accordance with a policy which assures nondiscrimination on the basis of race, religion, gender, lifestyle, national origin, or disability. The College or School is encouraged to seek diversity in the recruitment of its faculty.

Standard No. 25. Faculty Evaluation

Established criteria and a defined process should exist for the measurement of performance of each faculty member and for promotion and, where applicable, tenure consideration. Faculty should be evaluated for quality and effectiveness utilizing academically accepted indicia appropriate to the established responsibilities of individual faculty members. Evaluation techniques should include administrative review, peer review, and student evaluations.

Guideline 25.1

Teaching abilities, skills, and effectiveness related to pharmaceutical education should be evaluated and documented.

Guideline 25.2

Faculty should have a responsibility to generate and disseminate knowledge through scholarship, whether or not graduate education is a component of the College's or School's mission. Scholarship, including the scholarship of teaching, should be evident and demonstrated by productive research and scholarly activities, such as contributions to the scientific, professional, and educational literature, publication of books and review articles, and successes in securing extramural funding in support of research and scholarly activities. The College or School should foster an environment which encourages contributions by the faculty to the development and transmission of new knowledge, and should contribute to the advancement of knowledge and to the intellectual growth of students through scholarship. The College or School is encouraged to provide, or be affiliated with institutions that provide, residency and fellowship programs.

Guideline 25.3

Contributions to the advancement and promotion of the profession of pharmacy should be evidenced by activities such as the development and evaluation of innovative practice modes, participation in professional and scholarly meetings, presentation of papers, service as an officer or committee member of organizations, and as a presenter of continuing education programs.

Guideline 25.4

The faculty evaluation process should take into account and appropriately recognize efforts of faculty that make contributions toward advancement of the professional development of students, such as academic advising, career pathway counseling, and student organization advising.

Standard No. 26. Faculty Self-Assessment

Faculty should continually evaluate their individual and collective performance. It is essential that faculty assume responsibility for continuously improving their own teaching, scholarship, and service activities. The use of teaching portfolios as faculty self-assessment instruments is encouraged.

STANDARD FOR LIBRARY AND LEARNING RESOURCES

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Standard No. 27 - Library and Learning Resources

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STANDARD FOR LIBRARY AND EDUCATIONAL RESOURCES

Standard No. 27. Library and Educational Resources

Library and educational resources should be available and accessible to the College or School of Pharmacy that are sufficient to support the professional program in pharmacy and to provide for research and scholarly activities in accord with the mission of the College or School. The collection, educational technologies, services, and staff should be adequate to the needs of faculty and students, including those in nontraditional pathways; holdings should be current with an established mechanism for review and updating; the physical facilities should adequately house the library's print and non-print holdings, and provide sufficient study, reading, and computer space for students and faculty. The College or School should demonstrate that these resources are fully incorporated and utilized in the teaching and learning processes.

Guideline 27.1

The library resources and educational technologies should satisfy generally accepted standards and practices for library and educational resources that serve the professional program in pharmacy. The library should be under the direction of a professional librarian and a good working relationship should exist with the College or School. Educational technology services should be under the direction of a media professional and an effective working relationship should exist with the College or School as well as with the library. A faculty liaison or committee should be established to assure the adequacy of the collection, educational technologies, and services and insure their appropriate integration into the teaching program. An organized program should exist to teach students the effective and efficient use of the library and educational resources. Remote access technologies and mechanisms which promote utilization of library information from off-campus sites should be available. Search capabilities, interlibrary loans, and other methods for access to materials not in the collection should be available and taught to students. Student and faculty opinions should be sought regarding the adequacy of library and educational resources, and estimates of utilization of available resources by students and faculty should be obtained so as to foster improvement.

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STANDARDS FOR PHYSICAL AND PRACTICE FACILITIES

Standard No. 28. Physical Facilities

The physical facilities of a College or School of Pharmacy should be adequate to achieve its stated mission. Essential physical facilities include administrative and faculty offices, teaching and research laboratories, lecture rooms, small classrooms or conference rooms, student amenities, program support areas, and an infrastructure to support educational technologies. The physical facilities should be adequately equipped, well-maintained, provide a reasonably attractive environment for teaching and learning, and meet the federal, state, and local legal standards for disabled individuals. The teaching facilities, including general and specialized laboratories, should be sufficient in number and adequate in size to accommodate the student body. Equipment for computer and laboratory work should be available so as to provide individual learning experiences and should be available in a quantity sufficient so that each student has opportunity for participation. Physical facilities, instrumentation, and supplies should be adequate to support the research and scholarly activities of the College or School, including its professional development program for faculty.

Guideline 28.1

Offices for faculty should provide privacy for study and for counseling and advising students. Adequate facilities should be available for support staff, including space for clerical and receptionist duties, copying services, and the housing of equipment and supplies.

Guideline 28.2

Adequate equipment, instrumentation, and other educational technologies necessary to support the College's or School's mission, including audio-visual aids and computers, should be provided. The necessary teaching resources, including facilities for practice simulations, should be available so as to provide students with foundational practice exercises and simulated pharmaceutical care experiences.

Guideline 28.3

Adequate space should be provided for student activities and organizations, such as meeting rooms, study areas, and lounges. Appropriate resources should be available to support a favorable environment for student life.

Guideline 28.4

Proper and adequate animal facilities should be available to carry out the teaching and other programs of the College or School. Development and maintenance of such facilities should meet acceptable standards for animal facilities.

Guideline 28.5

Access to specialized resources is necessary to support the professional program in pharmacy, in accord with specific curricular needs. Illustrative of such resources are a drug information center, computer laboratory, professional practice simulation laboratory, poison control center, pharmaceutical technology laboratory, and a nuclear pharmacy.

Standard No. 29. Practice Facilities

A College or School of Pharmacy should have practice facilities of adequate number and sufficient nature to support the professional experience area of the curriculum and to provide for the student enrollment. Administrative arrangements should exist between the College or School and its practice affiliates.

Guideline 29.1

Practice facilities essential to the core Advanced Pharmacy Practice Experiences, such as appropriate inpatient and other environments of hospital/institutional practice, and ambulatory care settings, including community pharmacies, should be available. Suitable facilities should be available for students to support the selective Advanced Pharmacy Practice Experiences in a range of practice settings, such as primary, acute, chronic, and preventive care areas, medical specialty care areas, inhome care, health maintenance organizations, managed care, extended care, and other health care facilities.

Guideline 29.2

The pharmaceutical services at each practice facility should be of an exemplary nature and faculty (salaried or voluntary) should serve as role models of professional attributes and behavior for students. All practice facilities should be selected in accord with quality criteria established and reviewed periodically, in accord with the quality control procedure of the College or School. The quality control procedure should include delineation of outcome expectations for student performance in stated competencies along with assessment tools for measurement. The College or School should develop innovative practice settings so as to provide students with new concepts and practice capabilities.

Guideline 29.3

The patient population within the patient care areas of the practice facilities available to the College or School should be adequate for the instructional activities being conducted. Evaluation of learning opportunities should include assessment of the total number of students assigned to the facility, including pharmacy students as well as other health professional students.

Guideline 29.4

Where University health care facilities exist, these resources should be available to the professional program in pharmacy. Appropriate interrelationships should exist between the College or School, the health care facilities, and the pharmacy services of the health care facilities. Moreover, the educational programs of the College or School should be integrated with the pharmacy services of the health care facilities.

Guideline 29.5

The stability of relationships between the College or School and its practice affiliates should be demonstrated by contractual agreements or other statements of understanding. Agreements should provide for sufficient advance notification of termination in order to permit development of alternate affiliations should this become necessary. Agreements should also address student-related matters such as health services, malpractice provisions, immunization policies, and professional conduct.

STANDARD FOR FINANCIAL RESOURCES

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Standard No. 30 - Financial Resources

STANDARD FOR FINANCIAL RESOURCES

Standard No. 30. Financial Resources

Financial resources of a College or School of Pharmacy should be adequate so that continuing operation of the professional program in pharmacy is assured at an acceptable level. A budget should be available that provides for programmatic needs, including faculty resources, materials and supplies, faculty development, and evaluation for purposes of assessment of achievement and to insure program effectiveness. Enrollments should be established and managed by the College or School in harmony with resource capabilities. Financial resources are necessary to provide for appropriate and well-maintained physical facilities. The University and the College or School should develop and maintain a broad base of financial support. The College or School should augment budgetary resources with programs of private giving and other extramural support for purposes of programmatic development and enrichment.

Guideline 30.1

The College or School should operate with a budget that is developed and managed in accord with sound and accepted business practices. Financial resources should be deployed efficiently and effectively in support of the mission, goals, and objectives, and should be provided in accord with the plan of the College or School.

Guideline 30.2

A program should be established to acquire extramural funds through endowment income, grants, contracts, and other fund raising mechanisms. Resources obtained through such sources should be free of restrictions that may interfere with sound educational and ethical policies; such resources should be used in a manner which maintains the integrity of and supports the mission of the College or School. Accountability of faculty to the College or School and its professional program in pharmacy should not be affected by extramural funding.

GLOSSARY	

GLOSSARY

¹Mission, Goals, and Objectives

A mission statement defines the long-range purposes or aims which the College or School of Pharmacy strives to sustain year after year. Goals define those end results to be achieved; taken collectively, goals embody the mission of the College or School. Objectives refer to those relatively short-term conditions to be achieved within a given period of time that are measurable evidence of progress toward achievement of the goals of the College or School.

²Professional Competencies

Professional qualities including knowledge, skills, abilities, attitudes, and values necessary to the educational preparation of a generalist practitioner who renders pharmaceutical care.

³Pharmaceutical Care

Pharmaceutical care is the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life. These outcomes are (i) cure of a disease; (ii) elimination or reduction of a patient's symptomatology; (iii) arresting or slowing of a disease process; or (iv) preventing a disease or symptomatology.

Pharmaceutical care involves the process through which a pharmacist cooperates with a patient and other professionals in designing, implementing, and monitoring a therapeutic plan that will produce specific therapeutic outcomes for the patient. This in turn involves three major functions: (i) identifying potential and actual drug-related problems; (ii) resolving actual drug-related problems; and (iii) preventing drug-related problems.

Pharmaceutical care is a necessary element of health care, and should be integrated with other elements. Pharmaceutical care is, however, provided for the direct benefit of the patient, and the pharmacist is responsible directly to the patient for the quality of that care. The fundamental relationship in pharmaceutical care is a mutually beneficial exchange in which the patient grants authority to the provider, and the provider gives competence and commitment (accepts responsibility) to the patient.

The fundamental goals, processes, and relationships of pharmaceutical care exist regardless of practice setting.

Reference:

Hepler, D.D. and Strand, L.M., "Opportunities and Responsibilities in Pharmaceutical Care," *Am. J. Pharm. Educ.*, **53**, 7S-15S(1989).

⁴Standards

Accreditation standards reflect professional and educational qualities identified by the Council as essential to the professional program in pharmacy leading to the doctor of pharmacy degree (Pharm.D.). The use of the word "should" indicates that ACPE considers an attribute to be necessary for compliance and to insure a quality program. Compliance with standards equates to accreditation of the professional program in pharmacy. Based upon the several evaluative steps in the accreditation process, the ACPE determines compliance with standards and the accreditability of the program.

⁵Guidelines

Guidelines are derivative of a particular standard and are provided for guidance and/or interpretation of the standard's intent and purpose. Guidelines are also presented to illustrate ways and means of complying with standards; they assist the College or School of Pharmacy as it demonstrates compliance with standards and they assist evaluation teams in the assessment of the College's or School's compliance with standards.

⁶Formative Evaluation

An evaluation process in which outcomes data and analysis are used to modify (form or reform) an activity with an eye to improving it before the activity is completed or repeated. For example, identifying student deficiencies at midpoint during a course and then using the information to modify later course activities is a formative use of outcomes data.

⁷Summative Evaluation

An evaluation process in which outcomes data and analysis are used to show the degree to which goals are attained at the conclusion of an activity. For example, a student's final course grade represents a summative evaluation of outcomes data and analysis.

⁸Outcome Expectations

Established performance descriptions that are quantifiable and measurable.

⁹Outcome Assessment

The process of collecting information about the attainment of a desired outcome of an academic endeavor; analyzing that information by comparing and contrasting it with previously established statements of mission, goals, and objectives; then using that information to validate the existing effort or to make recommendations to guide improvement.

APPENDIX

APPENDIX REVISION PROCESS

ADVANCE NOTICE: SEPTEMBER 17, 1989, NEW STANDARDS AND GUIDELINES ADOPTED: JUNE 14, 1997

A. DECLARATION OF INTENT TO REVISE STANDARDS, SEPTEMBER 1989.

Advance Notice to Propose Revisions

In September 1989, the ACPE provided advance notice of its intention to propose revisions of the existing accreditation standards for pharmacy education, including reconsideration of <u>Standard No. 16</u>, <u>Accredited Professional Degree Programs</u>: programs leading to the two professional degrees in pharmacy, the baccalaureate in pharmacy degree and the doctor of pharmacy degree. This reconsideration involved the proposal to converge these two programmatic standards into the framework of a new doctor of pharmacy program.

B. PROCEDURE AND SCHEDULE.

Step I: Distribution of Procedure and Schedule for Revision. Timeline: Spring 1990.

The ACPE widely distributed the step-wise <u>Procedure and Schedule for the Revision of Standards and Guidelines, dated January 1,1990</u>, to the pharmacy community. This distribution began in Spring 1990, and was continued throughout the revision process, as a means of communicating the details of the standards revision process to interested parties.

<u>Step II</u>: Competency and Content Development: Broadly-Based and Participatory Procedures for Development of Proposed Revision of Standards. Timeline: June 1990 - June 1991.

ACPE extended an invitation to all pharmacy organizations and professional societies to provide key competencies which were felt to be necessary for a generalist pharmacy practitioner (i.e., hospital pharmacy, independent community pharmacy, chain community pharmacy) to meet the societal purpose of pharmacy at present and in the future. Consideration of the existing curricular standards, including the relative balance and adequacy of areas was also requested. Comments were also accepted on the programmatic framework presented in ACPE's advance notice of intent to revise standards. Recommendations and suggestions were requested related to enhancing efficiencies in the educational process involving students as active learners and maturing professionals consistent with program goals, with emphasis on the development of problem-solving skills. Perspectives and recommendations were also sought for the educational development of baccalaureate-degreed pharmacists already in practice, including non-traditional educational approaches. The input sought included education and training program innovations as well as assessment processes for outcome characteristics and individualized practice patterns of pharmacists.

Letters dated July 18, 1990, were sent to the following organizations: American Association of Colleges of Pharmacy (AACP), American College of Apothecaries (ACA), American College of Clinical Pharmacy (ACCP), American Pharmaceutical Association (APhA), American Society of Consultant Pharmacists (ASCP), American Society of Hospital Pharmacists, now American Society of Health-System Pharmacists (ASHP), National Association of Boards of Pharmacy (NABP), National Association of Chain Drug Stores (NACDS), NARD, Representing Independent Retail Pharmacy, now National Community Pharmacists Association (NCPA), National Pharmaceutical Association (NPhA), National Pharmaceutical Council (NPC), Nonprescription Drug Manufacturers Association (NDMA), and Pharmaceutical Manufacturers

Association (PMA), now Pharmaceutical Research and Manufacturers Association (PhRMA). In addition, all fifty state pharmaceutical associations and all ASHP affiliated state chapters were included.

Step III: Analysis and Preliminary Formulation of Proposed Revision of Standards. Timeline: June 1991 - June 1992.

The Council indicated throughout this step in its Newsletters and other communications that while the procedures called for the completion of the first information gathering stage by June 1991, information would continue to be accepted throughout the entire revision procedure. Additional or new information would be infused as the process continued. The Council received extensive input from the pharmacy community during this step in the revision process, from the above-stated organizations as well as from individuals. ACPE studied the responses from the pharmacy community and formulated, in appropriate accreditation/technical language, a working draft of a proposed revision of standards.

Step IV: Preliminary Review of Proposed Revision by Professional Societies. Timeline: June 1992 - June 1993.

The ACPE, in letters dated April 10, 1992, provided advance notice to eleven organizations of the Council's plan to form, with their assistance and participation, an Advisory Committee on Standards Revision. The charge to the Committee was stated as being three-fold: a) to provide assistance in the continuing development of the proposed revision; b) to review and react to a doctor of pharmacy programmatic framework; and c) to review and react to curricular and other revised standards, as proposed. Each contacted organization was subsequently asked, in a letter dated September 9, 1992, to submit a list of three nominees, from which the Committee would be selected. This procedure was utilized so as to assure geographical balance and insure diversity of the Committee's membership. All contacted organizations participated and each complied with this request. Committee members were informed of their appointment in a letter dated November 6, 1992. The Advisory Committee members and the organizations they represented are as follows:

Howard B. Bolton, National Association of Boards of Pharmacy (NABP)

Timothy N. Burelle, American Pharmaceutical Association (APhA)

Jessica Foster, Academy of Students of Pharmacy (ASP - student in BS program)

William R. Garnett, American College of Clinical Pharmacists (ACCP)

Doris S. Jackson, National Pharmaceutical Association (NPhA)

Mary-Anne Koda Kimble, American Association of Colleges of Pharmacy (AACP)

Calvin H. Knowlton, American College of Apothecaries (ACA)

Sharlea Leatherwood, NARD, Representing Independent Retail Pharmacy, now National Community Pharmacists Association (NCPA)

James C. McAllister, American Society of Health-Systems Pharmacists (ASHP)

Richard R. Powis, National Association of Chain Drug Stores (NACDS)

William Simonson, American Society of Consultant Pharmacists (ASCP)

Terri Wheelwright, Academy of Students of Pharmacy (ASP - student in PharmD program)

The <u>Proposed Revision of Accreditation Standards - Working Draft, August 16, 1992</u>, was provided to the advisory committee members in advance of the meeting, along with background information, such as an analysis of standards used by specialized accrediting agencies in ten professions, including the accreditation standards for dental, medical, and optometric education. The Committee met on December 12-14, 1992. The meeting began with a general orientation to the accreditation process, and, for comparative purposes, a review was conducted of the existing ACPE accreditation standards and guidelines. Each Committee member provided initial remarks regarding the <u>Proposed Revision - Working Draft</u>, after which the document was considered page-by-page and line-by-line. Comments and recommendations were made and at the conclusion of the review, opportunity was provided for Committee members to recap specific issues and to give overall comments. A copy of the <u>Proposed Revision -</u>

<u>Working Draft</u>, annotated with the comments and recommendations of the Committee, was then forwarded to Council members for their consideration. The Committee's recommendation in support of a doctor of pharmacy program framework was unanimous; specific comments on curricular and other content of the <u>Proposed Revision - Working Draft</u> were formulated by consensus, with votes taken on two specific areas, for the Council's further consideration.

Step V: ACPE Reviews Findings and Recommendations of <u>ad hoc</u> Advisory Committee on Standards Revisions. Timeline: June 1993 - June 1994.

The ACPE reviewed the comments and recommendations of the Advisory Committee at its January 1993 meeting. Upon due consideration of each and every comment, modifications, revisions, and refinements were effected. The Proposed Revision, April 7, 1993 was readied for distribution to all pharmacy organizations, colleges and schools of pharmacy, boards of pharmacy, university administrators, and the general public. In addition, and in keeping with the next steps of the Procedure and Schedule, the first of the two comment periods was scheduled. This next step provided for solicitation of written comments, and a series of open hearings. It should be noted that the Council recognized that the revision process, at this point, was proceeding very well, and was, in fact, ahead of the planned timeline for the development of proposed revision as initially established in the Procedures and Schedule. The progress in timelines, to date, provided additional time and opportunity for scheduling open hearings and seeking written comments.

Step VI: Comment Period #1. Timeline: June 1994 - June 1995.

The <u>Proposed Revision</u>, <u>April 7</u>, <u>1993</u> was widely distributed, including availability through electronic communication (HELIX). Copies were also made available on request and in advance of the scheduled open hearings. A total of ten open hearings were conducted from November 1993 to August 1994, during national meetings of practitioner, academic, student, professional, and trade organizations. Each open hearing was preceded by a 15-minute slide presentation describing the standards revision process, the <u>Procedure and Schedule</u>, the steps completed and the next steps to be taken. ACPE open hearings were conducted during meetings of the following organizations:

Academy of Students of Pharmacy (ASP), 3/22/94, Seattle, WA

American Association of Colleges of Pharmacy (AACP-COD), 2/19/94-3/1/94, Hilton Head, SC

American Association of Colleges of Pharmacy (AACP), 7/19/94, Albuquerque, NM

American College of Apothecaries (ACA), 4/28/94, Nashville, TN

American College of Clinical Pharmacists (ACCP), 7/31/94, St. Louis, MO

American Pharmaceutical Association (APhA), 3/22/94, Seattle, WA

American Society of Consultant Pharmacists (ASCP), 11/13/93, New Orleans, LA

American Society of Health-System Pharmacists (ASHP), 12/8/93, Atlanta, GA

NARD, Representing Independent Retail Pharmacy, now National Community Pharmacists Association (NCPA), 4/28/94, Nashville, TN

National Association of Boards of Pharmacy (NABP), 5/17/94, Portland, OR

National Association of Chain Drug Stores (NACDS), 8/21/94, Orlando, FL

National Pharmaceutical Association (NPhA), 8/1/94, Atlanta, GA

Step VII: ACPE Review #1. Timeline: June 1995 - January 1996.

The comments obtained during the first comment period were considered by ACPE at meetings held June 15-18, 1995, August 12-13, 1995, and January 12-14, 1996. The <u>Proposed Revision, January 15, 1996</u> was readied for distribution.

Step VIII: Comment Period #2. Timeline: January 1996 - January 1997.

The <u>Proposed Revision</u>, <u>January 15</u>, <u>1996</u> was widely distributed, including availability on the Internet at URL http://ourworld.compuserve.com/homepages/ACPE. Copies were also made available on request and in advance of the scheduled open hearings. Written comments, including those through E-mail, were requested and three open hearings were scheduled. Each open hearing was preceded by a short presentation describing the standards revision process, the <u>Procedure and Schedule</u>, the steps completed and the next steps to be taken. ACPE open hearings were conducted on the following dates and sites:

March 11, 1996, Opryland Hotel, Nashville, TN May 20, 1996, Marriott at Copley Place, Boston, MA July 17, 1996, Nuggett Hotel, Reno NV

Step IX: ACPE Review #2. Timeline: January 1997 - June 1997.

The comments obtained during the second comment period were considered by ACPE during the time period of January 1997 and June 1997. Final consideration of the <u>Proposed Revision</u>, <u>January 15</u>, 1996 was scheduled for the June 1997 meeting of the ACPE. The <u>Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree</u> were adopted June 14, 1997. The new standards and guidelines were made available for immediate distribution.