

Educational Outcomes

Introduction

These *Educational Outcomes* are intended to serve several purposes, the most important of which is as a guide to pharmacy faculty and administrators in assessing and revising their curriculums. The *Outcomes* are intended to be the endpoint, the target toward which the evolving pharmacy curriculum should be aimed.

The AACP Center for the Advancement of Pharmaceutical Education (CAPE) Advisory Panel on Educational Outcomes originally developed these *Outcomes* in 1994. The Advisory Panel used as resources the papers of the AACP Commission to Implement Change in Pharmaceutical Education, the AACP Focus Group on the Liberalization of the Professional Curriculum, and the results of the Scope of Practice Project survey that was supported by AACP, the American Pharmaceutical Association, the American Society of Health-System Pharmacists, and the National Association of Boards of Pharmacy.

The AACP Board of Directors, during its July 1997 meeting, determined that, in light of the continued evolution of pharmacy practice and the roles and functions of pharmacists (e.g., manage drug therapy; conduct physical assessments; order/perform diagnostic tests; initiate, modify, monitor, continue, or discontinue drug therapy under collaborative care agreements with physicians), a review and possible revision of the *Educational Outcomes* was needed. The CAPE Advisory Panel on Educational Outcomes was reconvened for that purpose.

The 1997/98 CAPE Advisory Panel on Educational Outcomes considered input provided from various sources, including:

- A letter from the American Society of Health-System Pharmacists, suggesting the inclusion of outcomes related to the provision of care to the dying;
- The Chair Report of 1997/98 AACP Academic Affairs Committee, suggesting that complementary or alternative therapies be mentioned specifically within the outcomes;
- *Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree*, adopted by the American Council on Pharmaceutical Education June 14, 1997;
- *Maintaining Our Commitment to Change*, a report of the AACP Commission to Implement Change in Pharmaceutical Education, published in January 1997;
- *Collaborative Drug Therapy Management by Pharmacists*, an ACCP Position Statement; and
- The *Pharmacy Practice Activity Classification* from the American Pharmaceutical Association.

Contained herein is the revised version (1998) of the *Educational Outcomes*.

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Professional Practice-Based Outcomes

I. Provide Pharmaceutical Care

- A. Gather and organize information in order to identify ongoing or potential drug-related problems and the root cause of the problems.
 - 1. Collect accurate and comprehensive drug information from appropriate sources.
 - 2. Collect accurate and comprehensive information to be used in monitoring therapeutic outcomes.
 - 3. Identify the patient's primary complaint(s) and reason(s) for seeking medical care.
 - 4. Perform selected aspects of physical assessment.
 - 5. Identify appropriate information in profiles or medical records that will affect drug dose and schedule.

- B. Plan and perform ongoing patient evaluation to identify additional drug-related problems and implement changes in the pharmaceutical care plan.
 - 1. Assess patient therapeutic self-management.
 - a. Review patient profiles or medication administration records to determine the adequacy of patient therapeutic self-management.
 - b. Employ clinical assessment skills to determine the adequacy of patient therapeutic self-management.
 - c. Interview the patient/caregiver to help determine the adequacy of patient therapeutic self-management.
 - 2. Optimize patient therapeutic self-management.
 - a. Develop a plan to influence patients to effectively manage their therapy and reinforce appropriate behaviors.
 - b. Communicate an analysis of patient therapeutic self-management problems to the patient's physician or other relevant health care providers.
 - c. Communicate alternative dosage strategies to the prescriber to help resolve specific patient therapeutic self-management problems.
 - 3. Monitor the safety and efficacy of therapeutic plans.
 - a. Employ clinical assessment skills in order to evaluate therapeutic effectiveness or potential drug-related problems in the patient.
 - b. Communicate evidence of efficacy or potential for drug-related problems to the patient and/or caregiver and prescriber.
 - c. Communicate alternative therapeutic strategies to the prescriber to correct or prevent drug-related problems.
 - d. Recommend revisions of therapeutic plans based upon changes in patient status.

- C. Interpret and evaluate pharmaceutical data and related information needed to prevent or resolve medication-related problems or to respond to information requests.
 - 1. Interpret statistical data.
 - 2. Assess physical and chemical data.
 - 3. Evaluate laboratory test results and pharmacokinetics data.
 - 4. Evaluate information obtained from the patient's history and physical assessment.
 - 5. Evaluate research studies.



6. Evaluate the acceptability of prescription order transmission and legitimacy of source.
 7. Determine the validity of the patient-prescriber relationship.
 8. Clarify, add, and/or correct prescription order information when necessary.
 9. Make reasonable assumptions and/or draw reasonable conclusions when data are incomplete.
 10. Identify and collect all information necessary to select appropriate medical goods and devices for the patient.
 - a. Research the literature related to medical goods and devices in order to select or recommend the most appropriate device for an individual patient.
 - b. Compile and update literature for ready reference in the provision of patient care.
 - c. Obtain patient information relevant to the selection of a particular device.
- D. Collaborate with physicians, other health care professionals, patients, and/or their caregivers to formulate a pharmaceutical care plan.
1. Communicate pertinent information from the patient's medical record.
 2. Recommend appropriate drug therapy.
 3. Make referrals to other health care agencies or professionals where indicated.
 4. Select appropriate medical goods and devices for the patient.
 - a. Assess the patient's medical and/or pharmaceutical needs.
 - b. Assess the ability of the patient or caregiver to cope with or employ the necessary medical goods or devices.
 - c. Determine which of the available items in the market place meets the patient's or caregiver's needs.
 5. Integrate basic knowledge as needed to design, implement, and evaluate patient-specific pharmacotherapeutic regimens to prevent or resolve medication-related problems or to respond to information requests.
 - a. Apply knowledge of the pathophysiology of a specific disease to prevent medication-related problems.
 - b. Apply pharmacologic approaches to the management of specific diseases.
 - c. Relate therapeutic principles to medication-related problems experienced by patients.
 - d. Relate psychosocial aspects of illness and health to the management of therapy-related problems.
 - e. Apply preventive strategies and epidemiological research to manage public health problems.
 - f. Apply basic principles of nutrition to the management of patient health.
 - g. Relate the major components of the American health care system and their relationship to the delivery of pharmaceutical care.
 - h. Relate the chemical, biochemical, and pharmacological mechanisms of drug action to the identification and resolution of medication-related problems.
 - i. Relate the chemical and/or biochemical structure of drugs to their therapeutic action.
 6. Determine the appropriate drug delivery system for the patient based upon individual patient needs and characteristics.
 - a. Evaluate patient characteristics that may influence the choice of a drug delivery system.

- b. Select a drug delivery system that will provide optimal therapeutic benefit to individual patients.
 - c. Evaluate the suitability of an extemporaneously compounded prescription formulation for the administration of a desired drug.
 - 7. Select an appropriate container for the drug product or determine if original packaging is safe and appropriate for the product and consumer.
 - a. Evaluate the suitability of a container for a given drug product based upon the chemical and physical properties of the drug.
 - b. Recognize any special packaging required for a given dosage form including any additional apparatus necessary for its administration.
 - c. Determine if the product is packaged in compliance with legal requirements and bears no signs of tampering.
 - d. Recognize patient characteristics that require alteration of product packaging.
 - e. Assess the appropriateness of product packaging for a particular patient.
 - 8. Recommend medication doses and dosage schedules based upon relevant patient factors, such as pharmacodynamic, physiologic, and pharmacokinetics parameters.
 - a. Integrate patient and drug information with drug dosing methods to calculate appropriate dosage adjustments.
 - b. Explain dosage recommendations and associated rationale to other health care team members.
- E. Implement the pharmaceutical care plan.
 - 1. Accurately prepare prescriptions.
 - a. Correctly count, measure, and/or mix preformulated products.
 - b. Correctly label the finished prescription.
 - 2. Accurately compound individual or bulk medications.
 - a. Use correct gravimetric and volumetric measuring procedures to obtain the desired quantity of any formulation component.
 - b. Use good compounding practices in the extemporaneous production of a patient-specific drug delivery system.
 - c. Identify physical and chemical incompatibilities among components of a given formulation.
 - d. Recommend appropriate alternatives to avoid physical and chemical incompatibilities among components of a given formulation.
 - 3. Apply guidelines and standards of practice for preparation, storage, in-process quality control, and administration of sterile dosage forms and enteral nutrition products in various pharmacy practice settings.
 - a. Use aseptic technique and/or sterilization methods that are appropriate for the pharmaceutical product based on established risk levels.
 - b. Use aseptic technique to prepare sterile pharmaceutical dosage forms.
 - c. Perform proper quality control procedures.
 - d. Evaluate the physical and chemical stability of a given formulation.
 - e. Maintain appropriate documentation.

4. Provide counseling to patients and/or caregivers relative to proper therapeutic self-management.
 - a. Use appropriate sources of patient education information to review indications, adverse effects, dosage, storage, and administration techniques.
 - b. Use effective written, visual, verbal, and nonverbal communication skills when providing medication self-management counseling to patients and/or caregivers.
 - c. Demonstrate proper administration technique for a given drug delivery system.
 - d. Explain any action that should be taken in the event of a missed dose.
 - e. Advise patients on how to avoid potential interactions with other therapies.
 - f. Explain signs and symptoms associated with the common and/or severe adverse reactions to a therapy.
 - g. Explain the significance and frequency of adverse drug reactions and interactions associated with a given therapy.
 - h. Encourage patients/caregivers to contact the pharmacist for further information or advice regarding therapy.
 5. Provide counseling relative to the proper use of medical goods and devices.
 - a. Identify manual, audiovisual, and/or computerized sources of patient education information on medical devices and goods appropriate to the specific patient's or caregiver's needs.
 - b. Demonstrate the proper use of the medical goods and devices to help ensure that the patient or caregiver can effectively implement the use of the medical goods and devices.
 - c. Ensure that equipment specific requirements for maintenance, testing, etc., are effectively communicated to the patient or caregiver.
- F. Document pharmaceutical care activity in the patient's medical record to facilitate communication and collaboration among providers.
1. Develop and maintain a comprehensive database of information relative to each patient.
 - a. Record all patient information accurately, legibly, and succinctly.
 - b. Observe legal and ethical guidelines for protecting the confidentiality of patient information.
 - c. Consolidate and organize information that is already in the patient's medical record to facilitate its review.
 2. Record information related to the provision of pharmaceutical care to individual patients.
 - a. Record the patient care plan.
 - b. Record decisions about appropriate drug therapy.
 - c. Record actions taken to achieve desired therapeutic outcomes.
 - d. Document the effectiveness of the drug therapy.
- G. Display the attitudes, habits, and values required to render pharmaceutical care.
1. Provide pharmaceutical care ethically and compassionately.

- a. Give the well being of the patient highest consideration in provision of pharmaceutical care.
 - b. Exhibit empathy and a caring attitude when dealing with patients.
 - c. Facilitate the resolution of ethical dilemmas in the provision of optimal pharmaceutical care.
 - d. Respect the dignity and autonomy of individual patients.
2. Provide pharmaceutical care in a professional manner.
- a. Dress and speak in ways that convey a professional image.
 - b. Maintain personal self-control and professional decorum.

II. Manage the Practice

A. Manage Pharmacy Operations

- 1. Establish a mission statement with component goals and actions.
- 2. Develop a strategic plan to achieve the identified goals.
- 3. Develop management plans that take into account advances in technology to enhance the delivery of care to patients and future patient care needs.
 - a. Apply management principles.
 - b. Predict future patient care needs and professional service opportunities.
- 4. Evaluate the achievements of a practice in relation to the established mission, fiscal resources, and customer needs.
- 5. Continually review the operational functioning of the pharmacy and recommend strategic changes to improve the quality of care provided.
- 6. Resolve ethical dilemmas that develop in management of the pharmacy practice setting.

B. Manage Medication Distribution and Control Systems

- 1. Evaluate vendor quality.
 - a. Ascertain product availability and time required to obtain product from vendor.
 - b. Ascertain dependability of the vendor.
 - c. Select the most cost-effective source of a given product.
 - d. Determine if a reasonable length of expiration time remains when products arrive from the vendor.
 - e. Determine if proper storage and shipment procedures have been followed by the vendor.
- 2. Select high quality drug products for patients.
 - a. Apply relevant regulations to product selection from among multi-source drug products.
 - b. Use appropriate references for the evaluation of drug product quality.
 - c. Perform simple testing procedures to evaluate physical and chemical stability.
 - d. Communicate an evaluation of drug product quality to the patient and/or other health care professionals.
 - e. Identify alternative actions if product quality is compromised.
- 3. Recognize valid in vitro dissolution and in vivo bioavailability studies.

- a. Evaluate the validity of experimental designs, analytical methods, and statistical analyses used in bioavailability studies.
 - b. Evaluate in vitro dissolution and in vivo data obtained from relative and absolute bioavailability studies.
4. Select drug products on the basis of bioequivalence and therapeutic equivalence.
 - a. Evaluate the validity of relevant bioequivalence studies.
 - b. Evaluate in vivo—in vitro correlations where appropriate.
 - c. Assess bioequivalence and therapeutic equivalence recommendations embodied in institutional, state and federal formularies, and documents.
5. Determine the reliability of the manufacturer.
 - a. Evaluate the quality control record of manufacturers.
 - b. Consider other factors that are indicative of a manufacturer's attention to quality and address their potential impact on the manufacturer's ability to replicate the product and ensure reliability.
6. Use pharmacoeconomic data in the selection of drug delivery form, amount, and brand vs. generic of a drug product.
 - a. Evaluate pricing information, including relevant pricing structures for products under consideration.
 - b. Evaluate characteristics of the product(s) under consideration that may impact cost and/or therapeutic outcome.
 - c. Determine the availability of pharmaceutical alternatives.
 - d. Determine the availability of generic counterparts to brand name products.
7. Determine and maintain optimal inventory mix/level.
 - a. Apply purchasing and inventory control principles.
8. Maintain records of products received and removed from inventory.
9. Monitor compliance with policies and procedures for inventory management.
10. Design, select, implement, and/or manage drug distribution systems for various practice settings.
 - a. Develop appropriate position descriptions for a given drug distribution system.
 - b. Develop and use policies and procedures that provide for quality assurance/control to improve the efficiency and effectiveness of a given drug distribution system.
11. Perform drug control, storage, and security functions in drug distribution.
 - a. Determine which drugs require special storage conditions and insure that these drugs are properly stored.
 - b. Properly dispose of/return those drug products that have expired and/or exceeded their reasonable shelf life.
12. Comply with federal, state, and local laws and related regulations that affect the practice of pharmacy.



13. Apply principles of civil law to the practice of pharmacy.
 - a. Recognize professional practice situations that may give rise to liability under civil law.
 - b. Predict the likelihood of liability that may arise from errors of omission or commission in professional practice situations involving civil law.
- C. Manage Human Resources
 1. Maintain a staff of persons capable of fulfilling the practice mission.
 - a. Apply principles of personnel management to recruit hire, train, develop, supervise, motivate, retain, and evaluate support staff.
- D. Manage Facilities and Equipment
 1. Specify, acquire, maintain, and update facilities and equipment required to fulfill the practice mission.
 - a. Identify deficiencies in facilities design and equipment at an existing practice site.
 - b. Apply relevant regulations and guidelines during the design of facilities to fulfill a specific practice mission.
 - c. Develop/specify information system needs and implement an information management system that meets legal, business, archival, and patient care needs.
- E. Manage Fiscal Resources
 1. Develop a business plan (budgets, pricing, contract development, and yearly reports) that assures financial success of the practice.
 - a. Apply principles of fiscal management.
- F. Manage Change in Response to Professional Evolution
 1. Identify actual and potential personnel, technological, financial, or regulatory changes that may impact the practice of pharmacy.
 2. Formulate and evaluate strategies to adapt to change.

III. Manage Medication Use Systems

- A. Participate in the pharmaceutical care system's process for reporting and managing medication errors and adverse drug reactions.
 1. Identify and report medication errors and adverse drug reactions to appropriate individuals and organizations.
 2. Manage the incidence of medication errors and adverse drug reactions.
 - a. Evaluate information obtained from adverse drug reaction and medication error reporting systems to identify preventable causes.
 - b. Recommend actions to minimize the occurrence of adverse drug reactions and medication errors.

- B. Participate in the pharmaceutical care system's process for conducting drug use evaluations.
 - 1. Develop appropriate criteria and outcome indicators.
 - a. Identify appropriate drugs for review.
 - b. Identify appropriate criteria or indicators developed by regulatory agencies.
 - c. Adapt and/or modify existing criteria for use in a given situation.
 - d. Develop criteria and/or indicators based on analysis of the literature.
 - 2. Conduct drug use evaluations.
 - a. Collect data for a drug utilization review.
 - b. Apply criteria to collected drug utilization review data.
 - c. Implement corrective actions to improve drug use.
- C. Participate in the development, implementation, evaluation, and modification of a formulary system.
 - 1. Develop standards for drug product inclusion in the formulary.
 - a. Compile and evaluate relevant scientific literature and drug use data across patients and prescribers within the system.
 - b. Develop therapeutic interchange guidelines.
 - 2. Implement and manage the formulary system.
 - a. Compile and evaluate data necessary to review therapeutic and/or generic classes of drugs and new products for formulary consideration.
 - b. Monitor prescriber and pharmacist compliance with formulary standards.
 - c. Implement corrective action if variances from the formulary standards occur.
 - d. Communicate with managers and caregivers regarding formulary decisions.
- D. Apply principles of outcomes research and quality assessment methods to the evaluation of pharmaceutical care.
 - 1. Use appropriate structure, process, and outcome measures to evaluate the quality of pharmaceutical care.
 - 2. Apply elements of continuous quality improvement to pharmaceutical care.
 - 3. Apply appropriate drug use management methods to evaluate the quality of pharmaceutical care.
 - 4. Use appropriate critical pathways, clinical practice guidelines, and disease management protocols in the delivery of pharmaceutical care.
 - 5. Document quality assurance activities according to the specifications of relevant accrediting and regulatory bodies.
 - 6. Use report cards in assessing the quality of health care.
 - 7. Apply principles of pharmacoeconomics in making pharmaceutical care decisions.
 - 8. Apply principles of humanistic outcomes in determining impact of pharmaceutical care services on patient's quality of life.

IV. Promote Public Health

- A. Provide emergency care on a limited basis.
 - 1. Provide emergency first aid treatment and cardiopulmonary resuscitation (CPR).



- a. Identify and evaluate common emergencies including those requiring CPR.
 - b. Determine urgency of the situation and necessity to summon emergency medical service personnel.
 - c. Apply appropriate emergency care in relationship to available personnel, equipment, and facilities.
 - d. Advise patients on the need for further medical evaluation.
 - e. Describe legal and ethical implications of intervention in emergency situations.
2. Provide patients with access to poison control and treatment information.
- a. Apply effective communication techniques when responding to requests for information on poisoning and drug overdose.
 - b. Consult appropriate resources for identification of the symptoms, signs, and management of a specific poisoning or drug overdose.
 - c. Provide recommendations for management and/or refer patients for further medical evaluation.
 - d. Assist individuals in obtaining emergency transportation to a medical facility.
 - e. Describe legal and ethical implications of intervention in poisoning/drug overdose situations.
- B. Promote public awareness of health and disease.
1. Provide disease prevention/detection programs to the public.
- a. Assess the needs of the target population relative to disease prevention/detection.
 - b. Select and implement an appropriate strategy to prevent (e.g., immunizations) or detect (e.g., blood cholesterol screening) disease in the target population.
 - c. Provide recommendations for follow-up and/or refer patients for further medical evaluation.
 - d. Evaluate the impact of the program on the target population.

V. Provide Drug Information and Education

- A. Provide pharmaceutical information to health professionals and the general public.
1. Determine the nature and specific aspects of the request.
- a. Obtain appropriate background information.
 - b. Establish the urgency of the response.
2. Use sources of information available and applicable to the specific question.
- a. Recognize the type of content that is available in general (tertiary), secondary, and primary information sources.
 - b. Apply knowledge of the content of general (tertiary), secondary and primary information sources.
 - c. Use abstracting and indexing services to access necessary information.
 - d. Use computerized programs for monitoring and identifying adverse reactions, drug interactions, etc.
 - e. Consult personal and organizational sources of information.
3. Respond to information requests.

- a. Evaluate information obtained from available sources.
 - b. Provide information applicable to the question/case.
 - c. Use appropriate written and verbal communication techniques to respond to information requests.
 - d. Document responses to information requests.
- B. Design, develop, and present educational materials tailored to the needs and educational background of a given audience.
- 1. Identify the educational needs and background of the intended audience.
 - 2. Choose appropriate media to communicate effectively.
 - 3. Choose health education strategies that are appropriate to the type of health care education program.
 - 4. Use health education strategies effectively.
 - 5. Demonstrate effective oral and written communication tailored to the individual needs of the audience and type of setting.
 - 6. Evaluate the impact of an educational program on the behaviors/performance of program participants.

General Ability-Based Outcomes

I. Thinking

Think critically, solve complex problems, and make informed, rational, responsible decisions within scientific, social, cultural, legal, clinical, and ethical contexts.

- A. Identify, retrieve, understand, analyze, synthesize, and evaluate information needed to make informed, rational, ethical decisions.
 - 1. Systematically gather and generate relevant information using a variety of methods and research tools.
 - 2. Analyze information within interdisciplinary frameworks.
 - a. Identify organizing principles and the logic of arguments.
 - b. Identify and test assumptions, biases, and prejudices implicit in arguments.
 - c. Employ sophisticated mathematical and statistical tools and electronic technology to analyze information.
 - d. Assess accuracy, soundness, fairness, significance, relevance, completeness, and persuasiveness of information, arguments, and information sources.
 - 3. Synthesize information in order to draw conclusions, hypothesize, conjecture alternatives, or decide a course of action.
 - 4. Evaluate conclusions and solutions according to appropriate criteria, and revise as necessary.
 - 5. Provide support for arguments, solutions, and results.
- B. Solve complex problems that require an integration of one's ideas and values within a context of scientific, social, cultural, legal, clinical, and ethical issues.
 - 1. Interpret problems within appropriate contexts.
 - 2. Prioritize problems based on identifiable criteria and standards.
 - 3. Apply systematic and intuitive problem-solving strategies.
 - 4. Articulate and implement a defensible solution.
 - 5. Apply appropriate criteria to monitor solution outcomes.
 - 6. Implement solution modifications based on monitoring data.
- C. Display habits, attitudes, and values associated with mature critical thinking.
 - 1. Evaluate personal assumptions, biases, prejudices, and opinions.
 - 2. Display an openness to new ideas, a tolerance for ambiguity, and incompleteness.
 - 3. Display inquisitiveness and commitment to the pursuit of truth.
 - 4. Adopt multiple perspectives in personal thinking to avoid ethno-centricity and intolerance.

II. Communication

Communicate clearly, accurately, and persuasively with various audiences using a variety of methods and media.

- A. Read and listen effectively.
 - 1. Recognize the major ideas of written, spoken, audio-visual, and electronic communications.
 - 2. Understand the conventions, organizing principles, and structures of written, spoken, audio-visual, and electronic communications.



3. Interpret ideas and feelings in discursive and aesthetic modes of communication.
- B. Effectively communicate in speaking and writing, choosing strategies and media that are appropriate to the purpose of the interaction and to the ideas, values, and background of the audience.
1. Speak and write clearly, using logical patterns of organization.
 2. Communicate persuasively by establishing trustworthiness, incorporating appropriate use of emotion, and providing sufficient logical arguments and evidence.
 3. Adapt topics, content, style, tone, and arguments to the beliefs, attitudes, values, and backgrounds of the audience.
 4. Use mechanics and standard conventions appropriate to the medium when speaking, writing, or using electronic communications, unless the purpose of the interaction or audience considerations indicate otherwise.
 5. Communicate effectively through a variety of media and strategies.

III. Valuing and Ethical Decision Making

Make rational, ethical decisions regarding complex personal, societal, and professional situations within a context of personal and professional values.

- A. Interpret decision making within a context of personal and professional values.
1. Recognize the influence of personal values in personal and professional settings.
 2. Identify and test one's personal values.
 3. Respect the values of others within decision making.
 4. Integrate personal and professional values into decision making.
- B. Make and defend rational, ethical decisions.
1. Resolve ethical dilemmas through a systematic decision-making process based on clearly articulated ethical theories and principles.
 2. Resolve ethical issues through an analysis of the ethical principles.
 3. Evaluate the ethical accountability of actions, intentions, and outcomes.

IV. Social and Contextual Awareness

Demonstrate the ability to place health care and professional issues within appropriate historical, cultural, social, economic, scientific, political, and philosophical frameworks, and demonstrate sensitivity and tolerance within a culturally diverse society.

- A. Interpret the context of health care and professional issues in the context of historical, cultural, social, economic, scientific, political, and philosophical frameworks of thinking.
- B. Demonstrate sensitivity and tolerance within multicultural interactions and settings.

V. Social Responsibility

Demonstrate an appreciation of the obligation to participate in efforts to help individuals and to improve society and the health care system.

- A. Demonstrate personal growth through volunteer activities in the community.
- B. Demonstrate leadership abilities in community activities that involve health and human service initiatives focused on individuals or groups.
- C. Advocate improved professional approaches to meet the pharmacy-related needs of society and individual patients.
- D. Promulgate a philosophy of care within health care settings.

VI. Social Interaction

Function effectively in interactions with individuals, within group situations, and within professional organizations and systems.

- A. Evaluate different types of interpersonal behaviors and their roles in effective social interactions.
- B. Demonstrate interaction behaviors that are appropriate for a particular interpersonal situation.
- C. Evaluate the process and outcomes of interpersonal interactions and modify as appropriate.

VII. Self-Learning Abilities

Self-assess learning needs and design, implement, and evaluate strategies to promote intellectual growth and continued professional competence.

- A. Determine areas of deficiency and/or interest.
 - 1. Identify personal learning style and preferences.
 - 2. Identify strengths and weaknesses within personal approach to learning.
 - 3. Regularly self-assess learning needs for ongoing personal and professional growth.
- B. Engage in learning activities on an ongoing basis for personal or professional development based on self-determined areas of deficiency and/or interest.
 - 1. Formulate strategies and learning goals to address identified needs for ongoing personal and professional growth.
 - 2. Engage in instructional activities to achieve desired learning goals.
 - 3. Evaluate the efficacy of completed instructional activities for the achievement of desired learning goals.