

CAPE/COP Educational Outcomes (approved 2016)

Educational Outcomes

Domain 1 – Foundational Knowledge

1.1. Learner (Learner) - Develop, integrate, and apply knowledge from the foundational sciences (i.e., *pharmaceutical, social/behavioral/administrative*, and *clinical sciences*) to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and *patient-centered care*.

Examples of Learning Objectives

- 1.1.1. Develop and demonstrate depth and breadth of knowledge in biological, *pharmaceutical, social/behavioral/administrative*, and *clinical sciences*.
- 1.1.2. Identify how knowledge in foundational sciences is integral to clinical reasoning; evaluation of future advances in medicine; supporting health and wellness initiatives; and delivery of contemporary pharmacy services.
- 1.1.3. Integrate knowledge from foundational sciences to explain how specific drugs or drug classes work and evaluate their potential value and adverse effects in individuals and in ethnic, economic, age and gender-related patient populations.
- 1.1.4. Apply knowledge in foundational sciences to solve therapeutic problems and advance *patient-centered care*.
- 1.1.5. Critically analyze scientific literature related to drugs and disease to enhance clinical decision making.
- 1.1.6. Identify and critically analyze emerging theories, information, and technologies that may impact *patient-centered* and *population based care*.

Domain 2 – Essentials for Practice and Care

2.1. Patient-centered care (Caregiver) - Provide *patient-centered care* as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities).

Examples of Learning Objectives

- 2.1.1. Collect subjective and objective evidence related to patient, medications, allergies/adverse reactions, and disease, by performing patient assessment (including physical assessment) from chart/electronic health records, pharmacist records and patient/family interviews.
- 2.1.2. Interpret evidence and patient data.
- 2.1.3. Prioritize patient needs.
- 2.1.4. Formulate evidence based care plans, assessments, and recommendations.
- 2.1.5. Implement patient care plans.
- 2.1.6. Monitor the patient and adjust care plan as needed.
- 2.1.7. Document patient care related activities.

2.2. Medication use systems management (Manager) - Manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems.

Examples of Learning Objectives

- 2.2.1. Compare and contrast the components of typical **medication use systems** in different pharmacy practice settings.
- 2.2.2. Describe the role of the pharmacist in impacting the safety and efficacy of each component of a typical **medication use system** (i.e., procurement, storage, prescribing, transcription, dispensing, administration, monitoring, and documentation).
- 2.2.3. Utilize technology to optimize the medication use system.
- 2.2.4. Identify and utilize human, financial, and physical resources to optimize the **medication use system**.
- 2.2.5. Manage healthcare needs of patients during **transitions of care**.
- 2.2.6. Apply standards, guidelines, best practices, and established processes related to safe and effective medication use.
- 2.2.7. Utilize continuous quality improvement techniques in the medication use process.
- 2.2.8. Identify and adhere to the laws, rules, and regulations associated with medication distribution and control systems.
- 2.2.9. Apply marketing principles to promote pharmacy services.

2.3. Health and wellness (Promoter) - Design prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve health and wellness.

Examples of Learning Objectives

- 2.3.1. Describe systematic preventive care, using risk assessment, risk reduction, screening, education, and immunizations.
- 2.3.2. Provide prevention, intervention, and educational strategies for individuals and communities to improve health and wellness.
- 2.3.3. Participate with **interprofessional** healthcare team members in the management of, and health promotion for, all patients.
- 2.3.4. Evaluate personal, social, economic, and environmental conditions to maximize health and wellness.
- 2.3.5. Identify Public Health initiatives and perform patient care skills necessary to improve health outcomes based on the patient, the community or the population needs (i.e. blood pressure monitoring, glucose screening, flu vaccination).

2.4. Population-based care (Provider) - Describe how **population-based care** influences **patient-centered care** and influences the development of practice guidelines and evidence-based best practices.

Examples of Learning Objectives

- 2.4.1. Assess the healthcare status and needs of a targeted patient population.
- 2.4.2. Develop and provide an evidence-based approach that considers the cost, care, access, and satisfaction needs of a targeted patient population.
- 2.4.3. Participate in **population health management** by evaluating and adjusting interventions to maximize health.

Domain 3 - Approach to Practice and Care

3.1. Problem Solving (Problem Solver) – Identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution.

Examples of Learning Objectives

- 3.1.1. Identify and define the primary problem.
- 3.1.2. Define goals and alternative goals.
- 3.1.3. Explore multiple solutions by organizing, prioritizing, and defending each possible solution.
- 3.1.4. Anticipate positive and negative outcomes by reviewing assumptions, inconsistencies, and unintended consequences.
- 3.1.5. Implement the most viable solution, including monitoring parameters, to measure intended and unintended consequences.
- 3.1.6. Reflect on the solution implemented and its effects to improve future performance.

3.2. Educator (Educator) – Educate all audiences by determining the most effective and enduring ways to impart information and assess understanding.

Examples of Learning Objectives

- 3.2.1. Conduct a learning needs assessment of constituents who would benefit from pharmacist-delivered education (e.g., patients/caregivers, technicians and interns, pharmacy students, fellow pharmacists, other healthcare providers, legislators).
- 3.2.2. Select the most effective techniques/strategies to achieve learning objectives.
- 3.2.3. Demonstrate the ability to coordinate educational efforts with other healthcare providers, when appropriate, to ensure a consistent, comprehensive, and team-based encounter.
- 3.2.4. Ensure instructional content contains the most current information (e.g. scientific literature) relevant for the intended audience.
- 3.2.5. Adapt instruction using appropriate terminology and deliver to the intended audience.
- 3.2.6. Assess audience comprehension.

3.3. Patient Advocacy (Advocate) - Assure that patients' best interests are represented.

Examples of Learning Objectives

- 3.3.1. Empower patients to take responsibility for, and control of, their health.
- 3.3.2. Assist patients in navigating the complex healthcare system.
- 3.3.3. Ensure patients obtain the resources and care required in an efficient and cost-effective manner (e.g., triage to social and/or other healthcare services).

3.4. Interprofessional collaboration (Collaborator) – Actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.

Examples of Learning Objectives

- 3.4.1. Establish a climate of shared values and mutual respect necessary to meet patient care needs.
- 3.4.2. Define clear roles and responsibilities for team members to optimize outcomes for specific patient care encounters.
- 3.4.3. Communicate in a manner that values team-based decision making and shows respect for contributions from other areas of expertise.
- 3.4.4. Foster accountability and leverage expertise to form a highly functioning team (one that includes the patient, family, and community) and promote shared patient-centered problem solving.

3.5. Cultural sensitivity (Includer) - Recognize *social determinants of health* to diminish disparities and inequities in access to quality care.

Examples of Learning Objectives

- 3.5.1. Recognize the collective identity and norms of different *cultures* without overgeneralizing (i.e., recognize and avoid biases and stereotyping).
- 3.5.2. Demonstrate an attitude that is respectful of different *cultures* and interact without prejudice or judgment.
- 3.5.3. Assess a patient's *health literacy* and culture and modify communication strategies to meet the patient's needs.
- 3.5.4. Safely and appropriately incorporate patients' cultural beliefs and practices into health and wellness care plans.

3.6. Communication (Communicator) – Effectively communicate verbally and nonverbally when interacting with an individual, group, or organization.

Examples of Learning Objectives

- 3.6.1. Interview patients using an organized structure, specific questioning techniques (e.g., motivational interviewing), and medical terminology adapted for the audience (including pediatric and geriatric, and other special populations).
- 3.6.2. Actively listen and ask appropriate open and closed-ended questions to gather information.
- 3.6.3. Use available technology and other media to assist with communication as appropriate.
- 3.6.4. Use effective interpersonal skills (nonverbal communication, empathy, etc) to establish rapport and build trusting relationships.
- 3.6.5. Communicate assertively, persuasively, confidently, and clearly.
- 3.6.6. Demonstrate empathy when interacting with others.
- 3.6.7. Deliver and obtain feedback to assess learning and promote goal setting and goal attainment.
- 3.6.8. Develop professional documents pertinent to organizational needs (e.g., SOAP notes, monographs, policy documents).
- 3.6.9. Document patient care activities clearly, concisely, and accurately using appropriate medical terminology.

Domain 4 – Personal and Professional Development

4.1. Self-awareness (Self-aware) – Examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth.

Examples of Learning Objectives

- 4.1.1. Use *metacognition* to regulate one's own thinking and learning.
- 4.1.2. Maintain motivation, attention, and interest (e.g., *habits of mind*) during learning and work-related activities.
- 4.1.3. Identify, create, implement, evaluate and modify plans for personal and professional development for the purpose of individual growth (e.g. identify strategies for keeping knowledge up to date).
- 4.1.4. Approach tasks with a desire to learn.
- 4.1.5. Demonstrate persistence and flexibility in all situations; engaging in *help seeking* behavior when appropriate.
- 4.1.6. Strive for accuracy and precision by displaying a willingness to recognize, correct, and learn from errors.
- 4.1.7. Use *constructive coping strategies* to manage stress.

- 4.1.8. Seek personal, professional, or academic support to address personal limitations.
- 4.1.9. Display positive self-esteem and confidence when working with others.

4.2. Leadership (Leader) - Demonstrate responsibility for creating and achieving shared goals, regardless of position.

Examples of Learning Objectives

- 4.2.1. Identify characteristics that reflect *leadership* versus *management*.
- 4.2.2. Identify the history (e.g., successes and challenges) of a team before implementing changes.
- 4.2.3. Develop relationships, value diverse opinions, and understand individual strengths and weaknesses to promote teamwork.
- 4.2.4. Persuasively communicate goals to the team to help build consensus.
- 4.2.5. Empower team members by actively listening, gathering input or feedback, and fostering collaboration.

4.3. Innovation and Entrepreneurship (Innovator) - Engage in innovative activities by using creative thinking to envision better ways of accomplishing professional goals.

Examples of Learning Objectives

- 4.3.1. Demonstrate initiative when confronted with challenges.
- 4.3.2. Develop new ideas and approaches to improve quality or overcome barriers to advance the profession of pharmacy.
- 4.3.3. Demonstrate creative decision making when confronted with novel problems or challenges.
- 4.3.4. Assess personal strengths and weaknesses in *entrepreneurial skills* (e.g., self-motivation, self-confidence, ethics/morals, time management).
- 4.3.5. Apply *entrepreneurial skills* within a simulated entrepreneurial activity.
- 4.3.6. Conduct a risk-benefit analysis for implementation of an innovative idea or simulated entrepreneurial activity.

4.4. Professionalism (Professional) - Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.

Examples of Learning Objectives

- 4.4.1. Demonstrate altruism, integrity, trustworthiness, flexibility, and respect in all interactions.
- 4.4.2. Display preparation, initiative, and accountability consistent with a commitment to excellence.
- 4.4.3. Deliver *patient-centered care* in a manner that is legal, ethical, and compassionate.
- 4.4.4. Recognize that one's professionalism is constantly evaluated by others.
- 4.4.5. Engage in the profession of pharmacy by demonstrating a commitment to its continual improvement.
- 4.4.6. Identify and correspond with mentors to assist with professional development.

Bloom's Taxonomy of Educational Objectives			
Cognitive Domain (historical)	Cognitive Domain (revised)	Psychomotor Domain	Affective Domain
Knowledge		Skills	Attitudes
Lower Level* 1. Knowledge 2. Comprehension 3. Application	Lower Level 1. Remember 2. Understand 3. Apply	1. Observing 2. Imitating 3. Practicing 4. Adapting Bloom, 1956	1. Receiving 2. Responding 3. Valuing 4. Organization 5. Characterization by a value Bloom, 1956
Higher Level* 4. Analysis 5. Synthesis 6. Evaluation Bloom, 1956		Higher Level 4. Analyze 5. Evaluate 6. Create Anderson, et al., 2001	
Emphasizes knowledge building, learning facts and terminology of a discipline		Emphasizes problem solving & critical thinking. Applying knowledge to solve problems with multiple answers	