West Virginia University School of Pharmacy Educational Outcomes
Professional Curriculum
Approved by the Faculty: October 11, 2013

Preamble
The School of Pharmacy's educational outcomes (EOs) are designed to produce pharmacists with the knowledge, skills, and values needed to safely and effectively manage medications and medication therapy and promote public health in a complex, dynamic health care environment. Other specific EOs beyond those listed below may be developed for specialized curriculum tracks.

Educational Outcomes
Upon successful completion of the West Virginia University Doctor of Pharmacy degree program, the graduate will be able to accomplish the following educational outcomes (EOs):

EO 1 **Foundational Knowledge and Skills (Learner) -** Develop, integrate, and apply foundational knowledge (e.g., concepts, facts, principles) from biological, pharmaceutical, social, behavioral, administrative, and clinical sciences to evaluate the scientific literature, explain drug actions, solve therapeutic problems, and advance individual and population health.

1.1. Acquire and demonstrate depth and breadth of knowledge of foundational scientific, clinical, socioeconomic, and humanistic concepts and skills.
1.2. Explain how knowledge in the foundational sciences is integral to pharmacy practice.
1.3. Integrate knowledge from foundational sciences to explain how specific drugs or drug classes work and evaluate their potential value in individuals and populations.
1.4. Apply foundational concepts and skills to practice.
1.5. Use scientific reasoning and critical thinking skills in practice to address problems, issues, or concerns.
1.6. Develop and apply creative and innovative approaches to effectively resolve problems and improve patient outcomes.
1.7. Apply an evidence-based approach to practice by identifying appropriate questions to address, using databases and other resources to retrieve information, critically analyzing and interpreting relevant scientific information and other evidence, formulating sound conclusions, and integrating the best published evidence with expertise and individual patient values/needs.
1.8. Analyze and use epidemiologic, pharmacoeconomic, medication utilization, and quality improvement data when developing evidence-based programs and protocols.
1.9. Apply knowledge of research methodology to design or conduct basic research, practice-based studies, or clinical trials.
1.10. Use information technology where appropriate to enhance individual knowledge and skills.

EO 2 **Communication Skills (Communicator, Educator) –** Effectively communicate verbally and nonverbally when interacting with an individual, group, or organization.

2.1. Use appropriate verbal and nonverbal communication skills with individuals or groups, including patients, health professionals and others.
2.2. Use effective written communication skills with patients, health professionals, and others, including the development of documents pertinent to professional or organizational needs (e.g., monographs, reports).
2.3. Educate target audiences by using the most effective method to deliver information, in coordination with other health care professionals as appropriate.

2.4.   Use technology to facilitate or enhance professional communications and presentations.

EO 3   **Professionalism, Advocacy, and Leadership (Professional, Leader, Advocate) -** Exhibit behaviors and values consistent with the professional trust given by patients, healthcare providers, and society; assure that patients' best interests are represented; and demonstrate responsibility for achieving shared goals regardless of position.

3.1.   Conduct pharmacy practice duties and patient care responsibilities in accordance with applicable federal, state, and local laws, statutes, and regulations, as well as professional guidelines and standards.

3.2.   Serve as an advocate, leader, and change agent for pharmacy and pharmacists' professional roles and responsibilities by implementing or participating in new, evidence-based models for cost-effective pharmacist-delivered patient care.

3.3.   Serve as an advocate for community and patient health and medication therapy needs, including disadvantaged or underserved patients and those from diverse cultural and socioeconomic backgrounds, while honoring their autonomy and dignity.

3.4.   Serve as a positive role model in actions/communications for peers and other health care providers by maintaining a high standard for personal and professional demeanor and ethical conduct.

3.5.   Respect all points of view in professional interactions while placing patients' needs and desires at the forefront.

3.6.   Demonstrate compassion, empathy, honesty, integrity, ethical behavior and altruism in all actions and communications with patients, families, and care providers.

3.7.   Develop professional competence through ongoing, active and self-directed pursuit of new knowledge and skills.

3.8.   Identify and analyze emerging health care and pharmacy issues and incorporate new roles, products and services into practice that can improve patient outcomes.

3.9.   Accept accountability and responsibility for one's words and actions.

EO 4   **Self-Awareness (Insightful) – Examine and assess personal knowledge, skills, abilities, attitudes, beliefs, motivation, and emotions and strive for continual improvement.**

4.1   Conduct self-assessments on a regular basis and create, implement, evaluate, and modify as needed plans for personal improvement and continuing professional development.

4.2   Recognize personal strengths and limitations and seek assistance when needed.

4.3   Approach tasks and situations with flexibility and a desire to learn.

4.4   Accept constructive criticism and display a willingness to correct and learn from errors.

EO 5   **Interprofessional Collaboration (Collaborator) –** Actively participate as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.

5.1.   Collaborate with health care professionals, patients, and/or caregivers to ensure that desired patient-specific or population-based health outcomes are achieved.

5.2.   Facilitate team building among health care professionals by developing and maintaining an atmosphere of mutual respect and shared values that place the patient at the forefront.

5.3.   Effectively utilize the knowledge, expertise, and unique roles of health care team providers and refer patients to others when indicated.

5.4. Serve as the medication expert on a collaborative care team by managing the pharmacotherapy for patients' medical conditions and by proactively providing drug product and other medication related information to team members.

5.5. Accept responsibility for medication-related outcomes on the care team.

EO 6   **Patient Care (Provider)** – Provide patient-centered care as the medication expert.

6.1. Accurately interpret, prepare and/or compound, handle and dispense prescriptions for patients.

6.2. Obtain necessary patient-specific data (e.g., consulting patient records, taking medication histories, performing basic physical assessments, ordering/interpreting lab tests), and evaluate and use these data when performing patient care related responsibilities.

6.3. Evaluate pharmaceutical products, including information about the drug, dosage form, delivery system and cost/benefit, when conducting a medication review or preparing a care plan.

6.4. Conduct comprehensive medication reviews and prepare individualized care plans to optimize patient outcomes, with emphasis on commonly encountered chronic or high risk conditions amenable to pharmacotherapy and patients at greater risk for adverse events.

6.5. Work with patients, caregivers, and health care professionals to implement specific therapy plans.

6.6. Educate and empower patients to take an active role in their health and incorporate recommendations for healthy living and self-care into care plans.

6.7. Monitor and evaluate patients during therapy for drug product or pharmacotherapy problems, patient concerns, or adherence issues and recommend or implement solutions.

6.8. Work with patients and other health care providers to ensure the continued success of individual care plans.

6.9. Document patient-care services in charts/medical records and on forms needed for reimbursement.

6.10. Counsel patients and/or caregivers about the following to help ensure a care plan's success: i) medications, non-drug therapy, dietary supplements and natural products; ii) insurance and other options for obtaining necessary medications; iii) proper use of testing devices and medical goods and equipment; and iv) healthy lifestyle changes.

EO 7   **Population-Based Care (Promoter, Provider) –** Design and implement prevention, intervention, and educational strategies for communities to manage chronic disease and improve health and wellness.

7.1. Develop, recommend, and provide preventive health services, such as administration of vaccines and screening tests.

7.2. Develop and implement disease management programs based upon identified needs and priorities (e.g., cost, access, and patient satisfaction considerations; commonly encountered, chronic conditions managed by pharmacotherapy).

7.3. Evaluate and adjust interventions as needed to maximize population health.

7.4. Promote public awareness of health promotion and disease prevention strategies.

7.5. Design, develop, and disseminate public health related educational materials or services in a culturally competent manner.

7.6. Work with health care professionals and other personnel to identify and help resolve key public health issues and problems, and participate in policies or strategies to address them.

EO 8   **Pharmacy and Medication Use Systems (Manager) –** Manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems.

8.1.   Demonstrate knowledge of pharmacy management including operations, human and fiscal resources, marketing, and leadership principles.

8.2.   Design, use, and manage systems to prepare, dispense, distribute and administer medications to optimally serve patient's drug-related needs.

8.3.   Use knowledge of the organization and financing of the U.S. healthcare system to provide and effectively manage progressive pharmacy services.

8.4.   Develop a business plan for integrating clinical and distributive services that includes methods for supporting and obtaining reimbursement for clinical services provided to patients.

8.5.   Demonstrate and apply knowledge of national standards, guidelines, best practices, and established principles and processes for safe medication use to protect patient safety.

8.6.   Participate in quality improvement programs and employ performance indicators to enhance the quality of care and cost effectiveness of services provided and to optimize safe, appropriate medication use.

8.7.   Participate in developing and performing medication use evaluations to identify and resolve drug therapy problems or concerns.

8.8.   Reconcile a patient's medications when transitioning from one care setting to another by communicating effectively with all involved health care professionals.

8.9.   Use current and emerging information and system technologies to enhance safe and effective medication use.

8.10. Provide recommendations for developing and managing a formulary that incorporate pharmacoeconomic principles.

8.11. Actively participate in, and contribute to the development of, strategies to minimize drug misuse/abuse.

Resources
The following resources were consulted to assist with the preparation of this document.

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