What is the definition of continuing education?
Continuing education for the profession of pharmacy is a structured educational activity designed or intended to support the continuing development of pharmacists and/or pharmacy technicians to maintain and enhance their competence. Continuing pharmacy education (CPE) should promote problem-solving and critical thinking and be applicable to the practice of pharmacy.

What does ‘applicable to the practice of pharmacy’ mean?
In general, for guidance in organizing and developing CPE activity content, providers should ensure that, as for all health care professionals, pharmacists and pharmacy technicians should develop and maintain proficiency in six core areas:

1. delivering patient-centered care,
2. working as part of interprofessional teams,
3. practicing evidence-based medicine,
4. focusing on quality improvement,
5. using information technology, and
6. developing and maintaining safe and effective medication use processes.

*Adapted from Institute of Medicine’s Health Professions Education: A Bridge to Quality, April 2003.

**Added competency by ACPE CPE Pharmacy Technician Group

The following guidance should be utilized by ACPE-accredited providers as guides in developing CE activity content appropriate for pharmacists and/or pharmacy technicians:

Pharmacist competencies. Specific pharmacist outcomes have been developed by the American Association Colleges of Pharmacy’s Center for the Advancement of Pharmacy Education (CAPE) Educational Outcomes (2013):

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.

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).

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1 Continuing education whereby the components comply with the ACPE Standards for Continuing Pharmacy Education
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.

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.

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.

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.

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

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

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.

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

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

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.

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

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

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.

Pharmacy Technician Competencies. Specific pharmacy technician knowledge statements (numbers 1.0 – 9.0) have been developed by the Pharmacy Technician Certification Board (PTCB) (2013):

1.0 Pharmacology for Pharmacy Technicians

   1.1 Generic and brand names of pharmaceuticals
   1.2 Therapeutic equivalence
   1.3 Drug interactions (e.g., drug-disease, drug-drug, drug-dietary supplement, drug-OTC, drug-laboratory, drug-nutrient)
   1.4* Strengths/dose, dosage forms, physical appearance, routes of administration, and duration of drug therapy
   1.5 Common and severe side or adverse effects, allergies, and therapeutic contraindications associated with medications
   1.6 Dosage and indication of legend, OTC medications, herbal and dietary

2.0 Pharmacy Law and Regulations
2.1 Storage, handling, and disposal of hazardous substances and wastes (e.g., MSDS)
2.2 Hazardous substances exposure, prevention and treatment (e.g., eyewash, spill kit, MSDS)
2.3 Controlled substance transfer regulations (DEA)
2.4 Controlled substance documentation requirements for receiving, ordering, returning, loss/theft, destruction (DEA)
2.5 Formula to verify the validity of a prescriber’s DEA number (DEA)
2.6 Record keeping, documentation, and record retention (e.g., length of time prescriptions are maintained on file)
2.7 Restricted drug programs and related prescription-processing requirements (e.g., thalidomide, isotretinoin, clozapine)
2.8 Professional standards related to data integrity, security, and confidentiality (e.g., HIPAA, backing up and archiving)
2.9 Requirement for consultation (e.g., OBRA’90)
2.10 FDA’s recall classification
2.11 Infection control standards (e.g., laminar air flow, clean room, hand washing, cleaning counting trays, countertop, and equipment) (OSHA, USP 795 and 797)
2.12 Record keeping for repackaged and recalled products and supplies (TJC, BOP)
2.13 Professional standards regarding the roles and responsibilities of pharmacists, pharmacy technicians, and other pharmacy employees (TJC, BOP)
2.14 Reconciliation between state and federal laws and regulations
2.15 Facility, equipment, and supply requirements (e.g., space requirements, prescription file storage, cleanliness, reference materials) (TJC, USP, BOP)

3.0 Sterile and Non-Sterile Compounding
3.1 Infection control (e.g., hand washing, PPE)
3.2 Handling and disposal requirements (e.g., receptacles, waste streams)
3.3* Documentation (e.g., batch preparation, compounding record)
3.4* Determine product stability (e.g., beyond use dating, signs of incompatibility)
3.5 Selection and use of equipment and supplies
3.6* Sterile compounding processes
3.7* Non-sterile compounding processes

4.0 Medication Safety
4.1 Error prevention strategies for data entry (e.g., prescription or medication order to correct patient)
4.2 Patient package insert and medication guide requirements (e.g., special directions and precautions)
4.3 Identify issues that require pharmacist intervention (e.g., DUR, ADE, OTC recommendation, therapeutic substitution, misuse, missed dose)
4.4 Look-alike/sound-alike medications
4.5 High-alert/risk medications
4.6 Common safety strategies (e.g., tall man lettering, separating inventory, leading and trailing zeros, limit use of error prone abbreviations)

5.0 Pharmacy Quality Assurance
5.1 Quality assurance practices for medication and inventory control systems (e.g., matching National Drug Code (NDC) number, bar code, data entry)
5.2 Infection control procedures and documentation (e.g., personal protective equipment [PPE], needle recapping)
5.3 Risk management guidelines and regulations (e.g., error prevention strategies)
5.4 Communication channels necessary to ensure appropriate follow-up and problem resolution (e.g., product recalls, shortages)
5.5 Productivity, efficiency, and customer satisfaction measures

6.0 Medication Order Entry and Fill Process
6.1* Order entry process
6.2* Intake, interpretation, and data entry
6.3* Calculate doses required
6.4 Fill process (e.g., select appropriate product, apply special handling requirements, measure, and prepare product for final check)
6.5 Labeling requirements (e.g., auxiliary and warning labels, expiration date, patient specific information)
6.6* Packaging requirements (e.g., type of bags, syringes, glass, pvc, child resistant, light resistant)
6.7 Dispensing process (e.g., type of bags, syringes, glass, pvc, child resistant, light resistant)

7.0 Pharmacy Inventory Management
7.1 Function and application of NDC, lot numbers and expiration dates
7.2 Formulary or approved/preferred product list
7.3* Ordering and receiving processes (e.g., maintain par levels, rotate stock)
7.4 Storage requirements (e.g., refrigeration, freezer, warmer)
7.5 Removal (e.g., recalls, returns, outdates, reverse distribution)

8.0 Pharmacy Billing and Reimbursement
8.1 Reimbursement policies and plans (e.g., HMOs, PPO, CMS, private plans)
8.2* Third party resolution (e.g., prior authorization, rejected claims, plan limitations)
8.3 Third-party reimbursement systems (e.g., PBM, medication assistance programs, coupons, and self-pay)
8.4 Healthcare reimbursement systems (e.g., home health, long-term care, home infusion)
8.5 Coordination of benefits

9.0 Pharmacy Information System Usage and Application
9.1 Pharmacy-related computer applications for documenting the dispensing of prescriptions or medication orders (e.g., maintaining the electronic medical record, patient adherence, risk factors, alcohol drug use, drug allergies, side effects)
9.2 Databases, pharmacy computer applications, and documentation management (e.g., user access, drug database, interface, inventory report, usage reports, override reports, diversion reports)

10.0 Verbal Communication Skills for Pharmacy Technicians
10.1 Effective and professional verbal communication skills with multidisciplinary healthcare members and patients/customers (e.g., effective listening, feedback, using proper verbal syntax, and questioning)
10.2 Effective telephone communication techniques/etiquette which comply with organizational protocols in both receiving and initiating calls
10.3 Identify nonverbal gestures (e.g., body language) which can positively or negatively affect verbal communication

*denotes content including calculations.
**How will CPE activities for pharmacists and pharmacy technicians be designated?**

Announcement materials (e.g., brochures, advertisements, e-mail blasts, or other announcements) should clearly and explicitly identify the target audience that will benefit from the content of the CPE activity. If a CPE activity includes pharmacists and pharmacy technicians in the same CPE activity specific and separate learning objectives should be described for each, pharmacists and pharmacy technicians. Please note that CPE activities pertaining to, for example, law, may have one set of objectives for pharmacists and pharmacy technicians.

In addition, a Universal Activity Number is an identification number that is assigned to each CPE activity developed and provided, or jointly provided, by an ACPE-accredited provider. This number is developed by appending to the ACPE provider identification number (e.g., 0197), the joint provider designation number (0000 for no joint provider, 9999 for joint providers), the year of CE activity development (e.g., 17), the sequential number of the CPE activity from among the new CPE activities developed during that year (e.g., 001), and the topic and format designators (see below).

**Joint Provider Designators:**
- 0000 - no joint providership
- 9999 - joint providership with another organization

**Format Designators:**
- L - Live activities
- H - Home study and other mediated activities
- B - Activities that contain both live and home study or mediated components (Practice-based activities)

**Topic Designators – activities are related to:**
If a CPE activity’s target audience is exclusively for pharmacists the designation “P” will be used as follows:
- 01-P Disease State Management/Drug therapy
- 02-P AIDS therapy
- 03-P Law (related to pharmacy practice)
- 04-P General Pharmacy
- 05-P Patient Safety
- 06-P Immunizations
- 07-P Compounding

If a CPE activity’s target audience is exclusively for pharmacy technicians the designation “T” will be used as follows:
- 01-T Disease State Management/Drug therapy
- 02-T AIDS therapy
- 03-T Law (related to pharmacy practice)
- 04-T General Pharmacy
- 05-T Patient Safety
- 06-T Immunizations
- 07-T Compounding

*Note:* If the CPE activity is intended for both pharmacists and pharmacy technicians, that activity will have the same Universal Activity Number with respect to the provider identification number, joint provider designation, year of release, sequence number and
format; however, the topic designator in the number will be specific to each audience, either a “P” or “T.” For example:

0197-0000-17-001-L05-P (activity number to be used for pharmacists)
0197-0000-17-001-L05-T (activity number to be used for pharmacy technicians)

**Have questions?**

If you have any questions as to what constitutes continuing education for the profession of pharmacy, please contact the ACPE staff at ceinfo@acpe-accredit.org or phone 312-664-3575.

Please note: ACPE-accredited providers should be aware that the roles of pharmacy technicians are evolving and vary according to state and workplace setting. Thus it is important to conduct an appropriate educational needs assessment and practice gap analysis to guide continuing education programming.