In January 2015, the ACPE Board of Directors adopted a revised Definition of Continuing Education for the Profession of Pharmacy which better describes the quality of continuing pharmacy education (CPE) required by ACPE and assists accredited providers of CPE in planning activities applicable to the professional development of pharmacists and pharmacy technicians. CPE, as defined by ACPE, is an integral and essential component of the broader approach to learning that is continuing professional development (CPD). Continuing professional development provides a process for pharmacists and pharmacy technicians to meet and maintain defined competencies in areas relevant to their respective professional responsibilities, i.e. Center for the Advancement of Pharmacy Education (CAPE) Educational Outcomes (2013), Pharmacy Technician Certification Board (PTCB) knowledge statements (2013) [Appendix A].

**Continuing Pharmacy Education (CPE):**
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.

**Continuing Professional Development (CPD):**
A self-directed, ongoing, systematic and outcomes-focused approach to lifelong learning that is applied into practice. It involves the process of active participation in formal and informal learning activities that assist in developing and maintaining competence, enhancing professional practice, and supporting achievement of career goals. The CPD approach is cyclical in nature where each stage of the process can be recorded in a personal learning portfolio.
Continuing professional development should include a wide variety of methods for attaining new knowledge, skills, attitudes, and values. CPD learning experiences should be based on an assessment of needs and goals (REFLECT), generated from a personal development plan with outcomes-based objectives (PLAN), and evaluated for achievement of objectives and personal and professional impact (EVALUATE). Key to the CPD approach is linking learning to practice (APPLY).

REFLECT
The REFLECT stage requires pharmacists to reflect on their personal and professional lives and self-assess their learning needs and goals. Areas requiring professional development should be identified. It is important to pinpoint what specific knowledge or skills are needed. Peer assessment can offer valuable insights to assist a pharmacist in identifying true learning needs.

PLAN
The PLAN stage involves formulating a personal development plan to accomplish identified learning needs. Planning involves the process of defining learning objectives, learning activities, required resources and measures of success, and articulating the plan with colleagues to support learning over an extended period of time. Learning needs should be prioritized based on importance and urgency in order to guide development of a plan specifying both short-term and long-term goals.

LEARN and APPLY
In the LEARN stage, the pharmacist puts the personal development plan into action to meet identified learning objectives utilizing an appropriate range of learning activities and methods. In the CPD model, the pharmacist is not limited to ACPE-accredited educational activities but may find relevant learning activities from other sources, such as academic programs, or specialized training courses. In the APPLY stage, learned knowledge, skills, attitudes, and values are then applied into practice.

EVALUATE
The EVALUATE stage involves the pharmacist assessing how successful the personal development plan has been in meeting stated learning needs by considering outcomes and impact. If learning needs were not fully met, it may be possible to identify further development needs at this stage. Activities that resulted in practice changes or beneficial patient outcomes are analyzed. Personal evaluation leads to reflection, which continues the ongoing cyclical process of CPD.

Documentation of each stage in the CPD cycle in a personal portfolio can support reflection and evaluation and provide evidence of the work involved to others (e.g. employers, professors, regulatory agencies). The portfolio should be simple to use, readily accessible, and developed over time into a comprehensive record of learning experiences which acts as an ongoing tool for review and self-evaluation.
Continuing Professional Development (CPD) Activities:
A multitude of educational activities exist in various formats and venues which may benefit pharmacists and pharmacy technicians in their lifelong learning. Types of activities undertaken should be identified and prioritized through the planning process to address educational needs and gaps in practice. Activities that are planned, developed, and implemented by ACPE-accredited providers consistent with the Definition of Continuing Education for the Profession of Pharmacy and CPE Standards and Policies can be awarded continuing pharmacy education credit.

Other types of educational activities and learning opportunities which do not constitute CPE can also prove valuable as part of one’s continuing professional development. Attributes of experiences beneficial in CPD involve selecting learning opportunities in response to identified personal and professional needs and goals which relate to daily practice or areas of professional interest/preference and focus on specific learning objectives and associated outcomes. The CPD approach to self-directed lifelong learning allows for flexibility in selecting and engaging in learning activities that are most beneficial to one’s particular practice, e.g. patient care, research, administration, industry, etc.

When creating a learning plan for professional development, activity selection should be based on the following criteria:

- The activity meets a defined or established educational need or career goal (REFLECT);
- The activity aids in achieving a specific learning objective included in the learning plan (PLAN);
- The activity links to meaningful professional development (LEARN); and
- Effectiveness of the activity is evaluated based on measurable outcomes and impact in practice (EVALUATE and APPLY)

Categories and Examples of CPD Activities

Continuing Education
An individual’s professional learning needs and objectives may be addressed through engagement in formal, structured accredited educational activities. These may include:

- Participating in CPE activities by ACPE-accredited providers (i.e. knowledge, application, or practice-based activities)
- Participating in continuing education activities by accredited providers from other disciplines (e.g. ACCME, ANCC, AOA)

Academic/Professional Study
Both structured education and unstructured autonomous learning activities may enhance current competencies or instill new knowledge or skills to address an identified need. These may include:

- Participating in conferences, workshops, retreats
- Undertaking academic coursework or postgraduate education
• Completing certification courses (e.g. advanced cardiac life support, certified diabetes educator)
• Completing an independent study (e.g. directed study with defined objectives, outcomes, assessment)
• Reading and reflecting on healthcare articles and literature
• Leading or participating in journal clubs

**Scholarly Activities**
Generating and disseminating knowledge through scholarly activities may enhance professional practice and support achievement of career goals. These may include:
• Conducting research in one’s professional field
• Preparing or writing grant proposals
• Presenting and/or publishing scholarly works
• Serving as content reviewer for publications, dissertation, or other scholarly works
• Test-item writing (e.g. high stakes examinations, peer-reviewed self-assessment activities, or researching, drafting, and defending questions)

**Teaching and Precepting**
Active involvement in the education and training of others may support advancing one’s expertise, the achievement of one’s career goals, and enhancement of professional development. Such activities include:
• Developing, presenting, and/or authoring educational content (e.g. academic course, seminar/webinar, publication)
• Teaching and precepting students, residents, or other healthcare professionals
• Peer coaching or mentoring programs (e.g. mentor or mentee)

**Workplace Activities**
Experiences in one’s workplace can present opportunities for learning and professional development. Examples include:
• Engaging in point-of-care (PoC) learning, i.e. self-directed learning on topics relevant to clinical practice
• In-service training to learn a new skill
• Job shadowing (e.g. observing experienced professional for a defined period of time with assessment of impact on one’s professional role)
• Preparing for or participating in external review, accreditation, or certification process
• Implementing performance improvement projects (e.g. current practice assessment, implement PI changes, evaluate impact/change)
• Consultation with peers and healthcare experts to address a practice problem or learning need or goal
• Serving on committees (e.g. self-study, institutional review boards, pharmacy and therapeutics, medication safety, medication therapy management)
Professional/Community Service

Contributions and leadership in professional and community activities may be relevant to the development of personal competence. Such opportunities should align with one’s professional or career goals and may include:

- Serving on a committee, workgroup, or holding office in a professional association
- Active involvement in professional associations/organizations
- Training for or involvement in advocacy
- Volunteer experiences or special interest groups, e.g. emergency preparedness, Red Cross
- Developing interprofessional and/or outreach initiatives for health professionals and students

In summary, when selecting CPD activities, consideration should be given to incorporating a wide variety of learning formats and methods that can meet one’s professional development needs and goals. Resources (e.g. expertise/access, financial, technology, etc.) should also be considered when selecting an activity to support professional development. The breadth of activities selected should meet identified learning objectives and collectively address the competency areas relevant to one’s practice.
Appendix A

Accreditation Council for Pharmacy Education
Definition of Continuing Education for the Profession of Pharmacy

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:
- delivering patient-centered care,
- working as part of interprofessional teams,
- practicing evidence-based medicine,
- focusing on quality improvement,
- using information technology, and
- 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).
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.

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1 Continuing education whereby the components comply with the ACPE Standards for Continuing Pharmacy Education
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., validation, documentation and distribution)

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., 197), the joint provider designation number (0000 for no joint provider, 9999 for joint providers), the year of CE activity development (e.g., 15), 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 jointly provided organization
- 9999 - joint provider

**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

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

**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:

197-000-15-001-L05-P (activity number to be used for pharmacists)
197-000-15-001-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.