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 should develop and maintain proficiency in five core areas*:

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

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

Pharmacist competencies. Pharmacists should always strive to achieve the Future Vision of Pharmacy Practice (see Appendix A). Specific competency statements have been developed by the American Association Colleges of Pharmacy and are expected to be achieved upon graduation from an ACPE-accredited professional degree program in pharmacy (see Appendix B: Center for the Advancement of Pharmaceutical Education, Educational Outcomes 2004). Post graduation, pharmacy graduates need to take and pass the pharmacy licensure exam, NAPLEX®, in order to practice pharmacy. NABP has developed the NAPLEX® Blueprint (see Appendix C: The NAPLEX® Competency Statements) as the competencies needed to pass the exam. These documents are synergistic in establishing the competencies required of pharmacists to enter practice and to continue as a “student of pharmacy for a lifetime.”

Pharmacy Technician Competencies. The Pharmacy Technician Certification Board (PTCB) has developed the Pharmacy Technician Certification Exam (PTCE) Blueprint as the competencies needed to pass the exam (see Appendix D: PTCB Exam Content Outline).

Note: The appendices should be utilized by ACPE-accredited providers as guides in developing CE activity content appropriate for pharmacists and/or pharmacy technicians.
How will CPE activities for pharmacists and pharmacy technicians be designated?

Promotional materials (e.g., brochures, advertisements, memoranda, letters of invitation, 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.

In addition, a Universal Program Number is an identification number that is assigned to each CPE activity developed and sponsored, or cosponsored, by an ACPE-accredited provider. This number is developed by appending to the ACPE provider identification number (e.g. 197), the cosponsor designation number (000 for no cosponsor, 999 for all non-ACPE-accredited cosponsors, or the ACPE identification number for ACPE-accredited cosponsors), the year of CE activity development (e.g., 06), 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).

**Cosponsor Designators:**
- 000 - no cosponsoring organization
- 999 - cosponsoring with a non-ACPE-accredited organization
- 001 - 998 - the ACPE provider identification number of the cosponsoring provider

**Format Designators:**
- L - Live activities
- H - Home study and other mediated activities
- C - Activities that contain both live and home study or mediated components

**Topic Designators – activities are related to:**
- 01 - Disease State Management/Drug therapy
- 02 - AIDS therapy
- 03 - Law (related to pharmacy practice)
- 04 - General Pharmacy

In order to identify the target audience, **new topic designators** are being proposed as follows:

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: The prevention of healthcare errors, and the elimination or mitigation of patient injury caused by healthcare errors (An unintended healthcare outcome caused by a defect in the delivery of care to a patient.) Healthcare errors may be errors of commission (doing the wrong thing), omission (not doing the right thing), or execution (doing the right thing incorrectly). Errors may be made by any member of the healthcare team in any healthcare setting. (definitions approved by the National Patient Safety Foundation® Board July 2003)

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: The prevention of healthcare errors, and the elimination or mitigation of patient injury caused by healthcare errors (An unintended healthcare outcome caused by a
defect in the delivery of care to a patient). Healthcare errors may be errors of commission (doing the wrong thing), omission (not doing the right thing), or execution (doing the right thing incorrectly). Errors may be made by any member of the healthcare team in any healthcare setting. (definitions approved by the National Patient Safety Foundation® Board July 2003)

**Note:** If the CPE activity is intended for both pharmacists and pharmacy technicians, that activity will have the same Universal Program Number with respect to the provider identification number, cosponsor 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:

- 197-000-06-001-L05-P (program number to be used for pharmacists)
- 197-000-06-001-L05-T (program number to be used for pharmacy technicians)

**What are the responsibilities of an ACPE-accredited provider?**

It is the responsibility of the provider to assure that each activity complies with the Definition of Continuing Education, be applicable to the practice of pharmacy, identifies the appropriate target audience as it relates to the content, and adheres to ACPE Criteria for Quality and Interpretive Guidelines.

As outlined in the ACPE Criteria for Quality and Interpretive Guidelines, every ACPE-accredited provider is ultimately responsible for CPE activity planning, faculty selection, content of the activity, site selection, method of delivery, marketing to the appropriate target audience and assurance that the activity is fair, balanced and free from bias and/or promotion. In addition, the provider is responsible for explaining and guiding the faculty in its expectations regarding development of learning objectives and instructional materials and incorporation of active learning and learning assessment mechanisms within the activities. The provider should also ensure that the statements of credit include the appropriate designation as well as the other required elements noted in the ACPE Criteria for Quality, Guideline 8.1 Statements of Credit.

**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.
Joint Commission of Pharmacy Practitioners

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September 6, 2005
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Joint Commission of Pharmacy Practitioners Releases
“Future Vision of Pharmacy Practice”

The JCPP Future Vision of Pharmacy Practice is a consensus document that articulates a vision for pharmacy and how it will be practiced. Equally important, the document describes how pharmacy practice will benefit society. The document was officially adopted by the JCPP members’ executive officers following the November 2004 JCPP meeting and has subsequently been endorsed by each JCPP member’s board of directors.

The stakeholders group identified and prioritized the top groups and organizations pharmacy must engage in efforts to work toward the vision of optimized medication use. While pharmacy intends to take leadership roles in improving the use of medications in health and wellness it can not do so in isolation of the many other players in the medication use process.
Vision Statement
Pharmacists will be the health care professionals responsible for providing patient care that ensures optimal medication therapy outcomes.

Pharmacy Practice in 2015
The Foundations of Pharmacy Practice. Pharmacy education will prepare pharmacists to provide patient-centered and population-based care that optimizes medication therapy; to manage health care system resources to improve therapeutic outcomes; and to promote health improvement, wellness, and disease prevention. Pharmacists will develop and maintain:
- a commitment to care for, and care about, patients
- an in-depth knowledge of medications, and the biomedical, sociobehavioral, and clinical sciences
- the ability to apply evidence-based therapeutic principles and guidelines, evolving sciences and emerging technologies, and relevant legal, ethical, social, cultural, economic, and professional issues to contemporary pharmacy practice.

How Pharmacists Will Practice. Pharmacists will have the authority and autonomy to manage medication therapy and will be accountable for patients’ therapeutic outcomes. In doing so, they will communicate and collaborate with patients, care givers, health care professionals, and qualified support personnel. As experts regarding medication use, pharmacists will be responsible for:
- rational use of medications, including the measurement and assurance of medication therapy outcomes
- promotion of wellness, health improvement, and disease prevention
- design and oversight of safe, accurate, and timely medication distribution systems.

Working cooperatively with practitioners of other disciplines to care for patients, pharmacists will be:
- the most trusted and accessible source of medications, and related devices and supplies
- the primary resource for unbiased information and advice regarding the safe, appropriate, and cost-effective use of medications
- valued patient care providers whom health care systems and payers recognize as having responsibility for assuring the desired outcomes of medication use.

How Pharmacy Practice Will Benefit Society. Pharmacists will achieve public recognition that they are essential to the provision of effective health care by ensuring that:
- medication therapy management is readily available to all patients
- desired patient outcomes are more frequently achieved
- overuse, underuse and misuse of medications are minimized
- medication-related public health goals are more effectively achieved cost-effectiveness of medication therapy is optimized.
Appendix B. Center for the Advancement of Pharmaceutical Education Educational Outcomes 2004

1. Provide pharmaceutical care in cooperation with patients, prescribers, and other members of an interprofessional health care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social, behavioral, and clinical sciences that may impact therapeutic outcomes.
   a. Provide patient-centered care.
   b. Provide population-based care.

2. Manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution; and to improve therapeutic outcomes of medication use.
   a. Manage human, physical, medical, informational, and technological resources
   b. Manage medication use systems.

3. Promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an inter-professional team of health care providers.
   a. Assure the availability of effective, quality health and disease prevention services.
   b. Develop public health policy.

*Adapted from American Association of Colleges of Pharmacy’s, Center for the Advancement of Pharmaceutical Education (CAPE), Educational Outcomes, 2004, www.aacp.org
Appendix C. The NAPLEX Competency Statements

Area 1 Assure Safe and Effective Pharmacotherapy and Optimize Therapeutic Outcomes
  1.1.0 Obtain, interpret and evaluate patient information to determine the presence of a disease or medical condition, assess the need for treatment and/or referral, and identify patient-specific factors that affect health, pharmacotherapy, and/or disease management.
  1.2.0 Identify, evaluate, and communicate to the patient or health-care provider, the appropriateness of the patient’s specific pharmacotherapeutic agents, dosing regimens, dosage forms, routes of administration, and delivery systems.
  1.3.0 Manage the drug regimen by monitoring and assessing the patient and/or patient information, collaborating with other health care professionals, and providing patient education.

Area 2 Assure Safe and Accurate Preparation and Dispensing of Medications
  2.1.0 Perform calculations required to compound, dispense, and administer medication.
  2.2.0 Select and dispense medications in a manner that promotes safe and effective use.
  2.3.0 Prepare and compound extemporaneous preparations and sterile products.

Area 3 Provide Health Care Information and Promote Public Health
  3.1.0 Access, evaluate, and apply information to promote optimal health care.
  3.2.0 Educate the public and health-care professionals regarding medical conditions, wellness, dietary supplements, and medical devices.

*Adapted from the National Association of Boards of Pharmacy’s NAPLEX Blueprint, 2005, www.nabp.net
Appendix D. PTCB Exam Content Outline

The pharmacy technician performs activities related to three broad function areas. The specific responsibilities and activities that pharmacy technicians may perform within each function area are:

I. Assisting the Pharmacist in Serving Patients (66% of exam)

A. Receive prescription/medication order(s) from patient/patient’s representative, prescriber, or other healthcare professional
   1. Accept new prescription/medication order from patient/patient’s representative, prescriber, or other healthcare professional
   2. Accept new prescription/medication order electronically (for example, by telephone, fax, or electronic transmission)
   3. Accept refill request from patient/patient’s representative
   4. Accept refill authorization from prescriber or other healthcare professional electronically (for example, by telephone, fax, or electronic transmission)
   5. Contact prescriber/originator for clarification of prescription/medication order refill
   6. Perform/accept transfer of prescription/medication order(s)

B. Assist the pharmacist in accordance with federal rules and regulations in obtaining from the patient/patient’s representative such information as diagnosis or desired therapeutic outcome, disease state, medication history (including over-the-counter [OTC] medications and dietary supplements), allergies, adverse reactions, medical history and other relevant patient information, physical disability, and payor information (including both self-pay and third party reimbursement)

C. Assist the pharmacist in accordance with federal rules and regulations in obtaining from prescriber, other healthcare professionals, and/or the medical record such information as diagnosis or desired therapeutic outcome, disease state, medication history (including [OTC] medications and dietary supplements), allergies, adverse reactions, medical history and other relevant patient information, physical disability, and payor information (including both self-pay and third party reimbursement)

D. Collect and communicate patient-specific data (for example, blood pressure, glucose, cholesterol levels, therapeutic drug levels, immunizations) to assist the pharmacist in monitoring patient outcomes

E. Collect and communicate data related to restricted drug distribution programs (for example, thalidomide, isotretinoin, and clozapine)

F. Collect and communicate data related to investigational drugs

G. Assess prescription or medication order for completeness (for example, patient's name and address), accuracy, authenticity, legality, and reimbursement eligibility

H. Update the medical record/patient profile with such information as medication history (including [OTC] medications and dietary supplements), disease states, compliance/adherence patterns, allergies, medication duplication, and/or drug-disease, drug-drug, drug-laboratory, drug-dietary supplement and/or OTC, and drug-food interactions

I. Assist the patient/patient's representative in choosing the best payment assistance plan if multiple plans are available to patient

J. Process a prescription/medication order
   1. Enter prescription/medication order information onto patient profile
   2. Select the appropriate product(s) for dispensing (for example, brand names, generic substitutes, therapeutic substitutes, formulary restrictions)
   3. Obtain pharmaceuticals, durable and non-durable medical equipment, devices, and supplies (including hazardous substances, controlled substances, and investigational products) from inventory
   4. Calculate quantity and days supply of finished dosage forms for dispensing
   5. Measure or count quantity of finished dosage forms for dispensing
   6. Process and handle radiopharmaceuticals
   7. Perform calculations for radiopharmaceuticals
   8. Process and handle chemotherapeutic medications commercially available in finished dosage
forms (for example, Efudex, mercaptopurine)
9. Perform calculations for oral chemotherapeutic medications
10. Process and handle investigational products
11. Package finished dosage forms (for example, blister pack, robotic/automated dispensing vial)
12. Affix label(s) and auxiliary label(s) to container(s)
13. Assemble patient information materials (for example, drug information sheets, patient package inserts, Health Information Portability and Accountability Act [HIPAA] literature)
14. Check for accuracy during processing of the prescription/medication order (for example, National Drug Code [NDA] number, bar code, and data entry)
15. Verify the data entry, measurements, preparation, and/or packaging of medications produced by other technicians as allowed by law (for example, tech check tech)
16. Prepare prescription or medication order for final check by pharmacist
17. Prepare prescription or medication order for final check by pharmacy technician as allowed by law (for example, tech check tech)
18. Perform Nuclear Regulatory Commission (NRC) required checks for radiopharmaceuticals

K. Compound a prescription/medication order:
1. Assemble equipment and/or supplies necessary for compounding the prescription/medication order
2. Calibrate equipment (for example, scale or balance, total parenteral nutrition [TPN] compounder) needed to compound the prescription/medication order
3. Perform calculations required for preparation of compounded IV admixtures
4. Perform calculations for extemporaneous compounds
5. Compound medications (for example, topical preparations, reconstituted antibiotic suspensions) for dispensing according to prescription and/or compounding guidelines
6. Compound medications in anticipation of prescriptions/medication orders (for example, compounding for a specific patient)
7. Prepare sterile products (for example, TPNs, piggybacks, IV solutions, ophthalmic products)
8. Prepare radiopharmaceuticals
9. Prepare chemotherapy
10. Record preparation and/or ingredients of medications (for example, lot number, control number, expiration date, chemotherapy calculations, type of IV solution)

L. Provide prescription/medication to patient/patient's representative:
1. Store medication prior to distribution
2. Provide medication and supplemental information (for example, package inserts) to patient/patient’s representative
3. Package and ship pharmaceuticals, durable and non-durable medical equipment, devices, and supplies (including hazardous substances and investigational products) to patient/patient's representative. Place medication in dispensing system (for example, unit-dose cart, automated systems)
4. Deliver medication to patient-care unit
5. Record distribution of prescription medication
6. Record distribution of controlled substances
7. Record distribution of investigational drugs
8. Record distribution of restricted drugs (for example, isotretinoin, clozapine, thalidomide)
9. Record distribution of prescription/medication to patient's home

M. Determine charges and obtain reimbursement for products and services
N. Communicate with third-party payers to determine or verify coverage
O. Communicate with third-party payers to obtain prior authorizations
P. Communicate with third-party payers and patients/patient's representatives to rectify rejected third-party claims
Q. Identify and resolve problems with rejected claims (for example, incorrect days supply, incorrect ID number)
R. Provide supplemental information (for example, disease state information, CDs) as requested/required
S. Direct patient/patient's representative to pharmacist for counseling
T. Perform drug administration functions under appropriate supervision (for example, perform drug/IV rounds, check pumps, anticipate refill of drugs/IVs)
U. Process and dispense enteral products

II. Maintaining Medication and Inventory Control Systems (22% of exam)

A. Identify pharmaceuticals, durable and non-durable medical equipment, devices, and supplies (including hazardous substances and investigational products) to be ordered
B. Place routine orders for pharmaceuticals, durable and nondurable medical equipment, devices, and supplies (including hazardous substances and investigational products) in compliance with legal, regulatory, formulary, budgetary, and contractual requirements
C. Place emergency orders for pharmaceuticals, durable and non-durable medical equipment, devices, and supplies (including hazardous substances and investigational products) in compliance with legal, regulatory, formulary, budgetary, and contractual requirements
D. Receive pharmaceuticals, durable and non-durable medical equipment, devices, and supplies (including hazardous substances and investigational products) and verify against specifications on original purchase orders
E. Place pharmaceuticals, durable and non-durable medical equipment, devices, and supplies (including hazardous substances and investigational products) in inventory under proper storage conditions while incorporating error prevention strategies
F. Perform non–patient-specific preparation, distribution, and maintenance of pharmaceuticals, durable and non-durable medical equipment, devices, and supplies (including hazardous substances and investigational products) while incorporating error prevention strategies (for example, crash carts, clinic and nursing floor stock, automated dispensing systems)
G. Remove from inventory expired/discontinued/slow moving/overstocked pharmaceuticals, durable and nondurable medical equipment, devices, and supplies (including hazardous substances and investigational products)
H. Remove from inventory recalled pharmaceuticals, durable and non-durable medical equipment, devices, and supplies (including hazardous substances and investigational products)
I. Dispose of or destroy pharmaceuticals or supplies (for example, hazardous substances, investigational products, controlled substances, non-dispensable products)
J. Communicate changes in product availability (for example, formulary changes, recalls, shortages) to pharmacy staff, patient/patient’s representative, physicians, and other healthcare professionals
K. Implement and monitor policies and procedures to deter theft and/or drug diversion
L. Maintain a record of controlled substances ordered, received, and removed from inventory
M. Maintain a record of investigational products ordered, received, and removed from inventory
N. Perform required inventories and maintain associated records
O. Maintain record-keeping systems for repackaging, non-patient specific compounding, recalls, and returns of pharmaceuticals, durable and non-durable medical equipment, devices, and supplies (including hazardous substances and investigational products)
P. Compound non-patient specific medications in anticipation of prescription/medication orders
Q. Perform quality assurance tests on compounded medications (for example, end product testing and validation)
R. Repackage finished dosage forms for dispensing (for example, unit dose, blister pack, oral syringes)
S. Participate in quality assurance programs related to pharmaceuticals, durable and non-durable medical equipment, devices, and supplies (including hazardous substances and investigational products)

III. Participating in the Administration and Management of Pharmacy Practice (12% of exam)

A. Coordinate written, electronic, and oral communications throughout the practice setting (for example, route phone calls, faxes, verbal and written refill authorizations; disseminate policy and procedure changes)
B. Update and maintain patient information (for example, insurance information, demographics, provider information) in accordance with federal regulations and professional standards (for example, Health Insurance Portability and Accountability Act [HIPAA])
C. Collect productivity information (for example, the number of prescriptions filled, fill times, payments collected, rejected claim status)
D. Participate in quality assurance activities (for example, medication error prevention, customer satisfaction surveys, and internal audits of processes)
E. Generate quality assurance reports (for example, compile or summarize data collected for evaluation or action plan development, root cause analysis)
F. Implement and monitor the practice setting for compliance with federal regulations and professional standards (for example, Materials Safety Data Sheet [MSDS], Occupational Safety Health Administration [OSHA], Joint Commission on Accreditation of Healthcare Organizations [JCAHO], United States Pharmacopeia [USP])
G. Implement and monitor policies and procedures for infection control
H. Implement and monitor policies and procedures for the handling, disposal, and destruction of pharmaceuticals and supplies (for example, hazardous substances, investigational products, controlled substances, non-dispensable products, radiopharmaceuticals)
I. Perform and record routine sanitation, maintenance, and calibration of equipment (for example, automated dispensing equipment, balances, TPN compounders, and refrigerator/freezer temperatures)
J. Update, maintain, and use manual or electronic information systems (for example, patient profiles, prescription records, inventory logs, reference materials) in order to perform job related activities
K. Use and maintain automated and point-of-care dispensing technology
L. Perform billing and accounting functions for products and services (for example, self-pay, third-party adjudication, pharmaceutical discount cards, medication reimbursement)
M. Communicate with third-party payors to determine or verify coverage for products and services
N. Coordinate and/or participate in staff training and continuing education
O. Perform and/or contribute to employee evaluations and competency assessments
P. Participate in the establishment, implementation, and monitoring of the practice setting’s policies and procedures

*Adapted from the Pharmacy Technician Certification Board’s Content Outline, 2006; www.ptcb.org