Continuing professional development (CPD), a lifelong learning approach, is being explored as an enhancement to the current pharmacist continuing education (CE) system in the United States.\textsuperscript{1} CPD is defined as “a self-directed, ongoing, systematic and outcomes-focused approach to learning and professional development.”\textsuperscript{2} Evidence is mounting that current mandatory CE methods do not ensure practitioner competency nor improve healthcare outcomes. The Institute of Medicine (IOM) has concluded that the education and training of health care professionals is in need of a major overhaul and that both pre-service and lifelong education and training need to be competency based.\textsuperscript{3} The ongoing, cyclical process of CPD can be used by pharmacists to maintain and enhance their professional competence.\textsuperscript{4}

The CPD approach is currently used by pharmacists in Great Britain, Canada and New Zealand.\textsuperscript{5} A five-state (Indiana, Iowa, North Carolina, Washington, Wisconsin) CPD pilot program was launched in 2006 and ended in October 2007. The program, which was organized by several state pharmacy associations, sought to develop and evaluate a process for accomplishing CPD that could be used by pharmacists in the United States. A secondary purpose of the pilot project was to gather information about the effectiveness of CPD as a learning model compared to the standard CE process. Findings from the five-state pilot project are projected to be published in the second half of 2008. (Personal communication, Jennifer Moulton, February 4, 2008.)

CPD is self-directed and practitioner-centered, practice-based, and outcomes-oriented. Its goal is to ensure pharmacists enhance the knowledge, skills, attitudes and values required for their specific area of practice and ultimately to achieve improved patient outcomes. CPD is usually described as a four-stage cyclical process, comprising the stages of reflection, planning, action, and evaluation.\textsuperscript{6} Each stage of the process can be recorded in the pharmacist’s personal portfolio, which develops over time into a comprehensive record of learning experiences and acts as an ongoing tool for review and self-evaluation.\textsuperscript{7} A detailed look at each individual step in the CPD cycle follows.

The reflection stage requires pharmacists to reflect on their personal and professional lives and self-assess their learning needs and opportunities. Areas requiring professional development should be identified. It is important to pinpoint exactly what you need to know or want to be able to do. Conducting an accurate self-assessment can be challenging.\textsuperscript{8} Peer assessment can offer valuable insights and can assist a pharmacist in identifying true learning needs. An internet based self-assessment tool, the Pharmacist Self-Assessment Mechanism® (PSAM®), is also available.
PSAM® was developed by the National Association of Boards of Pharmacy (NABP) to provide a more objective viewpoint of pharmacist’s learning needs. At the conclusion of the self-appraisal process, the pharmacist can record identified learning needs in a personal portfolio.

The planning stage involves formulating a personal action plan to accomplish the identified learning needs. The pharmacist should develop a set of discrete learning objectives that will meet personal learning goals. It is important to set SMART objectives (SMART: Specific; Measurable; Achievable; Relevant; Timed). Each learning need should be prioritized based on importance and urgency. This will guide development of a plan timeline specifying both short-term (one-year) and long-term (3-5 year) goals. Activities and resources should be selected that will enable the pharmacist to meet their stated learning needs.

When selecting activities, each individual should consider their preferred learning style and choose activities that support it. Learning goals can include the acquisition of skills, values, and attitudes in addition to the knowledge outcomes provided by traditional continuing education programs. In the CPD model, the pharmacist is not limited to ACPE-accredited educational programs, but may find relevant learning activities from other sources, such as academic programs, or specialized training courses. The action plan is recorded in the portfolio and should be reviewed at least annually. The plan is not static-- it should be updated and modified as required.

In the action stage, the pharmacist implements the personal action plan and actual learning occurs. Activities selected should be outcomes-driven to meet the identified learning objectives. A wide variety of learning activities and methods should be utilized. The pharmacist records each activity, what was learned from it, and how it will be applied in practice in their personal portfolio.

In the evaluation stage, the pharmacist assesses how successful their personal plan has been in meeting their stated learning needs. It is important to consider the effectiveness of the plan in terms of meeting the stated learning objectives. Educational activities should be evaluated for appropriateness and their impact on learning new knowledge and skills. If learning needs were not fully met, then it may be possible to identify further development needs at this stage. Activities that resulted in personal 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, such as employers, professors, or regulatory agencies. The portfolio can be used as a tool to support pharmacists as they plan,
act, record and reflect on their learning activities. The portfolio should be simple to use and readily accessible. Either a paper or electronic based format can be utilized to maintain records of professional activities.

The Accreditation Council for Pharmacy Education (ACPE) is encouraging the adoption of continuing professional development as a lifelong learning approach by the inclusion of CPD in the revised PharmD standards implemented July 1, 2007 and by disseminating information about the process. The revised PharmD standards state that schools of pharmacy must provide a continuing professional development program for all faculty and staff, including non-paid faculty and that students should use portfolios to document achievement of competencies over the period of their academic careers. In addition, the new Accreditation Standards for Continuing Pharmacy Education: Effective January 1, 2009, place a greater emphasis on measurable outcomes achieved from learning and the ability to put into practice the knowledge and skills gained from CE programs. ACPE will support efforts to implement the CPD process in the lifelong education of pharmacists.

Re-evaluation of the existing continuing education system in pharmacy is currently underway. The CPD framework appears to offer an improved model for pharmacist lifelong learning and professional development.

For pharmacists interested in learning more about CPD, the Council on Credentialing in Pharmacy website (http://www.pharmacycredentialing.org/ccp/) is recommended.

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**References**