Continuing professional development in pharmacy

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Continuing professional development (CPD) is a framework for, or approach to, lifelong learning and is being discussed as a potential model for pharmacists in the United States. CPD is not a replacement for continuing education (CE), as quality-assured CE is an essential component of CPD. This article explains the concept and components of CPD, describes some of the driving forces behind the reevaluation of current systems of CE for pharmacists, defines relevant terms, and outlines some experiences with CPD in selected foreign and U.S. health systems that have already adopted the model. This article is intended to provide a basis for further discussions regarding CPD and explain what it could mean for the profession of pharmacy and pharmacists if implemented nationwide.

The following sentences introduce the American Society of Health-System Pharmacists (ASHP) statement on continuing education:

Next to integrity, competence is the first and most fundamental moral responsibility of all health professions... Each of our professions must insist that competence will be reinforced through the years of practice. After the degree is conferred, continuing education is society's only real guarantee of the optimal quality of health care.¹

Perhaps ahead of their time, the objectives of the ASHP statement, approved in 1989, read remarkably like a framework for CPD.

What is CPD? CPD is an ongoing, self-directed, structured, outcomes-focused cycle of learning and personal improvement. The Chartered Institute of Personnel and Development (CIPD) put forth an early definition of CPD in October 1997: “CPD is systematic, ongoing, self-directed learning. It is an approach or process which should be a normal part of how you plan and manage your whole working life.”

In 2002, the concept of CPD was defined by the International Pharmaceutical Federation (FIP) as the responsibility of individual pharmacists for systematic maintenance, development and broadening of knowledge, skills and attitudes, to ensure continuing competence as a professional, throughout their careers.³

Variations of the basic CPD model, using different terms to describe the stages, have been adopted or discussed in pharmacy, but the differences are not significant. Implementation strategies and the professional and regulatory framework within which the CPD model is adopted do, however, differ considerably, and some examples are described later. Essentially, the concept of CPD is based on a cycle in which individual practitioners reflect on their practice and assess their knowledge and skills, identify learning needs, create a personal learning plan, implement the learning plan, and evaluate the effectiveness of the educational interventions and the plan in relation to their practice. Documentation is an integral aspect of CPD, and a personal portfolio is typically used for this purpose. A five-step cycle was used to describe CPD in a statement adopted by FIP in 2002, and an adaptation—in which the cycle includes self-appraisal, development of a personal plan, action, documentation, and evaluation—has been used as the basis for some of the early discussions of CPD in the United States.

Another representation of the CPD cycle, offered by the author (Figure 1), in which documentation—the portfolio—is shown as an integral component but not a separate stage, may help to explain the elements of CPD and their sequence.
The purpose of CPD is to ensure that pharmacists maintain their knowledge, skills, and competencies to practice throughout their careers in their specific area of practice; improve personal performance; and enhance their career progression. CPD is designed to be self-directed, practitioner-centered, and outcomes-based to meet the specific goals and objectives of individual pharmacists, ultimately improving patient and public health outcomes. It emphasizes the importance of practice-based learning and, in the United Kingdom’s model, of identifying and achieving organizational goals and objectives. As CPD is a relatively new concept, evidence has not yet been provided that widespread adoption of a CPD model is more effective than traditional CE systems in achieving these goals.

Definitions. An understanding of and a distinction between the terms used in this paper are important, and most of the following are currently used within pharmacy or other health care professions. Competence is defined as follows:

The ability to perform one’s duties accurately, make correct judgments, and interact appropriately with patients and with colleagues. Professional competence is characterized by good problem-solving and decision-making abilities, a strong knowledge base, and the ability to apply knowledge and experience to diverse patient-care situations.4

Lifelong learning is defined as follows:

All learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment-related perspective.5

Continuing education was defined in 2000 as follows:

Organized learning experiences and activities in which pharmacists engage after they have completed their entry-level academic education and training. These experiences are designed to promote the continuous development of the skills, attitudes, and knowledge needed to maintain proficiency, provide quality service or products, respond to patient needs, and keep abreast of change.6

A more recent (2003) definition follows:

Continuing education for the profession of pharmacy is a structured process of education designed or intended to support the continuous development of pharmacists to maintain and enhance their professional competence. Continuing education should promote problem-solving and critical thinking and be applicable to the practice of pharmacy.6

Perhaps the terms lifelong learning and CE should be synonymous. CE has been associated more with organized or structured educational activities, as defined above by the Accreditation Council for Pharmacy Education (ACPE).

Why change? In a changing, increasingly complex profession, and with rapid medical and technological advances, the need for lifelong learning for pharmacists is irrefutable. Health care professionals are required to engage in CE. While appropriate, competency-based education can prepare a pharmacist to enter practice, no professional program can provide or develop the knowledge, skills, attitudes, and abilities that a pharmacist will ever need. Such development requires a combination of an appropriate preservice educational foundation, inservice training, hands-on work experience, and lifelong learning. For professionals, education is a continuum. Unlike medical practitioners, a minority of pharmacists obtain postgraduate qualifications or specialty certifications, although a variety of such programs are offered. Approximately 3% of licensed pharmacists are certified, and of the 2001–02 pharmacy school graduates, approximately 14% successfully completed an ASHP-accredited pharmacy practice residency in 2003.7-12 Council on Credentialing in Pharmacy resource documents on CPD and credentialing in pharmacy provide details of these programs.13,14 Certificate programs, for which national standards were introduced in 1999, are longer than the average CE program and de-
signed to develop knowledge or skills in a specific area (e.g., immunization, diabetes management). However, participation in certificate programs by pharmacists has been limited. In 2002-03, 4,824 participants—some 2% of licensed pharmacists—completed the 81 certificate programs offered by 37 ACPE-accredited providers.7,15 CE is, therefore, the simplest and most common form of postgraduate training for pharmacists.16 Emphasizing the professional development of practitioners, the CPD model expands in breadth and depth the traditional model of lifelong learning, thereby offering, some believe, a quality improvement for current CE systems.

Many factors are driving a critical reevaluation of CE systems. Virtually all state boards of pharmacy rely on pharmacists’ participation in a defined number of hours of ACPE-accredited or otherwise approved CE to provide assurance of pharmacists’ competence.7,17 Since the mid-1970s, when the number of states requiring mandatory CE started to grow, the number of accredited providers offering a broad range of quality CE programs has significantly increased. In 1978, ACPE accredited 72 CE providers; currently there are over 400.18 CE programs are delivered in a variety of formats to accommodate different learning needs and preferences. However, state boards of pharmacy have few specific requirements regarding the content of CE and its relevance to the practice of the pharmacist. ACPE standards require CE providers to have systems in place to identify the learning needs of participants and offer programs to meet those needs.19 In the current CE model, the programs offered are intended to meet the learning needs of a number of pharmacists. Clearly, it is unrealistic to expect CE providers to attempt to identify and respond to the individual needs of practitioners. Furthermore, meaningful assessment of learning is difficult and many times not even attempted. In the CPD model, more responsibility is placed on individual practitioners to identify and participate in programs that meet their own specific learning needs and assess the impact and benefit of such programs.

A growing body of evidence (primarily from the medical literature) shows that, while CE can be effective in improving knowledge, skills, attitudes, behavior, and patient health outcomes, traditional approaches to CE are not usually curricular in nature, do not optimally address all required competencies, and are not always successful in changing practice behaviors.20-25 Not only is the relative effectiveness of different educational strategies difficult to measure and compare, many extrinsic factors can influence the effectiveness of CE and its impact on performance, practice, and patient outcomes. More research is needed to improve our understanding of these factors and how they influence CE outcomes.

What is evident from the literature, however, is that achieving practice change requires some very uncommon practices, which do not consistently happen. Davis et al.26 concluded that there is some evidence that interactive CME [continuing medical education] sessions that enhance participant activity and provide the opportunity to practice skills can effect change in professional practice and, on occasion, health care outcomes [and] variables over which the CME provider has control and appear to have a positive effect are the degree of active learning opportunities, learning delivered in a longitudinal or sequenced manner, and the provision of enabling methods to facilitate implementation in the practice setting.

Ample studies indicate that utilization of multiple educational methods and participation in self-directed learning activities that are based on identified learning needs or personal goals, are relevant to practice, are interactive, are ongoing, have defined outcomes for the practitioner and the organization, and can be reinforced through practice are more likely to achieve sustainable learning and practice change.23,25,27-31 The CPD model incorporates a number of these strategies.

Pressure to change approaches to continuing education is coming from outside and within the pharmacy profession. Providers of health care services are required to increase attention to quality and quality improvement. In a series of reports, the Institute of Medicine (IOM) highlighted deficiencies in health systems, identified key factors contributing to the state of affairs, and made a number of recommendations.32-34 IOM notes that the knowledge and skills of health care professionals are often not optimally utilized and that problems arise because they work in a system that does not adequately prepare them, or support them once they are in practice, to deliver the best care to their patients. IOM has concluded that the education and training of health care professionals need a major overhaul and advocates that education and training (both preservice and lifelong) must be competency based. Pharmacy has been commended for its competency-based standards for degree-program accreditation and cited as an example for other health care professions to follow.34 ACPE’s new definition of CE highlights the professional competencies applicable to the practice of pharmacy.6 IOM has identified five core competencies that all health care professionals should possess: (1) provide patient-centered care, (2) work on interdisciplinary teams, (3) employ evidence-based practice, (4) apply quality improvement measures, and (5) use informatics. It has recommended that all health profes-
Neither CPD nor CE alone can ensure professional competence. Although CPD is a largely unproven model in pharmacy, might it build on the traditional methods of CE and offer more effective lifelong learning for pharmacists? Early adopters of the concept believe it can, and some examples of CPD implementation are emerging in pharmacy and other professions. Great Britain and Ontario, Canada, provide good case studies from programs initiated for pharmacy in the mid-to-late 1990s.13,37-41

A better learning model? The CPD model for lifelong learning and professional development of practitioners is sound theoretically and was developed using well-tested principles of learning and continuous quality improvement.42,43 In the 1970s and 1980s, Kolb and Smith44-46 described how people learn and handle day-to-day situations in their lives.

Based on the work of Kolb, a four-stage cycle of experiential learning has been described: (1) have a new experience, (2) reflect on that experience, (3) draw some conclusions, and (4) act differently as a result of the experience.47 Research has demonstrated that learning that is sought to meet identified and existing needs and reinforced through practice is more likely to be sustained.23 Some of the four-stage cycles that have been adopted within the context of CPD incorporate these principles of learning.48,49 In this context, the terms reflection, assessment, and self-appraisal are somewhat interchangeable.

The CPD cycle. CPD has been described using four- and five-stage cycles. In essence, these cycles are very similar. In the five-stage cycle, documentation is included as a separate stage to emphasize its importance. Documentation is, however, an important component of each of the other four sequential stages. The elements of the four-stage cycle—reflect, plan, act, evaluate—are now discussed. As shown in Figure 1, the record (documentation) step of the five-stage cycle is in the center of the four-stage cycle.

Reflect. Also referred to as self-appraisal or assessment, this stage requires pharmacists to reflect on personal and organizational needs and goals for professional development and to assess their knowledge, skills, and competence. Reflection is important to learning; it has been described as a complex and deliberate process of thinking about and interpreting an experience in order to learn from it.50 Ideally, reflection is performed in two ways: (1) on an ad hoc or unscheduled basis, usually a reaction to specific day-to-day practice experiences (a “reflection in practice”) and (2) on a scheduled or proactive basis (e.g., annually, biannually) or when a major career change occurs or is anticipated (a “reflection on practice”).

Accurate self-assessment is difficult, and pharmacists are likely to need assistance in this task. Ideally, self-assessment should be balanced with the considered judgment and opinion of others, such as peers and supervisors. Tools to assist pharmacists in appropriately and accurately assessing their learning needs have been developed in a number of countries, including the United States.51,52 The National Association of Boards of Pharmacy, which administers national licensure examinations on behalf of state boards of pharmacy, is developing an Internet-based self-assessment tool to offer pharmacists the opportunity to assess, in a nonthreatening and supportive environment, their needs and interests.53 Daily practice experiences should also contribute to the self-appraisal, leading to identification of individual learning needs based on actual issues confronting the pharmacist.

Documentation in the pharmacist’s personal portfolio begins at this stage in the cycle.
Plan. The second stage involves the design of a personal development plan. Pharmacists who have no prior experience with such planning will probably need assistance with this, which will likely create service opportunities for professional membership organizations and CE providers. The plan should include all of the activities that will address identified learning and development needs and goals. The learning goals should be clear, specific, measurable, achievable, relevant, and time based. The outcomes should be linked to one or more specific professional competencies. When possible, pharmacists should also address patient health care needs.

Personal development plans could include structured programs (such as accredited CE programs), as well as a diverse range of informal learning activities, many of which will be work based or work related (e.g., discussions with colleagues, job shadowing, interest group meetings, secondments, deputizing, peer review). The activities should fit with the pharmacist’s preferred learning style. When specific subject matter is required, ACPE’s P.L.A.N. (pharmacists’ learning assistance network) database is available (www.acpe-accredit.org) to assist pharmacists to identify appropriate CE offerings and certificate programs in various formats (e.g., seminars, journals, Internet courses). Other resources or sources of support should be identified. The activities will help the pharmacist to use and augment his or her knowledge and skills base.

Details of the personal development plan are recorded in the personal portfolio. While remaining focused on the pharmacist’s identified needs and goals, the plan should be dynamic, being changed and updated as required. Because each pharmacist’s situation is unique, no two sets of learning needs and personal plans will be the same. As with any planning process, priorities should be established. Short-, medium-, and long-term objectives may be identified. Different objectives will require different strategies, and the plan’s success will likely depend on the effective use of multiple learning methods.

Act. Putting the plan into action is the third stage. The activities chosen must be outcomes driven to meet identified needs and goals, not merely to meet a mandatory “hour requirement.” CPD does not replace accredited CE programs. CPD builds on this essential, quality-assured component. It also encourages different methods of delivery for learning.

Evaluate. As with reflection, evaluation should occur on an ad hoc basis (reacting to day-to-day experiences) and through a more formal, structured or proactive process. Evaluation will consider (1) if and how well the learning and development objectives have been achieved, (2) how appropriate and effective the plan was, (3) how well the activities undertaken correlated with the plan, (4) if the methods of learning were appropriate, (5) what impact there has been on knowledge, skills, competence, and confidence, (6) if and how practice has changed, and (7) if there were improved patient outcomes as a result of the activities.

Evaluation can be conducted by the individual practitioner, by the practitioner’s peers, or by the practitioner’s supervisor or manager. It may form an integral part of a formal performance review, where individual and organizational goals are considered. In some CPD models (e.g., those in the United Kingdom), the portfolio is subject to review by the regulatory body. In Ontario, there is the opportunity for small-group peer review of the learning portfolio and direct assessment of knowledge and skills. Some form of third-party review or evaluation of the portfolio would appear to be valuable, not only to provide feedback to the pharmacist but also as a means to identify those who may be having difficulty in one or more aspects of CPD and are in need of assistance or remediation. The evaluation also protects society from the few practitioners who otherwise would not self-assess and correct deficiencies. A further advantage of third-party evaluation is that areas for improvement, which are transferable elsewhere in practice, may be identified. Feedback from third parties should be given in a constructive and nontfrightening way, with the primary objective being to help the individual move forward in his or her professional development. In Ontario, data gathered during a review may not be shared with the investigative or disciplinary branches of the pharmacy registering and regulatory body.

Most importantly, the evaluation leads to the next stage of the continuum, reflection, followed by the design of a new plan based on updated learning and development needs and goals.

Record. Central to the CPD cycle is the practitioner’s personal portfolio, which becomes a comprehensive record—much like a professional diary or transcript—covering all the stages. The portfolio, which can be electronic or paper based, should be readily accessible and simple to use. Ideally, a standardized format should be adopted to facilitate training, data entry, and, where applicable, portfolio evaluation.

Traditionally, there has been little or no need or incentive for the majority of pharmacists to document their learning activities, apart from their record of participation in accredited CE courses as a requirement of relicensure. In CPD portfolios, pharmacists record all relevant learning experiences, accredited CE courses and informal work-based or work-related activities. When such activity has had a tangible outcome (e.g., an improved patient outcome, a change in practice method or behavior, new knowledge or skills, a new credential), it is noted in the portfolio. In
time, the pharmacist's portfolio will
develop into a comprehensive record
of education and practice with multi-
ple possible applications.

Principles of CPD. The princi-
ples of CPD can be summarized as
follows:54

- CPD is a systematic, ongoing, cyclical
  process of self-directed learning.
- CPD includes everything that practi-
tioners learn that enables them to be
  more effective as professionals.
- CPD includes the entire scope of the
  practitioner's practice and may in-
clude activities both within and out-
side the usual work setting.
- CPD can strengthen the partnership
  between the practitioner and his or
  her organization, so as to meet the
development needs of both.
- Practitioners are responsible for their
  own professional development. The
organization can have a role in helping
practitioners meet the developmental
needs related to job performance.

Three important features of CPD
are clear: CPD is (1) practitioner cen-
tered and self-directed, (2) practice
related, and (3) outcomes oriented.

Although defined as a continuous
cycle involving multiple stages, CPD
should be considered an approach to
lifelong learning rather than a num-
ber of stages that a practitioner has to
methodically and laboriously work
through. Progression through the
stages of CPD should, to a large extent,
become seamless and second nature,
although more conscious effort will
be required until CPD becomes sec-
ond nature to a practitioner.

CPD in health-system pharmacy.
Although its adoption may not yet be
widely adopted, the CPD model for life-
long learning is already in use in the
United States. Apart from individual
practitioners who use this approach,
examples can be found in some
health systems, including the Veterans
Affairs health care system.55 To comply
with accreditation requirements (e.g.,
those of the Joint Commission on Ac-
creditation of Healthcare Organiza-
tions [JCAHO]), institutions must
ensure that their health care practi-
tioners are scientifically and profes-
sionally competent to practice. As
stated earlier, as professionals, health
care practitioners are responsible for
maintaining their competence to
practice, but institutions can assist
with this responsibility. A number of
JCAHO standards (e.g., HR.3.1,
HR.4, HR.4.2, HR.5) address issues
relating to competence, lifelong
learning, and staff development. Ac-
creditation standards require institu-
tions to demonstrate that systems are
in place to support staff learning and
development and assess staff mem-
bers' abilities to meet performance
expectations, both initially (at em-
ployment) and on an ongoing basis.
Assessment should include self-ap-
praisal, peer review, and perfor-
mance appraisal by a supervisor or
manager.

An institution that is focused on
quality and quality improvement can
provide an excellent practice-based
learning environment for groups of
practitioners who are mutually sup-
portive in addressing identified
learning needs and meeting personal
and organizational goals. Through
in-service education programs, jour-
nal clubs, newsletters, case studies,
and other means, practitioners can
identify and address their own learn-
ing needs. While not all of these
activities would meet the criteria for
accredited CE, the value of such
learning activities is obvious. Because
of its relevance to daily work and the
potential for regular reinforcement
through practice, such learning is
more likely to be sustained, result in
practice change, and ultimately lead
to improved patient outcomes. In
such a learning environment, self-
directed CPD becomes second na-
ture rather than the mechanical,
burdensome process that it might
appear to be on initial consideration.

Future of CPD. In the United
States, interest in CPD is growing, as
is support for the concept, evidenced
by recent statements and resolutions
by several national pharmacy organi-
zations.52-56 Not all stakeholders,
however, will feel the need for change.
While CPD appears logical and straightfor-
ward, implementation certainly poses a number
of challenges. It would require a differ-
ent approach by CE providers, prac-
titioners, and health systems. New
skills and competencies will need to
be developed. For example, identify-
ing individual learning needs and de-
veloping and evaluating a personal
development plan are areas in which
few currently have expertise. Based
on the experiences of practitioners in
other countries, a system that in-
cludes some flexibility is likely to
achieve better "buy in" by pharma-
cists. Evidence from Great Britain
and Canada also indicates that a ma-
jority of pharmacists have been able
demonstrate that they can self-di-
rect their own learning at the required
level, that personal adoption of CPD
was not as burdensome as expected,
and that CPD, overall, was well ac-
cepted by pharmacists.37,38,40

The full implications of wide-
spread adoption of a CPD model
need further discussion. A perfect
solution—simple, effective, inexpen-
sive, and acceptable to all—does not
exist and is unlikely to be realized.
However, improving the quality of the
existing CE system for pharma-
cists needs to be purposefully ex-
plored by the profession in a timely
manner.

Conclusion. CPD appears to offer
pharmacists a viable model for indi-
vidualized ongoing learning and per-
sonal improvement.

References
1. American Society of Hospital Pharmacists.
ASHP statement on continuing education.
2. Continuing professional development—
the IPD policy. London: Chartered Insti-
Statement of professional standards on
continuing professional development.


