The Council on Credentialing in Pharmacy
Resource Document
Continuing Professional Development in Pharmacy

The Council on Credentialing in Pharmacy;
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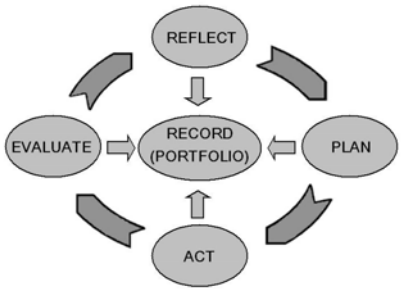
Index

Abstract

Continuing Professional Development (CPD) is a framework, or approach, for lifelong learning that is being discussed as a potential model for pharmacists in the US. The purpose of the resource document is to explain the concept and components of CPD *(see figure below)*, to describe some of the drivers behind the re-evaluation of current systems of continuing education (CE) for pharmacists, to define relevant terms, and to outline some experiences with CPD in selected countries that have already adopted the model. The document is also intended to provide a basis for further discussions regarding CPD.



A CPD Cycle

CPD does not replace CE. Quality-assured CE is an essential component of CPD. Evidence is mounting, however, that traditional methods of CE do not adequately meet the lifelong learning and professional development needs of healthcare professionals (HCPs), and are not always successful in affecting practice behavior and improved patient outcomes. The Institute of Medicine has concluded that the education and training of HCPs is in need of major overhaul. CPD, which is based on sound principles and which adopts educational strategies that have been shown to be effective, potentially offers a quality improvement to the current systems for pharmacist CE.

Interest in and support for the concept of CPD is growing. Case studies of successful implementation in the US and other countries now exist. Further discussion on the implications of widespread implementation for pharmacists in the US is needed.

CCP Resource Document:
Continuing Professional Development in Pharmacy [a]

Purpose

Continuing Professional Development (CPD) is a framework, or approach, for lifelong learning that is being discussed as a potential model for pharmacists in the US. CPD is not a replacement for continuing education (CE), as CE is an integral part of CPD. This resource document, requested by the Council on Credentialing in Pharmacy (CCP), provides information about the concept and components of CPD, defines related terms, describes some drivers for enhancement of the current systems of CE for pharmacists, and provides two CPD cases studies - the United Kingdom and Ontario, Canada. The document is intended to provide a basis for further discussions regarding CPD, and what it could mean for the pharmacy profession and pharmacists if widely implemented in the US.

Prologue

The following quote by Edmund D. Pellegrino M.D.,[b] introduces the *Statement on Continuing Education* of the American Society of Health-System Pharmacists (ASHP)[39]:

"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."

Perhaps ahead of their time, the objectives of the ASHP statement, approved in 1989, read remarkably like a framework for CPD. This paper will explore how the *continuing education* referred to by Dr. Pellegrino can potentially be enhanced to provide the guarantee of quality expected by society today.

The mission of pharmacy can be summarized as helping people make the best use of their medications. In simple terms, this is the basis of pharmaceutical care, or patient-centered care, endorsed broadly by the pharmacy profession in the early 1990s. In order to do this effectively and safely, pharmacists need to maintain their professional knowledge and skills throughout their career. Few, if any, would deny this. Pharmacy is a

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changing profession. Medical science, technology, health and political systems are evolving daily. New products – often more complex and powerful than their predecessors – enter the market ever year. Healthcare professionals are required to continually learn new things. While an appropriate, competency-based education can prepare a pharmacist to enter practice, no professional program can provide or develop *all* the knowledge, skills, attitudes and abilities that a pharmacist will ever need. These require a combination of an appropriate pre-service educational foundation, in-service training, hands-on work experience, and lifelong learning. For professionals, education is a *continuum*. The educational strategies, and the competency and outcomes based approach that are successfully utilized for pre-service training must be maintained throughout the practitioner's career.

The professional degree standards of the Accreditation Council for Pharmacy Education (ACPE)[c], developed through profession-wide consensus, repeatedly stress the need for lifelong learning.[1] Many professional organizations advocate it in their policy statements. Graduating pharmacy students pledge to "*keep abreast of developments and maintain professional competency in [the] profession of pharmacy"* when taking the "Oath of a Pharmacist."[2] While state boards of pharmacy are called upon, and expected, to protect the public by ensuring, through regulation, that licensed pharmacists are competent to deliver pharmacy services, as professionals, pharmacists have an ethical obligation and responsibility for their own lifelong learning, and the maintenance of the knowledge, skills, attitudes and abilities necessary to deliver these services in line with accepted, contemporary professional standards and public expectations. In its introduction to its statement on CPD[12], the International Pharmaceutical Federation (FIP) states:

> *"Maintaining competence throughout a career during which new and challenging professional responsibilities will be encountered, is a fundamental ethical requirement for all health professionals. Patients have a right to be confident that professionals providing health care remain competent throughout their working lives. They will expect governments, accreditation agencies and other pharmacy bodies with a legitimate interest, to seek assurances that regulatory bodies are taking the necessary action to achieve this goal."*

The ACPE standards for professional degree programs detail the entry-to-practice competencies that graduates will have achieved on completion of an accredited program. While pharmacy has received special commendation from the Institute of Medicine (IOM) for this competency-based system[22], assessment of the achievement of these competencies poses a challenge for our schools and colleges of pharmacy. How much greater is the challenge to assess and assure ongoing maintenance and enhancement of these competencies throughout the professional lives of pharmacists as they follow diverse career paths? In contrast to students of pharmacy, after graduation pharmacists are given little external direction in their learning, and the learning environment is much less structured. How much knowledge and skill is lost through lack of regular use? Currently, ACPE accreditation standards for CE providers do not specifically address

[c] ACPE was founded in 1932 as the American Council on Pharmaceutical Education.

outcome competencies for participants of CE offerings, nor assessment of their achievement, as do the standards for pharmacy degree programs.[56] ACPE guidelines issued in conjunction with the recently updated definition of CE[13] do, however, list the professional competencies providers should take into consideration when developing a CE program.

The history of mandatory continuing education for pharmacists

For many years, state boards of pharmacy have relied on participation in CE programs to provide a measure of assurance that pharmacists are maintaining and updating their professional knowledge. First discussed in a regulatory/academic context in the early 40s[9], it wasn't until 1965 that the first state (Florida) introduced mandatory CE. Nine years later, the National Association of Boards of Pharmacy (NABP) adopted a formal resolution on mandatory continuing education for re-licensure. The American Pharmaceutical Association-American Association of Colleges of Pharmacy (APhA-AACP) Task Force on Continuing Competence in Pharmacy (1972-74) concluded that CE was the best available mechanism for assuring pharmacists profiency.[10] This led to a recommendation by the APhA Board of Trustees in 1974 that ACPE be requested to develop a system of accreditation for CE providers, and the following year ACPE introduced standards for providers of continuing pharmaceutical education (CPE). In the subsequent years, as more states introduced mandatory CE as a requirement for re-licensure, the number of CE providers and CE offerings grew. All but one of the states now require participation in accredited, or otherwise approved, CE for relicensure[3]. The requirement is *hours based*, and the most common requirement is 15 hours (or 1.5 CEUs[d]) per annum. All states recognize ACPE accreditation of the CE taken by pharmacists. Some states also have their own approval mechanism for CE programs. ACPE accredits providers of CE, not individual CE offerings. As of June 2003, over 400 CE providers were ACPE-accredited.

The above regulatory approach is common among health professions in the US. 80% of licensing boards responding to a 2002 survey indicated that they required license holders to periodically take CE as a condition of license renewal.[4] Direct assessment of competence, as a requirement for renewal of license, is uncommon and many healthcare bodies only evaluate practitioner competence *after* a performance problem becomes apparent. This could be for budgetary or other reasons.[54]

Recent concerns about CE

The effectiveness of traditional CE has been a source of much debate. Both within and outside the pharmacy profession, concern is growing that the current system of mandatory CE does not provide a *satisfactory* degree of assurance that pharmacists are maintaining a level of competence adequate to meet public needs and expectations.

[d] Continuing Education Unit (CEU)– defined as ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction.

Accreditation standards for CE providers recommend, but do not require, summative evaluation of participant learning, except for certificate programs.[19] Is a better system possible? Could a different model produce the desired, or better, outcomes? How, and by whom, can professional competence be assured? What evidence do we have on which to make judgments and decisions regarding optimal learning systems? Is there any evidence to link systems of learning with practice change, and beyond that, to improved patient outcomes? Some researchers have also raised the issue of the cost-effectiveness of such systems[66] but discussions in this paper will focus on quality issues, rather than economic issues.

Clearly, there are many unanswered questions. Yet, pharmacy is not alone in asking these questions. Many healthcare professions, policy makers and legislators both in the US and abroad are debating these issues. Can US pharmacy learn from others? How should the profession move forward with much still unknown or unproved? How much time does the profession have before others, outside the profession, call us to account … or impose "solutions" not of our design, as was recently seen in the accounting profession?

This document discusses several of these unresolved issues by defining and differentiating relevant terms, by providing a background to the current system of CE and other credentialing activities available for pharmacists in the US, by outlining the drivers for change, by describing the origins and components of the CPD model, by outlining the experiences and initiatives of selected countries and professions, and by providing a summary of relevant initiatives and policies within the profession of pharmacy in the US.

Definitions

An understanding of, and distinction between, the terms used in this paper is important, and most of the following have been selected based on their current use within pharmacy or other healthcare professions.

Competence

CCP adopted the following definition in 2000:

> *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.* [14]

Lifelong learning

> *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.*[18]

Continuing Education

In 2000, CCP defined CE as:

> *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.*[14]

More recently (June 2003), ACPE adopted the following definition:

> *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.*[13]

Possibly the terms "lifelong learning" and "continuing education" should be synonymous. However, the term "continuing education" has tended to be associated more with *organized* or *structured* educational activities, as defined above by ACPE.

Continuing Professional Development

The Institute of Personnel and Development (IPD, UK) put forward 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 described by 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.*[12]

The same year, at a conference on lifelong learning, the following definition was offered:

> *Postgraduate professional education involving a cycle by which individual practitioners assess their learning needs, create a personal learning plan, implement the plan, and evaluate the effectiveness of the education intervention as it applies to their pharmacy practice.*[17]

Of note, the definition of CPD adopted by the National Health Service (NHS) in Great Britain in 1999 makes reference to patients and healthcare outcomes:

> *CPD is a process of lifelong learning for all individuals and teams of individuals which meets the needs of patients and delivers the health outcomes and healthcare priorities of the NHS and which enables professionals to expand to fulfill their potential.*[23]

Post-graduate credentialing activities in pharmacy

In contrast to medicine, a minority of pharmacists obtains post-graduate credentials. For example, all physicians have to complete a residency in order to be licensed to practice medicine, and currently 89% of licensed physicians are certified by one or more of the member boards of the American Board of Medical Specialties (ABMS).[67] A number of options, however, do exist for pharmacists and these should be noted in the context of this paper, due to its focus on lifelong learning and professional development. Table 1 summarizes post-graduate credentials and programs offered to pharmacists. The table was compiled from data supplied by CCP member organizations, and further detail regarding these credentials is provided in CCP's resource paper on credentialing in pharmacy.[68] The importance of postgraduate training to the advancement of pharmacy practice has been stressed, particularly in view of the changing role of pharmacists and the consequent need for new knowledge and skills. It has also been noted that CE is the simplest and most common form of postgraduate training for pharmacists.[50]

What is the need and why is change being considered?

The need for *continuing professional development* can be summarized as follows:

- To ensure that pharmacists **maintain** (at an appropriate level) their knowledge, skills and competence to practice throughout their careers in their own specific (or current) area of practice;
- To **improve** the pharmacist's personal performance (i.e., develop knowledge and skills);
- To **enhance** the pharmacist's career progression.

As will be discussed in more detail below, evidence is mounting that traditional systems of CE for all professionals - not just pharmacists - are no longer considered ideal, nor adequate, to meet the above needs.[22] This statement is not intended to undermine the value and benefits that can be, and are, derived from CE. Due recognition must be given to CE providers who deliver high quality programs, through which pharmacists (and other participants) learn new knowledge and develop new skills. This solid foundation must be built upon. It is paramount, however, that CE activities ultimately benefit patient care, rather than simply meeting administrative requirements.[55] It is for reasons of *quality*

improvement that alternative systems are being considered and adopted. Globally, and in many professions, CPD appears to be emerging as a more effective model.

What's driving change?

Drivers for change are emerging within and outside the pharmacy profession. Historically, both in the US and abroad, professions have, to a large extent, been left by governments to self-regulate. This is a defining element of a profession.[61] This, however, may be changing. Globally, governments, the professions and increasingly the public are questioning how to achieve lifelong learning and assure competence throughout a practitioner's career. Should this be mandatory, voluntary, or an ethical obligation? Who should be responsible for assuring competence: the government or the professions? How best is the public served and protected? How do professions develop?

These issues are a major area of focus for the Citizens Advocacy Center (CAC), a training, research and support network for the public members of healthcare regulatory and governing boards. The CAC says there is no clear evidence to reliably link CE to competent performance in practice.[15]. Competence assurance *per se* is a complex subject, and beyond the scope of this paper, but within this context, agreeing on the optimal model to address the lifelong learning and development needs of pharmacists is a good starting point, hence the importance of this discussion.

Drivers for change within pharmacy and the healthcare professions

A system of mandatory CE for pharmacists has been in place in the US for over 25 years. Quality assurance for this enterprise is effected through the approval systems of the state boards of pharmacy and most states, directly or indirectly, rely on the ACPE accreditation standards for CE providers.[3] Some may argue that, to date, this system has served the profession and the public well, but studies cannot provide conclusive evidence of this. As will be discussed in more detail later, many factors impact the effectiveness of CE programs, the outcomes for the participant, and ultimately healthcare outcomes. In a 1983 study, 55% of members and secretaries of boards of pharmacy in states with mandatory CE indicated that the most *unfavorable aspect* of mandatory CE was that it does not ensure competency, although 63% said that the *most favorable* aspect was that it forces pharmacists to update their knowledge in at least some areas of pharmacy practice.[11] Overall, 91% of responders who were members of boards of pharmacy supported mandatory CE.

In the above study, perceptions of alternatives to mandatory CE were also investigated. While CE had a high perceived ability to increase knowledge, a high level of acceptability by pharmacists, and was perceived as easy to administer, a four-year re-licensure examination was believed to be one of the best programs to ensure competency, but it was ranked very low in terms of pharmacist acceptance. Generally pharmacists are not unhappy with mandatory CE. In a 1989 study, the majority of pharmacists sampled

had a "positive attitude" toward CE.[8] A similar favorable attitude to CE was also inferred by state pharmacy board members and ACPE-accredited CE providers.[11] No subsequent studies have been found that indicate that these attitudes have changed, so some may question the need to change the present system, and/or the wisdom of adopting alternatives for which there is limited evidence of success.

While there is evidence that CE *can* maintain and increase the knowledge of participating pharmacists, a number of shortcomings and challenges have been identified. Can the achievement of learning be adequately assessed? Does the present system of CE (which primarily uses a non-curricular approach) address the *actual* learning needs of pharmacists? Are all required pharmacist competencies being addressed?

As the national accreditation agency for providers of CE, ACPE plays a pivotal role in assuring quality in the delivery of CE for pharmacists. ACPE has recognized that its CE Provider Standards, now over 25 years old, are due for review. As a part of its strategic plan, ACPE is exploring the re-engineering of the CE provider accreditation process to make it more efficient and effective, while fostering continuous quality improvement and encouraging innovation.[57] ACPE has also initiated a collaborative reevaluation of the existing CE model in pharmacy. This involves the identification of the CE requirements of other organizations, and an exploration of the CE processes and activities of other health professions, domestic and international, including the use of new models, such as CPD.

What evidence of links to improved outcomes, and how to achieve them?

Although there is a paucity of literature specifically reporting on links between CE and maintenance of competence of pharmacists, or between CE and practice change leading to improved patient outcomes, important parallels can be drawn from the more extensive literature regarding continuing medical education (CME). After a review of the literature in continuing health professional education (1988), Nona *et al* concluded that CE *can* be effective in improving professionals' practice-related capability and performance.[48] Nona noted, however, that the ability to document different levels of change may be affected by where a CE programs fits into a health professional's continuing development. Referring to the findings of Lockyer[45], Nona stressed that courses which reflect participant interest (or preference) in a subject of current relevance may have more success in effecting changes in behavior. Other studies have concluded that the identification of learning needs, coupled with an educational program specifically designed to meet those needs, is perhaps the best guarantee for effective change in a professional's attitude, knowledge or behavior patterns.[46,47] Nona advocated an increased emphasis, in the program planning process, on practice-related topics and problems to strengthen the overall effectiveness of CE.

Findings of more recent studies[36,40] include:

- While lectures, conferences, and short courses may predispose physicians toward change, didactic lectures by themselves do not play a significant role in immediately affecting physician performance or improving patient health care;
- Educational activities that use interactive techniques such as case discussion or hands-on practice session generally are more effective in changing behavior and patient outcomes;
- Interactive workshops can result in changes to knowledge or skills; didactic sessions alone are unlikely to change professional practice;
- CME strategies designed to use two or more interventions can lead to change in practice;
- Physicians benefit from reflection on their progress and development of their next learning projects or questions;
- Physicians should participate in educational activities that offer personal involvement in thinking about professional practice and in identifying learning needs;
- To achieve its greatest potential, CME must be truly continuing, not casual, sporadic, or opportunistic;
- Physicians must recognize the ongoing opportunities to generate important questions, interpret new knowledge, and judge how to apply that knowledge in clinical settings;
- CME must be self-directed by the physician, including management of the content of and context for learning;
- Opportunities for self-directed learning must enhance the knowledge and skills required for critical reflection on practice and measurement of improvement.

A critical review of CME in the US, concluded that conventional, formal CE, unless focused on specific behavioral objectives, does not alter a physician's practice measurably.[41]

A curricular approach to learning

As early as 1986 it was recommended that "curricular strategies", characterized by a sequence of related learning experiences, be applied to the planning, designing, production and delivery of CE in order to achieve specific, measurable outcome objectives.[7] A 1989 study reported that the majority of CE offerings did not follow such an approach and that a "curricular approach" to CE did not appear to be of paramount interest to many pharmacists.[8] It was speculated that a less-than-adequate preparation for independent learning at the undergraduate level may affect a practitioner's beliefs in later years regarding rigorous types of CE (i.e., curricular CE), which rely more heavily on independent learning skills. Educational practices and standards now focus more attention on the latter, as well as critical thinking and problem-based learning[1], and this may positively impact pharmacists' attitudes towards lifelong learning, especially that which requires a high degree of self-direction and self-motivation.

In Canada, CE presented to health professionals is generally didactic and content-oriented rather than skills-oriented, and ultimately has not proven to be the most appropriate vehicle for ongoing professional development.[32] The same appears to apply in the US. A 1989 analysis of CE programs offered by ACPE-accredited providers revealed that content-based programs were offered notably more frequently than skills-based programs.[37] ACPE reports that the same applies today.[38]

Fjortoft and Schwartz assessed the long-term outcomes from a 3-month, curriculum-based pharmacy CE program on lipid management and hypertension services, particularly looking at changes in practice behaviors.[51] Their findings suggested that pharmacists can realize long-term gains in cognitive/psychomotor skills from curriculum-based interactive CE, but that the benefits derived did not significantly affect practice behaviors, including the provision of clinical services. Miller defined competency-based education with four levels: the learner **knows** the facts (cognition), **knows how** to apply the facts, **shows how** (in a controlled environment) and **does** (behavior, in real situations).[75] The *application* of knowledge, skills and behavior is reflected in competence, and it is to this level that competency-based education must reach in order to be complete.

Many factors can influence the effectiveness of CE and its impact on performance, practice, and patient outcomes. Previous studies in this area have perhaps not adequately taken into account this complexity and investigated all factors. The effects of CE are often distantly removed in time and space, and this creates a potentially lengthy and difficult - if not impossible - evaluation process, thereby complicating the demonstration of links. More research is needed to improve our understanding of these factors. In their practice change model, Holland and Nimmo discussed different levels of influence on practitioner behavior, especially when a significant change in practice is introduced.[76] Focusing on educational aspects, however, ample studies indicate that utilization of multiple educational methods, and participation in learning activities that are self-directed, based on identified learning needs and/or personal goals, relevant to practice, interactive, ongoing, have defined outcomes for the practitioner and the organization, and that can be reinforced through practice, are more likely to achieve sustainable learning and practice change. In essence, this is the basis for the CPD approach. It would appear, therefore, that in order to achieve the desired objectives of learning, practice change and improved patient outcomes, a different approach from "traditional continuing education" is required by both educators and practitioners.

The role of education in preparing pharmacists to deliver pharmaceutical care

The American College of Clinical Pharmacy (ACCP) 2000 White Paper: *A Vision of Pharmacy's Future Roles, Responsibilities, and Manpower Needs in the United States* examined the pharmacy profession's future, and discussed the changing philosophy of practice, factors influencing the evolution of professional roles and responsibilities, preparation for future roles, future leadership and management needs, workforce manpower projections, and qualifications for practice.[16] Many of the issues raised in the

paper are relevant to the subject of this paper, and a few are discussed below. The ACCP white paper is recommended reading.

While noting that the profession had broadly endorsed pharmaceutical care in the early 90s, ACCP stressed that the profession was not yet united in pursuit of this "patient care mission." It stated that the profession as a whole has not embraced the new philosophy of practice, and pervasive change in practice had not yet been implemented. Several possible contributing factors were identified, including: the majority of practicing pharmacists were not originally educated towards this practice model; pharmacists may lack the necessary professional competence and/or self-confidence; practitioners have underdeveloped interpersonal skills. ACCP concluded that a mismatch exists between what the profession espouses and what it has been able to accomplish, and that "vast retraining" would be needed for pharmacists to acquire the necessary knowledge, skills and attitudes. It was ACCP's belief that the importance and enormity of this task has been underestimated by some segments of the profession.

Can the required enhancement of the clinical practice abilities of pharmacists ("retooling") be achieved under the current mandatory CE model, which is perceived to primarily address knowledge needs? ACCP concluded that, to bring about the required changes, would require a different approach by both learners and educators, a broad-based inclusive planning process involving all pharmacy organizations, and more effective collaboration between educators and the profession.

Drivers for change outside pharmacy

Consumers of healthcare are more informed about medical matters and medications today than ever before. Multiple factors have contributed to this: better and more accessible information, increased media attention to health issues such as patient safety and medication errors, managed healthcare (pre-authorization, exclusions, etc.), the rising cost of healthcare, and increased provision of information by healthcare practitioners, now often required by law. But at a time when the public is demanding improved safety and access to healthcare, public trust of professionals (not only healthcare professionals) has been damaged by a number of high profile cases in the US and abroad. Public confidence in the ability of regulatory authorities to provide the expected levels of protection to consumers has been eroded. Governments are being held accountable for some of the problems, and *"laissez-faire"* policies regarding professional regulation have been called into question. Action is being taken; recent changes in the regulation of the accounting profession are a prime example. Healthcare insurers and agencies accrediting healthcare facilities (such as, the Joint Commission on Accreditation of Healthcare Organizations, JCAHO) also want assurances that measures are in place to address the competencies of healthcare practitioners.

Three recent Institute of Medicine (IOM) reports [20-22] have raised issues pertinent to this paper. *To err is human: building a safer health system* noted that we do not make the most appropriate use of our healthcare manpower. *Crossing the quality chasm: a new health system for the 21st century* emphasized that safety and quality problems exist

largely because of system problems; among them health professionals working within a system that does not adequately prepare them, or support them once they are in practice, to achieve the best for their patients. In the report *Health professions education: a bridge to quality*, the IOM says that education for the health professions is in need of a major overhaul. Citing both academic programs and CE, the report called for education to be competency-based, and stressed the need for a commitment to lifelong learning. The IOM recommended that all health profession boards move towards requiring licensed practitioners to periodically demonstrate their ability to deliver patient care through direct measures of technical competence, patient assessment, evaluation of patient outcomes, and other evidence-based assessment methods.

The IOM reports have raised public awareness of some of the problems and challenges in healthcare. The reports called for fundamental change, and the public will expect to see it. To avoid such change being imposed by "outside forces", the pharmacy profession needs to ensure that a publicly acceptable solution is in place.

Time for change?

While re-certification (often through examination) is common for medical and pharmacy specialties, and has existed for some time,[32] the same does not apply for pharmacist re-licensure in the US. Some jurisdictions, such as in Canada and New Zealand, have introduced systems to directly assess, on an ongoing basis, the knowledge and skills necessary for a pharmacist to maintain competency. A paper describing Ontario's experience with CPD noted: "In spite of [these] findings, professional regulatory authorities throughout North America continue to require pharmacists to complete continuing education as evidence of continuous professional development. Such requirements may have little benefit on professional practice and do not provide assurances that the practitioner has the knowledge and skills necessary to provide safe and effective patient care. Developing assessment methods to ensure that all practitioners within a health profession are competent is a significant challenge for regulatory bodies, but one that is essential to meet if their mandate to protect the public is to be achieved."[32]

While it would appear unlikely that a system of direct assessment is considered feasible or desirable by the profession in the US at this time, has the time now come for a re-evaluation of the system of CE for pharmacists? NABP believes that the time for "wait and see" has passed, and CPD has become an important area of focus for the association.[52,53]

The CPD model, which appears to be emerging as the preferred alternative - or improved - framework for continuing education of professionals, is now described in more detail.

What is the CPD model?

The principles of CPD can be summarized as follows[23]:

- CPD is a systematic, ongoing cyclical process of self-directed learning;
- It includes everything that practitioners learn which enables them to be more effective as professionals;
- CPD includes the entire scope of the practitioner's practice, and may include activities both within and outside the usual work setting;
- CPD is a partnership between the practitioner and his or her organization, meeting the needs of both;
- The practitioner is responsible for their own professional development. The organization has a responsibility to help the practitioner meet the development needs that relate to performance in their current job.

When considered together with the NHS definition given earlier, three important features of CPD are clear: CPD is **practitioner-centered** and **self-directed**; CPD is designed to be **practice-related**; CPD is **outcomes-oriented** in terms of maintaining competence, the professional development of the practitioner, meeting individual and organizational goals, and achieving improved patient outcomes.

Although work experiences have traditionally not been recognized for CE credit *per se*, learning in the workplace is an important component of lifelong learning. Inclusion of such learning is central to the philosophy of CPD. Furthermore, learning that can, and does, take place outside of the traditional learning environments (such as lecture halls) has to be recognized.[33] In its 1996 position paper on assuring competence, the National Council of State Boards of Nursing went further:[59]

> *"To benefit the consumer, it makes sense for the board to focus on assuring that a practitioner's knowledge and skills in the current area of practice are sufficient such that safe and competent care is delivered. It is a questionable use of time and resources to focus on practitioners acquiring knowledge and skills unrelated to daily practice. Requirements that have no relation to daily practice become an academic exercise, and may even detract from advancement of needed knowledge and skills…"*

A better learning model?

The CPD model for lifelong learning and professional development of practitioners is sound theoretically and developed around well-tested principles of learning and continuous quality improvement.[58,78] In the 70s and 80s, Kolb and others described the way people learn and how they deal with ideas and day-to-day situations in their lives.[24,25,73]

Archer[80] described a cycle of learning (derived from Kolb's) with four stages *(Figure 1)*:

- Have a new experience
- Reflect on that experience
- Draw some conclusions
- Act differently as a result

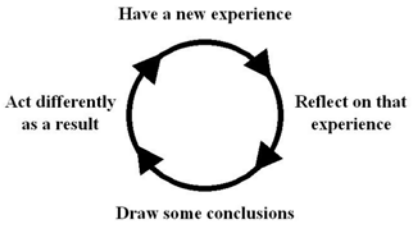
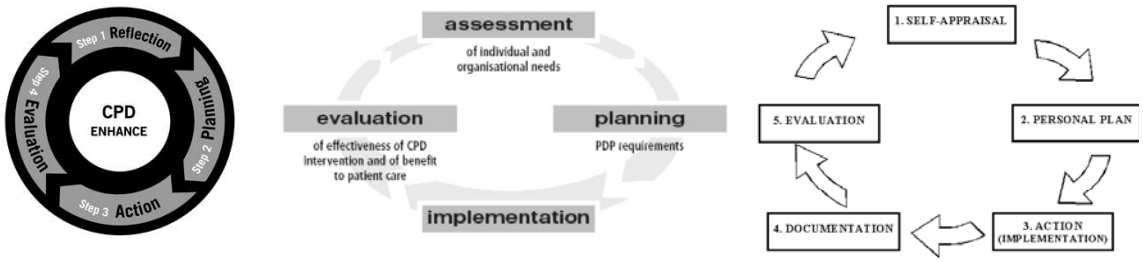


Figure 1: A cycle of learning

Studies have demonstrated that learning that is carried out in response to identified and existing needs, and is reinforced through practice, is more likely to be sustained[40]. Some of the four-stage and five-stage cycles *(Figures 2-4)* that have been adopted within the context of CPD incorporate these principles of learning. "Reflection," "assessment" and "self-appraisal" are somewhat interchangeable.



Figures 2,3 & 4. Versions of four-stage and five-stage CPD cycles.[69-71]

The CPD cycle

CPD has been described using four-stage and five-stage cycles. In essence, they are very similar. In the above five-stage cycle, documentation is included as a separate "stage" to emphasis its importance. Documentation is, however, an important component of each of the other four "sequential" stages. A modification of the above cycles, in which "documentation" – the portfolio – is shown as a central component (but not a separate stage) of the cycle, is offered here for consideration (Figure 5).

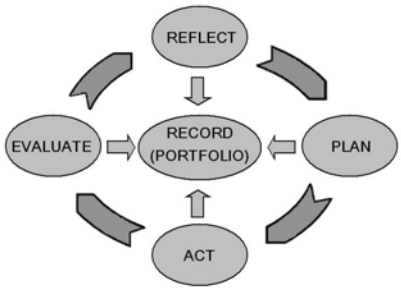


Figure 5: CPD cycle centered around a portfolio

This four-stage cycle, comprising the stages *Reflect*, *Plan*, *Act* and *Evaluate*, is described below.

Reflect

Also referred to as "self-appraisal" or "assessment," this stage entails the pharmacist reflecting on personal and organization needs and goals for professional development, and self-assessing their knowledge, skills and competence. Reflection is important to learning; it has been defined as *the complex and deliberate process of thinking about and interpreting an experience in order to learn from it*.[74] Ideally this is carried out in two ways – on an *ad hoc* or *unscheduled* basis (in most instances this will be in *reaction* to specific day-to-day practice experiences – *"reflection **in** practice"*), and on a *scheduled* or *proactive* basis, for example, annually or bi-annually, or when a major career change occurs, or is anticipated (*"reflection **on** practice"*).

Accurate self-assessment is difficult, and pharmacists are likely to need assistance. Ideally, self-assessment should be balanced with the considered judgment and opinion of others, such as peers and/or supervisors. Recognizing these points, tools to assist pharmacists to appropriately and accurately assess their learning needs have already been developed in a number of countries, including the US.[26,30] The National Association of Boards of Pharmacy (NABP), 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 non-challenging and supportive environment, their needs and interests.[52] Daily practice experiences should also contribute to this self-appraisal, in turn leading to identification of individual learning needs based on actual issues confronting the pharmacist.

Documentation in the pharmacist's personal portfolio begins at this first stage in the cycle.

Plan

The next stage involves the design of a *personal development plan* (PDP). Pharmacists who have no prior experience with such planning will probably need help, and this is likely to create service opportunities for professional membership organizations and CE providers. The plan includes all the activities that will address the identified learning and development needs and goals. What is to be achieved from the learning should be clear and specific (SMART objectives[e]). The outcomes should be linked to one or more specific professional competencies.[13] Where possible, they should also address patients' healthcare needs, as noted in the NHS definition of CPD.

The plan could include structured programs (such as accredited CE), as well as a diverse range of informal learning activities, many of which will be work-based or work-related (Figure 6). It should take into account the pharmacist's preferred learning style. Where specific subject matter is required, ACPE's P.L.A.N.® database[f] is available to assist pharmacists to identify appropriate CE offerings or certificate programs in various formats (e.g., seminars, journals, Internet courses).[27] Other resources and/or sources of support should be identified. All the activities will help the pharmacist to use, and build on, the knowledge and skills he or she already has.

Figure 6. Activities which can enable you to meet the learning and development needs you identify [23]

The PDP is recorded in the personal portfolio. While remaining focused around the identified needs and goals, the plan should be dynamic, being changed and updated as and when required. Each pharmacist's situation is unique, so 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 strategies will be needed for different objectives, and success will likely depend on the effective utilization of multiple learning methods.

[e] SMART objectives: **S**pecific, **M**easurable, **A**chievable, **R**elevant, **T**ime-Based
[f] P.L.A.N.® = Pharmacists' Learning Assistance Network

Act

Putting the plan into action is the next stage. The activities chosen will be outcomes-driven to meet identified needs and goals, not only to fulfill an "hour requirement." CPD does not remove the need for, or replace, accredited-CE. CPD builds on, and around, this essential, quality-assured component. It also encourages different methods of delivery for learning.

Evaluate

As with reflection, evaluation should take place in two ways: on an *ad hoc* or *unscheduled* basis (*reacting* to day-to-day experiences); and through a *more formal, structured* or *proactive* process. Evaluation will consider if, and how well, the learning and development objectives have been achieved, how appropriate and effective the PDP was, how well the activities undertaken correlated with the plan, if the methods of learning were appropriate, what impact there has been on knowledge, skills, competence and confidence, if and how practice has changed, and where applicable, if there were improved patient outcomes as a result of the activities.

Evaluation can be carried out 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 as well as organizational goals are considered. In some CPD models (for example, in the UK), the portfolio is subject to review by the regulatory body. In Ontario, Canada (discussed in more detail later) there is the opportunity for small-group peer review of the learning portfolio, and also for 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 that may be experiencing difficulty in one or more aspects of CPD, and in need of assistance or remediation, and to protect 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, that are transferable elsewhere in practice, may be identified. Feedback from third-parties (whoever they be) should be given in a constructive and non-threatening way, with the primary objective being to help the individual move forward in their professional development.

Most importantly, the evaluation leads into 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 incentive or need for the majority of pharmacists to document their learning activities, apart from their record of participation in accredited CE as a requirement of re-licensure. In CPD portfolios, pharmacists record all relevant learning experiences, be they accredited-CE or informal work-based or work-related activities. Where such activity has had a tangible outcome (for example, an improved patient outcome, a change in practice method or behavior, new knowledge or skills, or a new credential) this is noted in the portfolio. In time, the pharmacist's portfolio will develop into a comprehensive record of education and practice with multiple possible applications.

Although explained above as a continuous cycle involving multiple stages, as discussed earlier, CPD should be considered an *approach* to lifelong learning rather than a number of stages that a practitioner has to methodically and laboriously work through. "Progression" through the stages (or components) of CPD should in time, to a large extent, become seamless and unconscious, although more conscious effort will be required until CPD becomes "second nature" to a practitioner. Progression through the cycle should also occur at two levels – the *systematic, proactive* level that might be done, for example, annually; and the *ad hoc, reactive* level that should happen daily in practice.

Is CPD already a reality in the USA?

Although its adoption may not yet be widespread, the CPD model for lifelong learning is already in use in the US. Apart from individual practitioners who use this approach, examples can be found in some health-systems, including the Veterans Administration Health Care System.[77] To comply with accreditation requirements (for example, of the Joint Commission on Accreditation of Healthcare Organizations, JCAHO), institutions have a need and obligation to ensure that their healthcare practitioners are scientifically and professionally competent to practice. As stated, as professionals, healthcare practitioners are responsible for maintaining their competence to practice, but institutions can assist with this responsibility. A number of JCAHO standards address issues relating to competence, lifelong learning and self-development of staff.[g] Accreditation standards require institutions to demonstrate that systems are in place to support staff learning and development, and to assess staff members' abilities to meet performance expectations, both initially (on employment) and on an ongoing basis. Assessment should include self-appraisal, peer review and performance 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 supportive in addressing identified learning needs, and meeting personal and organizational goals. Through in-service presentations, journal clubs, newsletters, case studies and other means, such practitioners are presented with a variety of ways to

[g] For example, JCAHO Standards HR.3.1, HR.4, HR.4.2, HR.5

identify and address learning needs. While not all of these activities would meet the criteria for accredited CE, the value of such learning activities is obvious, as are the benefits in terms of the development of the practitioner and the organization. Due to its relevance to daily work, and the potential for regular reinforcement through practice, evidence would suggest that such learning is also more likely to be sustained, to result in practice change, and ultimately to lead to improved health outcomes. In such a learning environment, self-directed CPD can become "second-nature," not a mechanical, burdensome process that it might appear to be on initial consideration.

What has been the experience of other countries with CPD?

Several countries have adopted a CPD approach to lifelong learning; others are evaluating the concept. The drivers for change in all these countries have been similar to those described above. Principally, a need for greater public accountability and transparency existed, along with the assertion that regulation should remain within the professions, provided that the public interest is best served. Two "case studies" provide good examples for this paper: Great Britain and Ontario, Canada. While the health and regulatory systems of these countries differ in several aspects from those in the US, some parallels can be drawn, and their experiences and conclusions are worth noting.

Great Britain

Established in 1948, the National Health Service (NHS) is the employer or contractor for virtually all health professionals, including hospital and community pharmacists. The NHS has had a traditional role in supporting and funding CE for health professionals. Under the NHS Act (1967), the government accepted responsibility (as the "employer") to maintain the competence of pharmacists. The Nuffield Report (1986)[28] identified new roles for pharmacists and noted the additional training that would be required to meet these roles. At the same time, the government committed the funding for specific training initiatives.

In the late 80s, a working party of the Royal Pharmaceutical Society of Great Britain (RPSGB, the statutory and professional body) reviewed all aspects of pharmacy training, and their 1989 recommendation to introduce mandatory CE (based on the US model) was narrowly defeated. Subsequently, changes were made to the Code of Ethics to encourage participation in CE, and by 1991 CE became a "professional obligation." The working party recommended that the ultimate goal was periodic assessment of competence to practice, but at the time this was seen as too complex and expensive.

By 1996, CE became a specific "obligation," and pharmacists were expected to participate in a variety of methods of CE for at least 30 hours per year, and to meet with other pharmacists for CE at least once. In the 90s, a paradigm shift from "teaching" to "learning" was starting, and the concept of CPD began to emerge in a variety of professional groups. In 1996, the document *Pharmacy in a New Age: Agenda for Action* proposed developing a new system of CPD for pharmacists, which would be mandatory.

In 1998, RPSGB launched its pilot project to develop CPD within the profession. 500 pharmacists (mainly in community and hospital practice) were invited to participate in the 18-month pilot based on a four-stage learning cycle - *Reflection, Planning, Implementation, and Evaluation*. As much flexibility as possible was built in, and evidence of CPD was recorded in a *personal portfolio*. The volunteers were supported by either a facilitator, or by printed material, and a team of ten assessors carried out analysis of portfolios. Conclusions from the pilot were that the benefit of facilitators was evident, learning needs analysis and portfolio building were the major problem areas, and that a *"healthy majority"* of pharmacists were willing to voluntarily sign up to a CPD framework if the benefits are stressed. Generally, pharmacists reported that the system had not been as onerous as they had anticipated, and that the required documentation could usually be completed during a working day, at the end of the day, or at the end of a week.[60,62] Results from a recent study, however, indicate that CPD is still not clearly understood by all pharmacists and that better explanation is required.[72] The major questions: What will it cost, and who will pay?

In the Health Act of 1999, the government decided that professions would be left to self-regulate, but the government would intervene if necessary. Pressure was, however, building for mandatory CPD for health professionals. In response, RPSGB carried out a comprehensive survey of pharmacists in 2001, and applied to the government to allow for reform of the disciplinary system, and mandatory CPD as a requirement for re-registration. The voluntary pilot was extended to a second phase and an electronic database-driven portfolio, which allowed for electronic submission of records, was tested. At the same time related issues, such as the registration of pharmacists, standards, quality assurance and discipline were the focus of another major government report - the Kennedy Report (2001).[29]

In October 2002, the first phase of full implementation was initiated with 5000 pharmacists. A number of options to document CPD activities were allowed, including paper-based, and electronic via CD-ROM or the Internet). Any educational program could be included, including "non-accredited" CE. The pharmacist's CPD was monitored by RPSGB, and assessed against a "trial" set of evaluation criteria, with feedback provided. The Society sent a 30-minute videotape "*Introducing CPD"* to all pharmacists, and the 5,000 participating pharmacists were sent a CPD package *"Plan and Record."* A further 10,000 pharmacists rolled out in 2003, and the balance of GB's ±43,000 pharmacists will roll out in 2004. Roll out is by geographic region to facilitate support.

The introduction of CPD has been a collaborative effort between RPSGB, the national centers for pharmacy postgraduate education (CPPE), employers, and other stakeholders, so that resources were shared. The government has made it clear that CPD for pharmacists will have to become mandatory, and legislation could be introduced late 2004. Indications are that most pharmacists in Great Britain want mandatory CPD, and their views on mandatory CPD have been sought by the Society.[31] It is anticipated that pharmacists will be required to submit their CPD records every three to five years. The CPD implementation committee has proposed that the register be restructured into

"active" (practicing as a pharmacist, but not limited to direct patient care roles) and "non-active" members.

"CPD starts from the position that people are currently at … not the position that others think they should be at." Dr. Peter Wilson, consultant to RPSGB, August 2002.[62]

CPD has been seen as a means of quality assuring health professionals, a substitute for assessment of competence. It is acknowledged, however, that a direct link between completion of a CPD portfolio and "competence to practice" is not yet proven. Many pharmacists in Great Britain are concerned about the future possibility of "revalidation" (periodic renewal of practicing rights), and still confuse it with CPD. The RPSGB believes that revalidation requires a lot more work and discussion, and is not currently proposing such a system for pharmacists.

Some useful findings were made following a project to identify the professional development needs of community pharmacists in the Brighton area, and how the needs could be addressed.[65] Barriers to learning and pharmacists' attitudes to CPD were explored. The study reinforced the role of facilitation as an integral component of CPD, as demonstrated by the level of support required by the pharmacists in the study.

Highlighting the attention being given to this broad subject, in April 2003 the RPSGB initiated a stakeholder discussion on the *competencies of the future pharmacy workforce*. The report, distributed as the basis for comment, included the draft of a new competency framework, discussed the mapping of pharmacy education and training to the new competency framework, and outlined competency frameworks for other professions.

The Province of Ontario, Canada

Provinces in Canada, like the states in the US, are self-regulating. Most of the provinces in Canada have adopted a CPD model for pharmacists' lifelong learning. While some differences exist, the core elements and principles apply. The Province of Ontario, Canada's most populous, has been selected as the case study for Canada.

The Ontario College of Pharmacists (OCP) is the registering and regulating body for pharmacy in Ontario. With authority given by the provincial government, it sets, maintains, and enforces standards of practice. Prior to a discussion of Ontario's experience with CPD and assessment of the patient care competencies of pharmacists, it should be noted that in Canada the entry-to-practice examination for pharmacists consists of both a written test of clinical knowledge, and a performance assessment (OSCE, Objective Structured Clinical Examination).

Leading up to the promulgation of the Regulated Health Professions Act (1993), there was heightened awareness of the need for greater accountability among health care professionals and significant concerns regarding the structure and functioning of self-regulating professional colleges. Cognizant of the limitations of traditional CE, the

framers of the legislation mandated that the College, on a regular basis, must directly assess its members for competency to practice pharmacy.[32] OCP began to develop a quality assurance program to focus on ensuring and maintaining the competency of all practicing members, and in 1996, introduced the *Professional Profile and Learning Portfolio* as a part of the College's Quality Assurance Program. The new legislation also necessitated a change in structure and governance of the College, with an expanded presence and role for public members appointed by the government. The aim of this was to balance the need for public scrutiny and transparency, with the benefits of professional autonomy. Of note, such quality assurance systems are now a mandatory provision of the legislation governing the practice of 23 health care professions in Canada.[32]

The main elements of the OCP quality assurance program are as follows: (1) A two-part registration system; (2) A learning portfolio to demonstrate lifelong learning *(i.e., all components of CPD as described earlier)*; (3) A practice review process, involving assessment of the clinical knowledge and skills required to provide direct patient care in *any* pharmacy setting; and (4) Professional development (including assisted remediation where necessary).

Since 1997, all pharmacists in Ontario have been required to maintain a personal learning portfolio. There is no specific requirement in terms of type or quantity of CE to be completed, and pharmacists are free to set their learning objectives and outcomes based on their own practice needs. The portfolio is a personal record. It must be submitted for review to the College on request, but is not subject to a *Pass/Fail*. Pharmacists must also elect (annually) to be on the *Part A Register* (direct patient care; about 93% of Ontario's ± 9,000 registered pharmacists) or the *Part B Register* (non-direct patient care).

Part A pharmacists are subject to the two-phase *Practice Review Process*, which assesses pharmacists' patient care abilities as defined in the College's *Standards of Practice*. Each year, 20% of Part A pharmacists are randomly selected for Phase I of the Practice Review Process, i.e., every pharmacist electing into Part A will be selected to participate at least once every five years. Phase I involves submission of the *Self-Assessment Survey* and *Summary of Continuing Education Activities*. Failure to submit can result in disciplinary action. The survey includes pharmacist self-assessment of their knowledge and skills in various therapeutic and practice areas, and it provides an opportunity for pharmacists to assess their own learning, identify personal learning needs, and vehicles by which such needs have been, or are being, addressed.

Every year approximately 200 of the pharmacists in Phase I review are selected for Phase II review. Pharmacists complete the same "generic" review process, regardless of practice site, number of years since graduation, or educational background. The review includes assessment of direct patient care competencies, primarily in the four domains of **clinical knowledge**, **ability to gather information from patients**, **patient management and education**, and **communication skills**. A rigorous development and review system was established to ensure the validity and reliability of the assessment, and its reflection of contemporary practice issues for a variety of settings. Three activities are included: a

open-book written test of clinical knowledge (based on case studies typically encountered in daily practice); standardized-patient interview scenarios reflecting contemporary practice; and an educational/sharing session on CPD and the learning portfolio, conducted in small groups. Based on criterion-referenced Minimum Performance Levels (MLPs), pre-determined by consensus of experts, and using recognized assessment methods, the passing score is established.

All candidates are provided with an individualized statement of their results after their review. Those who meet or exceed standards in **all four components of the review**, progress to the *Self-Directed* category for CPD and continue to take responsibility for their own ongoing learning. Pharmacists who have difficulty meeting standards in either **clinical knowledge or communication skills** or fall below on **two or more of the four components** being assessed are assigned to the *Peer-Assisted* category, and are required to submit an educational plan to the College. Pharmacists who have difficulty in meeting standards in either **gathering information** or in **patient management and education** are assigned to the *Self-Directed* category, as experience has shown that these areas are particularly amenable to remediation through self-study. After successful remediation and re-assessment, pharmacists can transition from the *Peer-Assisted* category to the *Self-Directed* category.

The College has developed several resources (many web-based) to support pharmacists in their CPD activities and to help them prepare for the practice review. The Quality Assurance Committee, which administers the program, has no authorization (in terms of the Act) to revoke a pharmacist's license to practice, but it can impose terms and conditions on a pharmacist's status if an urgent public protection issue is identified. The QA Committee's role is, therefore, primarily educational, not punitive. If, for any reason, a pharmacist is under investigation, data gathered during the review process may not be shared with investigative or disciplinary branches of the College.

By September 2002, all Part A pharmacists had completed a self-assessment survey and provided a summary of their learning portfolio. Over 1,000 Part A pharmacists had participated in all parts of the practice review process.

Aggregate data based on a five-year review of the Self-Assessment Survey (Phase I) results identified the common areas of greatest learning need, as well as those that were least urgent. Self-assessed competency "strengths" and "weaknesses" were also identified; some had a relationship with the number of years since graduation and/or place of graduation. Results from the Practice Review (Phase II) were reported to be generally encouraging, and the response from the profession to be supportive. Despite some anxiety and stress concerning the process, the vast majority of pharmacists reported that the process is fair, reflective of daily practice, and is an important component in ensuring quality in the profession. A detailed analysis of the results has been published. [32]

It was found that the majority of pharmacists (86%) were able to self-direct their professional development, and were either meeting or exceeding current standards for the Practice Review. 14% of pharmacists assessed encountered difficulties in meeting

standards in one or more area, and were identified as potentially benefiting from a "peer-assisted" approach to their continuing professional development.

The College has concluded that through direct assessment of pharmacists' clinical knowledge and skills, the needs of practicing pharmacists can be measured. The results have provided important information to pharmacy educators, both in terms of aggregate learning needs, as well as the needs of specific categories of practitioners. In summary, it is the assertion of OCP that:

> *"By positioning quality assurance as an educational and remedial activity, not a punitive one, it was possible to construct a peer review process that balanced the needs of the public with respect for professional self-regulation. By balancing the twin needs of professional self-regulation and public accountability, the Practice Review process provides both the profession and the public with an effective vehicle for ensuring maintenance of competency within pharmacy."*

What has been the experience of other professions in the USA?

The Citizens Advocacy Center has studied and reported on discussions and initiatives of the healthcare professions and their regulatory boards. It is evident that most, if not all, health professions are discussing this issue. Several professions, specialty groups within professions, and certification boards have already adopted a CPD framework. Some, for example, dietetics, already have extensive experience with CPD. The American Medical Association (AMA) has been a strong advocate for the CPD concept and is broadening its definition of CME by changing its credit statement from listing "hours" for credit. The Accreditation Council for Continuing Medical Education (ACCME) considers CME to go beyond the provision of formal educational activities and has expanded CME to include CPD. Responses to a CAC survey indicate that the professions that have not yet instituted changes expect change to come. Nearly three quarters of responding boards indicated that they, and/or their state legislatures, are considering introducing continuing competency requirements at some time in the future.

Current initiatives and organizational policies regarding life long learning and CPD

A number of pharmacy organizations have developed policy statements on lifelong learning, continuing education and/or the professional development of pharmacists. Interestingly, as noted at the beginning of this paper, many of these statements already resemble a CPD framework. Awareness of the concept of CPD is growing, and the subject is being discussed in a number of sectors. Several organizations have published resolutions or statements on the subject; a selection of these is listed in *Appendix 1*.

In a resolution adopted at its 2003 annual meeting, and through statements made by its officers, NABP has made it clear that addressing the issue of continuing

professional development of pharmacists is a priority for the association, and that it will collaborate with virtually every organization in pharmacy in this project.[52,53]

Summary and conclusions

The pharmacy profession in several countries has already transitioned to a CPD framework for pharmacist lifelong learning and professional development; in other countries it is being actively considered. The same is true for other healthcare professions. The drivers for change are the same everywhere. While the finer details of structure and implementation may differ, the fundamental principles and intended outcomes of continuing professional development do not. A perfect solution – simple, effective, inexpensive and acceptable to all – does not exist, and is unlikely ever to be realized, but it would appear evident that a *quality improvement* of the existing system for continuing education for pharmacists can be achieved, and needs to be purposefully explored in a timely manner. Engagement in CPD does not guarantee competence. It is likely that, apart from competence assessment, no system can. A combination of written and observational techniques could assess competence, but at what cost? Arguably, even such techniques might be inadequate to accurately assess all competencies required of individual pharmacists. Demonstration of the effective use, by a practitioner, of a CPD model for lifelong learning appears to offer a practical way to provide the necessary public assurance of fitness for practice.

While CPD, as described in this paper, appears logical and straightforward as a concept, if adopted, implementation would certainly create challenges as well as opportunities. A system that includes some flexibility is likely to achieve better "buy in" by pharmacists. The full implications of widespread adoption of a CPD model needs further discussion. What is clear, however, is that a different approach would be required by both CE providers and practitioners.

Samuel Johnson (1709–1784) said, *"Nothing will ever be attempted, if all possible objections must first be overcome."* This paper will have served a useful purpose if it succeeds in stimulating further discussion - through to a meaningful conclusion and appropriate action - by those charged with leadership of the profession.

Glossary

Portfolio: A purposeful collection of work that illustrates efforts, progress and achievement in one or more areas over time. An electronic portfolio uses digital technologies, allowing the portfolio developer to collect and organize portfolio artifacts in many media types (audio, video, graphics, text). A standards-based portfolio uses a database or hypertext links to clearly show the relationship between standards or goals, artifacts, and reflections. The learner's reflections are the rationale that specific artifacts are evidence of achieving the stated standards or goals. An electronic portfolio is a reflective tool that demonstrates growth over time.

Table 1: Postgraduate Professional Development and Credentialing Activities*

(as of March 2004)

Organization	ACPE-Accredited Continuing Education	ACPE-Accredited Certificate Programs	Practitioner Certification	Program Accreditation	Traineeships/ Mini-sabbaticals	Other
AACP	X (1)					
ACA	X	X				
ACCP	X				X	X (2,3,4)
ACPE				X		X (5)
AMCP	X	X (6)				X (7)
APhA	X	X				
ASCP	X	X			X (8)	X (9)
ASHP	X	X		X	X	X (4)
BPS			X			
CCGP			X			
NABP	X					X (10)
NISPC (11)			X			
PTCB			X			

Abbreviations:

AACP	*American Association of Colleges of Pharmacy*
ACA	*American College of Apothecaries*
ACCP	*American College of Clinical Pharmacy*
ACPE	*Accreditation Council for Pharmacy Education*
AMCP	*Academy of Managed Care Pharmacy*
APhA	*American Pharmacists Association*
ASCP	*American Society of Consultant Pharmacists*
ASHP	*American Society of Health-System Pharmacists*
BPS	*Board of Pharmaceutical Specialties*
CCGP	*Commission for Certification in Geriatric Pharmacy*
NISPC	*The National Institute for Standards in Pharmacist Credentialing*
PTCB	*Pharmacy Technician Certification Board*

Notes:

1. *In conjunction with Rutgers University as the ACPE-accredited provider.*
2. *Voluntary "fellowship review program" for members providing research training.*
3. *PSAP program provides recertification mechanism for board certified pharmacotherapists*
4. *Joint ACCP/ASHP proposal on oncology recertification is pending approval by BPS.*
5. *Accredits providers of continuing pharmacy education*
6. *AMCP Management Development Program (an advanced management course for pharmacists)*
7. *Pharmacy's Framework for Drug Therapy Management in the 21st Century*
8. *Via ASCP's Foundation*
9. *ASCP provides a recertification mechanism for board certified geriatric pharmacists for CCGP. ASCP also provides the Geriatric Pharmacy Curriculum Guide.*
10. *Licensure*
11. ***Not CCP member as of March 2004***

* *Data supplied by members of CCP*

Appendix 1: Recent statements and resolutions regarding CPD

Accreditation Council for Pharmacy Education[79]

Statement on Continuing Professional Development (CPD)

In order to safely and effectively help patients make the best use of their medications - the basis of "pharmaceutical care" - pharmacists need to maintain their professional competence throughout their careers. Colleges and schools of pharmacy prepare their graduates to have the necessary competencies to enter practice, but no professional program can provide or develop all the knowledge, skills, attitudes and abilities that a pharmacist will ever need in practice. These can only be gained through the combination of an appropriate educational foundation (pre-service), in-service training, hands-on work experience, and "lifelong learning".

In line with its mission *to assure excellence in education for the profession of pharmacy* and in accordance with one of the objectives of its Strategic Plan – *to initiate a collaborative reevaluation of the existing CE model in pharmacy* - the Accreditation Council for Pharmacy Education (ACPE) has studied the concepts of Continuing Professional Development, as outlined in the Statement on Continuing Professional Development of the International Pharmaceutical Federation.

ACPE has noted the findings and conclusions relating to the effectiveness of continuing education published in the professional literature, as well as the recommendations of several notable reports, primarily some of the recent reports of the Institute of Medicine. ACPE has also noted the experiences and findings of other countries and professions regarding CPD.

Based on the above, ACPE considers that the concept of CPD is built on sound educational principles, and that CPD can further engage pharmacists as adult learners, and enhance the overall effectiveness and outcomes of continuing education. ACPE believes that the CPD model provides the opportunity for *quality improvement* of the current system of continuing education, building on the existing strong foundation of quality-assured, accredited continuing education for pharmacists.

ACPE acknowledges that, while CPD appears to be a relatively simple concept, implementation of CPD is likely to pose a number of challenges – for pharmacist practitioners, pre-service educators, providers of continuing education and regulatory bodies. Further discussion on the implications of national adoption of the CPD model is required.

ACPE is, however, firmly committed to participating in these discussions to further explore CPD and its implications for pharmacy in the United States. Furthermore, ACPE is committed to responding to the needs of the profession, and the public as a whole, with regard to any changes or improvements that may be required in its policies,

procedures or standards to ensure that, as an organization, it continues to assure excellence in education for the profession of pharmacy.

Adopted by the Accreditation Council for Pharmacy Education, Chicago, Illinois; September 2003.

The Joint Commission of Pharmacy Practitioners (JCPP) [64]

"The afternoon session was dedicated to an appraisal of issues related to continuing professional development (CPD) with a differentiation from continuing education and continuing competency. An international perspective was provided, as was the status of CPD in other professions, including member organizations of the Federation of Associations of Regulatory Boards. **The group concluded this discussion with a strong commitment to develop and maintain standards and programs to assure the public, governmental agencies, major employers and other influential organizations that pharmacists would maintain appropriate competencies throughout their careers**."

The National Association of Boards of Pharmacy [44]

NABP RESOLUTION NO. 99-7-03
TITLE: Continuing Pharmacy Practice Competency

Whereas, colleges, faculties, and schools of pharmacy educate and boards and colleges of pharmacy license pharmacists who are qualified to provide "patient centered pharmacy care" to the public; and

Whereas, the respect given to and enjoyed by pharmacists depends on pharmacists maintaining their knowledge and contemporary practice protocols for various patient needs;

THEREFORE BE IT RESOLVED that NABP endorse and encourage structured programs of continuing professional development; and

BE IT FURTHER RESOLVED that NABP encourage colleges, faculties, and schools of pharmacy and boards and colleges of pharmacy to collaborate on providing seminars to further pharmacist continuing professional development; and

BE IT FURTHER RESOLVED that the boards of pharmacy encourage, endorse, and support the efforts of NABP, the American Council on Pharmaceutical Education (ACPE), and the American Association of Colleges of Pharmacy (AACP) to instill and perpetuate the concepts of continuing professional development in students and pharmacists.

The American Association of Colleges of Pharmacy [63]

WHEREAS, continued pharmacist learning is of the utmost importance to the profession;

WHEREAS, Continuous Professional Development (CPD) is a concept consistent with adult learning principles and supportive of optimal learning; and

WHEREAS, the Continuing Professional Development cycle requires pharmacists to analyze their learning needs, plan activities to address their needs, reflect on their learning and evaluate the successfulness of learning; and

WHEREAS, Continuing Professional Development provides an opportunity for all pharmacy continuing education providers to take an active role with individual learners in progressing through the CPD cycle and achieving their learning outcomes; and

WHEREAS, ACPE has been investigating the concept, as have several additional pharmacy organizations; and

WHEREAS, the Colleges/Schools represented by AACP will be important participants in the support of pharmacists engaged in CPD; and

WHEREAS, as leaders in education it is important for AACP to have a position on the issue;

BE IT RESOLVED that the American Association of Colleges of Pharmacy (AACP) supports the concept of Continuous Professional Development.

BE IT FURTHER RESOLVED that AACP work actively with ACPE and other pharmacy organizations in exploring methods for facilitating its use within pharmacy.

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