

Chapter 10. Training and Education

INTRODUCTION

This chapter focuses on workplace-based education and training of pharmacists (including pharmacy students and intern pharmacists) and can assist in self-directed learning.

Competence is the skills, attitudes and other attributes attained by an individual based on knowledge and experience, which together are considered sufficient to enable the individual to practice as a pharmacist.¹

A commitment to continuing professional development (CPD) is necessary to ensure that a pharmacist's competence is maintained throughout their career during which new and challenging professional responsibilities will be encountered.² Formal and workplace-based training and education should form part of an individual's CPD plan and activities.

OBJECTIVE AND DEFINITION

Objective

Clinical education pharmacists offer education and training for pharmacists that is structured, personalised and documented, which aims to develop the practice of clinical pharmacy relevant to the learner, in order to provide safe, efficient and effective clinical pharmacy services.

Pharmacists involved in the educating and training of pharmacy support staff, other health professionals and the community aim to improve the quality use of medicines within the hospital and in the community.

Definition

As part of their role, clinical pharmacists may be involved in educating and training pharmacy students, intern pharmacists, other pharmacists, other health professionals and pharmacy technicians.

EXTENT AND OPERATION

Quality education and training is delivered by experienced pharmacists and clinical education pharmacists or other educators and is tailored to the experience and practice of the learner.¹⁻⁴ Clinical education pharmacists must be available to meet the needs of students, interns and pharmacists new to the workplace, as well as support experienced pharmacists with their clinical, educational and mentoring responsibilities.

Designated clinical education pharmacist positions are required to support transition to practice programs, orientation programs, preceptor activities as well as professional development programs; pharmacists may deliver some of these activities as part of their job description. Recommended ratios to use as a guide are one clinical education pharmacist for every 10 intern pharmacists or every 50 pharmacists.

Education and training for the provision of clinical pharmacy services should be designed to follow adult learning principles where the learning is within the learner's control and the clinical education pharmacist is available for support and guidance. Training should be structured, with learning goals and outcomes documented and students allowed to reflect on their learning.⁵

Principles for teaching adult learners include:⁵

- establishing an effective learning climate, where learners feel safe and comfortable expressing themselves
- involving learners to plan relevant methods and curricular content of education
- involving learners to diagnose their learning needs
- encouraging learners to formulate their objectives
- encouraging learners to identify resources and devise strategies for using the resources to achieve their objectives
- supporting learners carry out their learning plans
- involving learners to evaluate their learning—this can develop their skills of critical reflection.

Pharmacists are also involved in teaching the public about medicines to improve the use of medicines in the community. See *Chapter 5: Providing medicines information*.

Education and training for pharmacists should encompass all aspects of daily practice and include: orientation to the workplace, management of daily workload, review of skills (using an assessment tool based on competency standards) or performance review and an ongoing program of CPD relevant to scope of practice.

Education and training should be self-directed and follow adult learning principles—the learner should decide what they need to learn and how they are going to learn it and identify changes to their practice. The clinical education pharmacist should be available for support and guidance.

The model for clinical pharmacy education and training developed by a workplace will depend on its size and the extent of operation of the clinical pharmacy service.

All clinical pharmacy services should have dedicated clinical education resources and a mentoring team of pharmacists who have experience in particular clinical areas. Departments should have pharmacist(s) for the management, orientation, review and education of staff. Some departments may use academics, doctors, nurses and other health professionals for pharmacist education. Departments should have a documented education, assessment and review plan for all their pharmacists and this should be supported by pharmacy and hospital managers.

Wherever possible, pharmacists involved in an educator role should have formal training in clinical supervision.

POLICY AND PROCEDURE

Training and Educating Clinical Pharmacists

Workplace Orientation

Employees commencing practice in an unfamiliar organisation, department, unit or ward should receive a thorough orientation to that workplace. An orientation manual of policies and procedures should be available that:

- clearly defines the expectations, service priorities, extent and quality of the clinical pharmacy service
- includes these standards

- describes the duties and responsibilities of the employee in the role
- is regularly updated to reflect changes in clinical practice within and outside the workplace
- provides a framework for the clinical pharmacy procedures of the workplace.

Orientation also includes an introduction to all pharmacy and relevant medical, nursing, clerical and allied health staff; orientation to patient care areas, medication charts, histories, the laboratory system and other aspects of patient care activities.

Clinical Skills Development

Before planning a skills development program for a pharmacist, a baseline measure of clinical skills based on competency standards should be determined either by self-assessment or through workplace review.

The shpaclinCAT is a competency assessment tool for self-assessment and workplace assessment specific for the Australian setting, and is recommended for use.³

The *National Competency Standards Framework for Pharmacists in Australia* provide a competency tool for the self-assessment and workplace assessment of pharmacists in a general role.¹

The *Advanced Pharmacy Practice Framework for Australia* provides a generic framework that can be customised to show specific expert knowledge and skills required.⁶

Selection of appropriate sections from these documents will guide the development of pharmacists' competencies in identified areas of need.

Support by a clinical education pharmacist or an experienced pharmacist throughout training is recommended. The level and duration of supervision will be dependent on the baseline skills and experience of the pharmacist undergoing training.

A structured training and assessment plan for each pharmacist should:⁵

- define learning goals based on the individual's learning needs
- provide basic knowledge and skills needed including: information relevant to the specific area of clinical practice (e.g. an up-to-date ward manual), daily clinical pharmacy service activities, information regarding the types of patients and common procedures undertaken on the particular ward or service area, treatment protocols, related clinical information and relevant references
- include an observation of the pharmacist during encounters with patients, medical, nursing and other staff during clinical pharmacy service activities with debriefing and feedback
- give the learner opportunity to reflect on their learning
- allow for planning for the next clinical experience.

The shpaclinCAT assessment tool provides a useful template for developing a training and assessment plan.

Mentoring Pharmacists Providing Clinical Services

A mentoring system where an experienced pharmacist supervises and provides encouragement, support and feedback is a useful program to improve a pharmacist's skills. An effective mentoring program requires the mentor and pharmacist to meet regularly. This may involve regular supervised clinical practice, discussions involving medicine issues, clinical problems encountered with individual patients and education sessions at staff meetings.

The experienced pharmacist may also support a pharmacist in their journey towards advanced practice.⁶⁻⁸

Evaluating Clinical Skills and Assessing Performance

Most aspects of professional practice such as communication, teamwork and some technical skills can only be assessed by qualitative methods involving observation of the pharmacist in the workplace.

Reviewing and assessing performance is an essential component of both personal CPD and the improvement of clinical pharmacy services. Assessors can provide feedback and support based on directly observing the pharmacist completing agreed competencies. This provides a platform for identifying professional development requirements and planning career progression.

A pharmacist's ability to perform core clinical pharmacy activities can be assessed using a competency assessment framework, such as shpaclinCAT, which can be used for self-assessment as well as workplace review.

Performance assessment also includes the extent of pharmacist involvement in education, departmental activities and research, and incorporates feedback from key stakeholders. It may require direct observation and discussion with the pharmacist and other staff, including nurse unit managers, medical and pharmacy staff.

Regular review and feedback with individual pharmacists will identify areas that need improvement for the pharmacist and the pharmacy service and provides an opportunity to give positive feedback to individuals.

Clinical Education and Training Pharmacists

Pharmacists providing clinical services should play a role in educating and training pharmacy students, pharmacy interns, pharmacists, postgraduate pharmacists, pharmacy support staff, other health professionals and the public.

A key element of an individual pharmacist's CPD also includes presenting at continuing education sessions, presenting clinical cases, presenting at professional conferences or publishing in peer-reviewed journals and coordinating other educational activities.

Pharmacy Students

A pharmacist's involvement in training pharmacy students should be in conjunction with the student's academic institution. The training should reflect the required objectives of clinical placements, as well as the student's previous experiences.

Education and training of pharmacy students involves modelling clinical skills and incorporates all aspects of these standards. It may also include teaching about the use of medicines in the clinical context. Assessing the student's performance and providing feedback to the student, as well as providing formal feedback to the university regarding the student's performance in this area of pharmacy practice is also required.

Intern Pharmacists

Experiential clinical learning is an essential component of the intern training program. Modelling clinical pharmacy skills assists the intern pharmacist to assimilate knowledge gained as an undergraduate with the practical realities of caring for patients. The focus and intensity of training can be modified as the intern's knowledge and skills improve.

Practising Pharmacists

Pharmacists participating in the ongoing education of pharmacists within their workplace can include training in knowledge and skills in a specialty area. It also enables continuity of service provision when the 'usual' pharmacist is absent.

Pharmacists Undertaking Postgraduate Studies

Many postgraduate clinical pharmacy programs incorporate a component of clinical experiential training as well as didactic teaching. Pharmacists undertaking postgraduate studies should have access to pharmacists or other health professionals with the necessary clinical expertise, skill and experience to supervise and mentor. Postgraduate students should be taught at a significantly higher standard than undergraduates and be required to demonstrate the skills required to provide clinical services at a level more advanced than that expected of a general level pharmacist.

Pharmacy Assistants and Technicians

Pharmacy assistants and technicians involved in the supply of medicines should either have obtained or be undergoing training in HLT13412 - Certificate III in Hospital - Health Services Pharmacy Support.

Pharmacy assistants and technicians supporting clinical pharmacy services should either have obtained or be undergoing training in HLT40512 – Certificate IV in Hospital–Health Services Pharmacy Support.

Pharmacists, in preceptor or supervisor roles, will be involved in education and training of pharmacy assistants and technicians in the practical aspects of their support roles and didactic continuing education activities.

Other Health Professionals

Pharmacists are often called on to provide formal education to other health professionals and students. This is an important aspect of the pharmacist's role and can be instrumental in improving the quality use of medicines as well as the profile of pharmacists.

Pharmacists also provide informal education to other health professionals through their active participation in clinical decision making on ward rounds and in interdisciplinary team meetings.

Patients

Pharmacists will often be requested to provide medicines education to the public. This may involve educating individual patients on their medicines, or addressing groups of patients with particular diagnoses or in specific clinical situations. Pharmacists should be involved in the design and planning of patient education sessions about the use of medicines, such as smoking cessation, cardiac rehabilitation, disease management and other public health education programs.

Table 10.1 lists the competencies and accreditation frameworks that are relevant to this chapter.

References

1. Australian Pharmacy Profession Consultative Forum. National competency standards framework for pharmacists in Australia. Deakin: Pharmaceutical Society of Australia; 2010.
2. International Pharmaceutical Federation. FIP statement of professional standards: continuing professional development. The Hague: The Federation; 2002.
3. Society of Hospital Pharmacists of Australia. Clinical competency assessment tool (shpaclinCAT version 2). In: SHPA standards of practice for clinical pharmacy services. J Pharm Pract Res 2013; 43 (suppl): S50-S67.

4. Australian Commission on Safety and Quality in Health Care. Review by peers: a guide for professional, clinical and administrative processes. Sydney: The Commission; 2010.
5. Kaufman DM, Cantillon P, Hutchinson L, Wood DF. ABC of learning and teaching in medicine: applying education theory in practice. BMJ 2003; 326: 213-16.
6. Advanced Pharmacy Practice Framework Steering Committee. An advanced pharmacy practice framework for Australia. Deakin: Pharmaceutical Society of Australia; 2012.
7. O'Leary KM, Kirsa SW, Dowling HV, Allinson YM, Coombes I. A professional development framework for pharmacists [editorial]. J Pharm Pract Res 2012; 42: 259-61.
8. Coombes I, Kirsa SW, Dowling HV, Galbraith K, Duggan C, Bates I. Advancing pharmacy practice in Australia: the importance of national and global partnerships [editorial]. J Pharm Pract Res 2012; 42: 261-3.
9. Australian Commission on Safety and Quality in Health Care. National safety and quality health service standards. Sydney: The Commission; 2011.

Table 10.1 Competencies and accreditation frameworks

Relevant national competencies and accreditation standards and shpaclinCAT competencies

shpaclinCAT³

Competency unit 2.1 Problem solving

2.1.1 Recognition of limits of personal knowledge

Competency unit 2.8 Continuing professional development

2.8.1 Continuing professional development

National competency standards framework for pharmacists¹

Standard 2.7 Supervise personnel

- 1 Accept the supervisory role
- 2 Delegate tasks
- 4 Support improved performance of supervised personnel

Standard 3.1 Provide leadership and organisational planning

- 1 Provide leadership

Standard 3.2 Manage and develop personnel

- 2 Manage performance
- 3 Develop professional capabilities

Standard 8.3 Formally educate and train students and healthcare colleagues

- 1 Understand educational theory and principles
- 2 Facilitate learning
- 3 Assess learning outcomes

National safety and quality health service standards⁹

Standard 1 Governance for safety and quality in health service organisations: performance and skills management

- 1.10 Implement a system to determine and review the scope of practice of the clinical workforce
- 1.11 Clinical workforce performance development
- 1.12 Ongoing safety and quality education and training