

# Chapter 11: Participating in Research

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## INTRODUCTION

Pharmacists are in a unique position to identify opportunities for research in the optimal use of medicines and the provision of clinical pharmacy services. Research in clinical practice is essential for initiating changes in professional service delivery and promoting advancement of the pharmacy profession with the aim to improve health outcomes of patients.<sup>1</sup>

Research activities include involvement in the conception and design of the research, analysis and interpretation of data and presentation and publication of findings. It is essential that pharmacists identify a strategic focus for their involvement in research and develop the necessary skills to have a meaningful role.

Pharmacist involvement in clinical drug trials, drug use evaluation and quality assurance audits is not considered in this chapter. See *SHPA Standards of Practice for Pharmacy Investigational Drugs Services*, *SHPA Standards of Practice for Drug Use Evaluation in Australian Hospitals* and *SHPA Standards of Practice for Medication Safety*.<sup>2-4</sup>

## OBJECTIVE AND DEFINITION

### Objective

Research identifies the evidence that supports safe and effective medicines use for improved patient outcomes. It also has a role in advancing pharmacy practice.<sup>1</sup>

### Definition

Participating in research includes seeking opportunities for meaningful involvement in the design, conduct and analysis of research into medicines, medicines use, health and professional practice. It also encompasses mentoring and supervising other researchers (including students undertaking research).

## EXTENT AND OPERATION

Involvement in research should be a core activity of pharmacy practice. Participation in research may not be possible in all situations or practices; however pharmacists should attempt to contribute to the knowledge of evidence-based practice. It is important that involvement in research does not automatically infer that the pharmacist is required to perform all the activities, such as data collection and analysis.

Research activities should be approved by the organisational ethics committee as required.

Pharmacists' involvement in research should focus on their area of expertise, such as therapeutics, pharmacy practice, health service and quality improvement. The nature and extent of involvement will depend on the practice setting and the specific skills and experience of the pharmacist. Even small departments can undertake research.

In some advanced practice settings, pharmacy services may develop a formal research group with a strategic focus. Formal research links should be explored with academic institutions and other health professionals or other areas within the organisation.

Pharmacists can contribute to research in a range of ways. The extent and nature can vary, examples include primary investigator on prospective clinical trials, assistance in literature reviews and practical local support for research programs such as patient recruitment and data collection. Pharmacists can also be directly involved by analysing and interpreting data and determining the practical implications, and the significance of the findings and options for incorporation into practice.

## POLICY AND PROCEDURE

Successful research requires:

- support and acknowledgement of research as a core pharmacy activity
- appropriate resources
- focus on an area where pharmacists have expertise
- collaboration with other health professionals and academics
- relevance to current practice
- alignment with local practice experience and expertise
- credible researchers
- adherence to principles and procedures outlined by key authoritative bodies<sup>2,3,5,6</sup>
- sharing of results.

In planning and undertaking research activities ensure that the objectives are achievable, relevant and original. Ensure the activity is worthy of the required resources, data used are accurate, reliable and verifiable and that the method is appropriate and meets relevant ethics committee criteria.

Collaborate with other pharmacists, pharmacy staff and other health professionals in the identification, conception and design of research activities and utilise the expertise and resources of other health professionals whenever possible. Collaborative research with schools of pharmacy at undergraduate and postgraduate level provides opportunities to share expertise and resources. Universities can offer the pharmacist undertaking research access to technical expertise and facilities and assistance from students or academics with different specialties than those which may be encountered in their work.

All patient information must be treated in strict confidence. Identifiable patient data must not be revealed to anyone not directly involved in the research project or the clinical care of that patient.<sup>7</sup> An exception to this is when patients have provided written consent for their records to be subject to source document verification.

Research findings should be presented and published in interdisciplinary forums, pharmacy conferences and peer-reviewed journals.

## RESOURCES

The level of research contribution and resources available will depend on the organisation and pharmacy services. Pharmacists should be supported so they can dedicate a proportion of their time to research. A proportion of pharmacy departmental resources should also be made available to assist in the research.

Funding to support research can be obtained from direct operational sources or through submission to professional, government or philanthropic organisations. Individual pharmacists will need the support of their department and colleagues in applying for external funding.

Consider using support staff in some aspects of the research activity, e.g. data collection. Potential contributors include pharmacy assistants and technicians, pharmacy students, vocational research students and pharmacy interns. Collaboration with other colleagues can result in the sharing of the workload. Nursing, health information and medical staff, especially those completing postgraduate studies, are often keen to contribute.

Table 11.1 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. Society of Hospital Pharmacists of Australia. Committee of Speciality Practice in Investigational Drugs. SHPA standards of practice for pharmacy investigational drugs services. *J Pharm Pract Res* 2006; 36: 46-53.
3. Society of Hospital Pharmacists of Australia. Committee of Speciality Practice in Drug Use Evaluation. SHPA standards of practice for drug use evaluation in Australian hospitals. *J Pharm Pract Res* 2004; 34: 220-3.
4. Society of Hospital Pharmacists of Australia. Committee of Speciality Practice in Medication Safety. SHPA standards of practice for medication safety. *J Pharm Pract Res* 2012; 42: 300-4.
5. World Medical Association. Declaration of Helsinki: ethical principles for medical research involving human subjects. Fernay-Voltaire: The Association; 2002.
6. Therapeutic Goods Administration. Note for guidance on good clinical research practice (CPMP/ICH/135/95). Canberra: The Administration; 2000.
7. National Health and Medical Research Council. When does quality assurance in health care require independent ethical review? Canberra: The Council; 2003.
8. 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.
9. Australian Commission on Safety and Quality in Health Care. National safety and quality health service standards. Sydney: The Commission; 2012.

<b>Table 11.1 Competencies and accreditation frameworks</b>
<b>Relevant national competencies and accreditation standards and shpaclinCAT competencies</b>
<b>shpaclinCAT<sup>8</sup></b>
N/A
<b>National competency standards framework for pharmacists<sup>1</sup></b>
<b>Standard 8.2</b> Engage in health, medicines or pharmacy practice research
1 Understand research principles and concepts
2 Conduct research
3 Disseminate and apply findings
<b>National safety and quality health service standards<sup>9</sup></b>
<b>Standard 4</b> Medication safety: governance and systems for medication safety
4.5 Undertake quality improvement activities to enhance the safety of medicines use