



Pharmacy careers guide

2015

While most of the information contained in the Guide has been derived from relevant websites, wherever possible, the information has been collated with input by and collaboration with individuals from the organisations and companies to which they pertain. We hope that you find the information useful and we wish you every success in your pharmacy career.

Joanne & Amanda
October 2014

The PSA recognises that, in an ever-changing environment of employment opportunities, the information contained in this Guide is time sensitive. The Pharmacy careers guide is not all inclusive and may not capture all opportunities available to pharmacists, however there are plans to regularly update the document.

Acknowledgments

The development of this career guide is to help pharmacists, in the early stages of their careers, consider their next career move and navigate pathways to achieve their goals.

It was set as a project for an Industry Major and accomplished by two University of Sydney pharmacy students completing their placement with the NSW Branch of the Pharmaceutical Society of Australia. The project was supervised by the NSW Member services and CPD programs managers.

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This Guide is available on the PSA website at www.psa.org.au

Note: if organisations would like to be included in this publication, please contact the NSW branch at nsw.branch@psa.org.au

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Introduction to the pharmacy profession

Pharmacy is the study of the development of drugs used for therapy and their medicinal effects on the human body. Pharmacists are medicines experts who apply clinical knowledge to practical situations and are essential to the healthcare system.

Pharmacists are part of a multidisciplinary team of medical staff and allied health professionals that seek to provide optimal care for patients and carers. Pharmacy is a rewarding career for those interested in the health and wellbeing of people in primary, secondary and tertiary care settings. Pharmacy offers diverse career options in traditional e.g. community and hospital settings, and non-traditional settings.

Pharmacists are registered with the Australian Health Practitioner Regulation Agency (AHPRA) and registration must be current for pharmacists to work in clinical settings. Registered pharmacists must comply with the *National Competency Standards Framework for Pharmacists in Australia (NCSFPA) 2010*.

The Competency Standards describe the skills, attitudes and attributes which enable the individual to practise as a pharmacist. The domains or areas of professional endeavour or responsibility covered by the Competency Standards are:

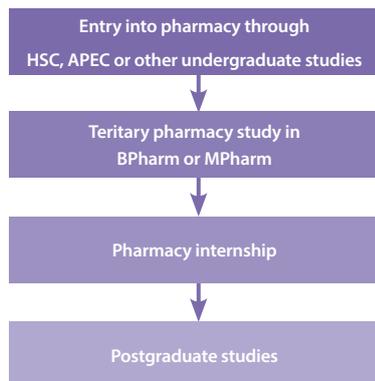
- Professional and ethical practice
- Communication, collaboration and self-management
- Leadership and management
- Review and supply prescribed medicines
- Prepare pharmaceutical products
- Deliver primary and preventative healthcare
- Promote and contribute to optimal use of medicines
- Critical analysis, research and education



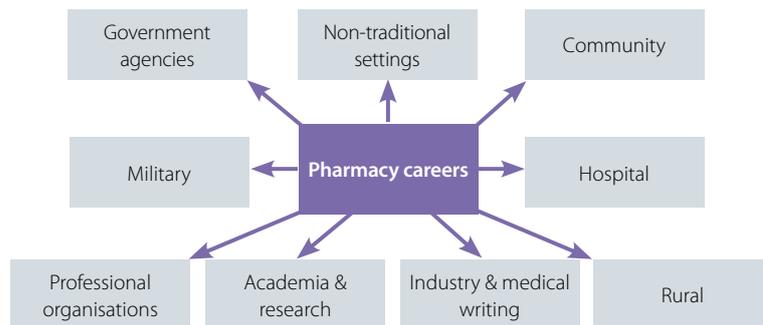
General qualities of pharmacists

- High attention to detail
- Organised and has good management skills
- Strong verbal and written communication skills
- Has exceptional problem solving skills
- Ability to make logical decisions and negotiate
- Ability to work independently and in a team environment
- Ability to build rapport with other healthcare professionals (HCPs) and consumers

Education pathway for pharmacists



Pharmacy career areas



Entry into pharmacy

In NSW, a number of universities offer pharmacy degrees at bachelor and/or master levels. Both pharmacy degrees develop students' insights into the development of drugs, how medications affect the human body and how to communicate effectively to consumers and other health professionals.

Admission requirements for universities differ and may vary from year to year. After completion of the pharmacy course, students are qualified to undertake an internship involving workplace and further training and assessment, to become a registered pharmacist.

Admission into Bachelor of Pharmacy (BPharm)

Note: Glossary of terms and abbreviations is available on page 50.

UNIVERSITY	COURSE DURATION	ADMISSION REQUIREMENTS
Charles Sturt University (CSU) Campus: Orange & Wagga Wagga	4 years full-time	<ul style="list-style-type: none"> • ATAR plus criteria (optional supplementary application) • Applicants are encouraged to fill in CSU's optional Supplementary Application Form available on their course website • May be invited to attend telephone interview • Assumed knowledge: Chemistry, English Standard and Mathematics • Recommended studies: Biology • International entrants require minimum overall IELTS score of 7.0 and individual band score of not less than 6.5 in each component (or equivalent) • STAT is not compulsory but will be considered along with other information
University of New England (UNE) Campus: Armidale	4 years full-time OR up to 10 years part-time	<ul style="list-style-type: none"> • 87.20 (2014 ATAR cut-off) • Assumed knowledge: Chemistry and Mathematics • Recommended studies: Biology • High level of English language proficiency. Applicants who need to provide evidence of English proficiency, require IELTS (Academic) overall score of at least 7.0 with minimum score of 7.0 in Speaking and Listening and 6.00 in Reading and Writing
University of Newcastle (UoN) Campus: Callaghan	4 years full-time	<ul style="list-style-type: none"> • 87.55 (2014 ATAR cut-off) • Assumed knowledge: Chemistry, English Advanced, Mathematics and Physics • Recommended studies: Chemistry, English Advanced, Mathematics and Physics
University of Sydney (USYD) Campus: Camperdown/Darlington	4 years full-time	<ul style="list-style-type: none"> • 90.05 (2014 ATAR cut-off) or strong GPA/WAM* • Applicants with a record of at least one year of full-time (or part-time equivalent) tertiary study require a strong WAM close to distinction or higher • Assumed knowledge: Chemistry and Mathematics • Recommended studies: Biology or Physics

Admission into Master of Pharmacy (MPharm)

UNIVERSITY	COURSE DURATION	ADMISSION REQUIREMENTS
University of Sydney (USYD) Campus: Camperdown/Darlington	2 years full-time	<ul style="list-style-type: none"> Completed a bachelor's degree Meet the minimum requirements for one of these: <ul style="list-style-type: none"> GPA: 5.5 approximate to credit level or 65% based on a pass mark of 50% at USYD (2014) OR GAMSAT: 55 with 50 in each section (2014) OR MCAT: 8 (2014) Meet a minimum of 54 credit points, or equivalent, in 7 prerequisite subjects (chemistry, pharmacology, physiology, human biology, biochemistry, calculus and statistics) at university level in the last 5 years. Students can enrol in the course with 12 credits of the above prerequisite subjects outstanding on the condition that they are completed by the end of the first year of the Master of Pharmacy program Proficiency in English is required for entry as per the University IELTS Standard; minimum result of 7.0 overall and a minimum 6.5 in each band
University of Technology (UTS) Campus: Ultimo	2 years full-time	<ul style="list-style-type: none"> Applicants must have completed a UTS recognised bachelor's degree, or an equivalent or higher qualification, or submitted other evidence of general and professional qualifications that demonstrates potential to undertake graduate studies All applicants need to have completed the following subjects at tertiary level (from a qualification completed in the last ten years): <ul style="list-style-type: none"> Two Chemistry subjects Two Pharmacology subjects One Biochemistry subject One Human Physiology subject One Mathematics/Statistics subject Applicants are assessed on their GPA (credit level in 2014) The English proficiency requirement for international students or local applicants with international qualifications is: <ul style="list-style-type: none"> Academic IELTS: 7.5 overall with a 7.0 in each subtest Shortlisted applicants are required to attend an interview

*Grade Point Average (GPA) is an internationally recognised numerical calculation used to find the average result of all grades achieved over a defined study period. GPA is equivalent to Weighted Average Mark (WAM) and may be used by various universities.

A pharmacy degree may be used as pre-requisite for postgraduate studies in health and health policy related courses such as in medicine, dentistry, bioethics, public health, health policy and law.

FOR MORE INFORMATION

Charles Sturt University
www.csu.edu.au

University of New England
my.une.edu.au

University of Newcastle
www.newcastle.edu.au

University of Sydney
www.sydney.edu.au

University of Technology
www.uts.edu.au



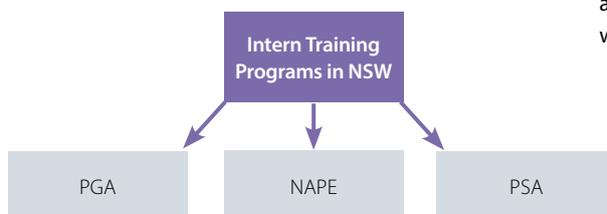
Pharmacy internship

Pharmacy graduates of an approved program of study need to undertake an internship under the supervision of a registered pharmacist preceptor to be eligible for registration as a pharmacist in Australia.

Pharmacy graduates apply for provisional registration and approval of supervised practice with AHPRA. Requirements for supervised practice are set by the Pharmacy Board of Australia (PBA). Interns must complete 1824 hours of supervised practice, undertake an accredited intern training program and successfully pass a written and oral examination to be eligible for full registration.

Intern Training Programs (ITP) must meet the accreditation standards set by the Australian Pharmacy Council (APC). The accreditation standards address the criteria for initial registration as set out in the NCSFPA. Training provided by ITP providers allows interns to apply their academic knowledge and skills in conjunction with practical experience to progress from student to competent pharmacist.

Pharmacist registration allows pharmacists to work anywhere in Australia, however State legislations vary and it is the responsibility of individual pharmacists to be aware of and to practice according to the legislation in the State they are working in.



Intern Training Programs (ITPs) offered in NSW

NATIONAL ALLIANCE FOR PHARMACY EDUCATION (NAPE)

The NAPE ITP is offered at the University of Sydney, Monash University, the University of South Australia and the University of Queensland. It provides opportunities to combine internship with credit points towards a postgraduate qualification. The teaching approach is through case-based learning to cover pharmacy practice issues and involves close ongoing interaction with other interns and practising pharmacists in discussion forums and face-to-face seminars.

Cost: This program qualifies for HECS-HELP as it is embedded in the **Graduate Certificate in Pharmacy Practice** which attracts Commonwealth Supported Places (CSPs).

PHARMACEUTICAL SOCIETY OF AUSTRALIA (PSA)

The PSA ITP offers 2 rounds of enrolments per year and the course can be fast tracked to be completed in 6 months. The course features online assessments, workplace based projects, and face to face workshops in Sydney and major regional centres of Australia. The course is run nationally and provides flexibility of access should the intern's situation change. At completion of the program, participants receive a Graduate Certificate in Applied Pharmacy Practice. Credits from this certificate can be used for further study qualifications such as the **Graduate Diploma of Applied Pharmacy Practice or the Diploma of Management**.

Cost: Single payment of \$1,950 (tax deductible, for 2014 year) OR pay monthly instalments over 6 months OR pay later with VET FEE-HELP.

PHARMACY GUILD OF AUSTRALIA (PGA)

The Guild ITP course features workshops and tutorials delivered by experienced pharmacy tutors and expert community pharmacy practitioners. Guild interns receive a face-to-face workplace visit, online interaction with intern pharmacists and tutors across Australia, and support for interns and preceptors.

The strong emphasis on community pharmacy practice in the Guild ITP includes coverage of primary healthcare, non-prescription medicines, treatment and referral of common minor illnesses, medication management, professional programs, the QCPP and more. The Guild ITP also offers free registration at key pharmacy congresses including APP, the National Convention and Exhibition and the Pharmacy Western Australia Forum.

The Guild ITP is offered in Queensland, New South Wales/Australian Capital Territory, Tasmania and Western Australia.

Cost: \$1,856 (for 2014 year)

FOR MORE INFORMATION

National Alliance for Pharmacy Education (NAPE)

www.nape.edu.au/interntainingprogram

Pharmaceutical Society of Australia (PSA)

www.psa.org.au/intern

Pharmacy Guild of Australia (PGA)

www.nsw-interntainingprogram.com

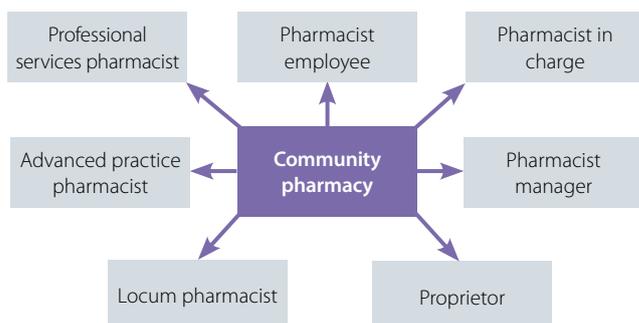


Community pharmacy

Community pharmacy practice is the most popular option for new graduates. There are various job opportunities within a community pharmacy that allow pharmacists to progress and gain new skills and specialities.

Community pharmacists have an important role in medication counselling and health education as they are often the first point of contact for patients and carers within the healthcare system. Pharmacists working in a community pharmacy setting must be registered with AHPRA. To maintain registration, pharmacists must hold the approved level of individual Professional Indemnity Insurance (PII), maintain regular practice and complete the minimum requirement of Continuing Professional Development (CPD) credits for each 12 month recording period.

Extended roles for pharmacists in the community setting include Residential Medication Management Review (RMMR) and Home Medication Review (HMR). Pharmacists accredited to conduct medication reviews must complete a qualifying course, obtain an additional 20 CPD credits within each CPD recording period and meet re-accreditation requirements.



Job positions for pharmacists in community pharmacy

The positions listed are not all inclusive. The information listed for each job position gives a general overview and duties and responsibilities vary from pharmacy to pharmacy.

PHARMACIST EMPLOYEE

Duties:

- Maintains and improves health by offering advice and information to customers and other healthcare professionals
- Checks dosage and ensures that medications are labelled correctly and safely administered
- Dispenses prescribed medications
- Counsels patients in regards to prescription and over the counter (OTC) medications
- Monitors adherence and provides clinical interventions where appropriate
- Prepares dose administration aids and delivers services to consumers' homes or residential care facilities

Recommended training:

- Ethics and Dispensing in Pharmacy Practice
- Graduate Diploma of Applied Pharmacy Practice
- Medication Management Review accreditation
- Graduate Certificate in Pharmacy Practice
- Graduate Certificate in Applied Pharmacy Practice

PHARMACIST IN CHARGE

Duties:

- Works with and reports to the pharmacist manager/proprietor for the day-to-day operations of the pharmacy
- Initiates store procedures to improve efficiency and customer experience
- Manages dispensary
- Trains and manages staff
- Provides primary healthcare advice and customer service

Recommended training:

- Certificate IV in Training and Assessment
- Diploma of Management
- Ethics and Dispensing in Pharmacy Practice
- Graduate Diploma of Applied Pharmacy Practice
- Graduate Certificate in Pharmacy Practice
- Graduate Certificate in Applied Pharmacy Practice

PHARMACIST MANAGER

Duties:

- Responsible to the proprietor for all aspects of the business
- Works closely with retail manager
- Manages rosters and wages
- Controls stock and stock orders
- Manages budgets
- Trains staff
- Performs all other duties of a community pharmacist as required

Recommended training:

- Certificate IV in Small Business Management
- Certificate IV in Training and Assessment
- Diploma of Management
- Ethics and Dispensing in Pharmacy Practice
- Graduate Diploma of Applied Pharmacy Practice
- Graduate Diploma in Public Health
- Graduate Certificate in Pharmacy Practice
- Graduate Certificate in Applied Pharmacy Practice

PROPRIETOR

Duties:

- Is responsible for the sustainability of the pharmacy as a business and sets the values and vision for the pharmacy
- Ensures the pharmacy is being managed in a way that meets legal and ethical requirements
- Works effectively and closely with pharmacists and retail manager
- Makes marketing decisions
- Recruits and trains staff

Recommended training:

- Certificate IV in Small Business Management
- Certificate IV in Training and Assessment
- Diploma of Management
- Ethics and Dispensing in Pharmacy Practice
- Graduate Diploma of Applied Pharmacy Practice
- Pharmacy Ownership Ready series seminars
- Graduate Certificate in Pharmacy Practice
- Graduate Certificate in Applied Pharmacy Practice

LOCUM PHARMACIST

Duties:

- Minimum duty levels of a pharmacist in charge; often required to also take on some managerial roles
- May require travelling, as many jobs are in rural or regional centres (A driver's licence would be an asset)
- Ability to self-manage finances and schedules is essential; having an Australian Business Number (ABN) is recommended

Recommended training:

- Certificate IV in Small Business Management
- Ethics and Dispensing in Pharmacy Practice
- Graduate Diploma of Applied Pharmacy Practice
- Graduate Certificate in Pharmacy Practice
- Graduate Certificate in Applied Pharmacy Practice

Job websites for locum pharmacists:

- Locum Company
www.locumco.com.au
- Pharmacy Locum
pharmlocum.com.au
- Ravens Recruitment
www.ravensrecruitment.com.au
- The Society of Hospital Pharmacists of Australia (SHPA)
jobs.shpa.org.au/Locum-pharmacists

PROFESSIONAL SERVICES PHARMACIST

Professional services pharmacists do not require additional qualifications but may undertake continuing professional education to expand their knowledge and skills to provide quality service for better patient health outcomes. It is recommended that pharmacists be familiar with the provision and remuneration of funded services such as MedsCheck and Diabetes MedsCheck through the Community Pharmacy Agreements (CPA) or other services that provide extra income streams or royalties for the pharmacy.

Examples of CPA funded services:

Pharmacy Practice Incentives (PPI)

- Dose Administration Aids (DAAs)
- Clinical interventions
- Primary healthcare screening and risk assessment and/or disease state management services
 - Cardiovascular disease
 - Diabetes
 - Health promotion
 - Mental health conditions
 - Respiratory
- Community services support
 - National Diabetes Services Scheme (NDSS) Access Point
 - Needle and Syringe Programs
 - Opioid Substitution Programs
 - Pharmacy Delivery Service
 - Return of Unwanted Medicines (RUM)

Medication Management Initiatives

- MedsCheck
- Diabetes MedsCheck

Examples of non-CPA funded services

- International normalised ratio (INR) testing
- Mobility and continence aids
- Sleep apnoea
- Weight management

Learning options

Continuing professional development (CPD) is important in acquiring and maintaining competence in professional service design and implementation. CPD is available from a range of health related bodies including the PSA, PGA, government bodies and support organisations. Access to educational material can be via print, online, webinars (live and recorded), workshops, lectures, seminars and conferences.

ADVANCED PRACTICE PHARMACIST

Pharmacy as a profession is maturing in its role in delivering healthcare and facilitating pharmacists to strive for excellence in all that they do. The credential of advanced practice pharmacist recognises those pharmacists whose practice is so significantly different from that achieved at initial registration that it warrants recognition by professional peers and the public of the expertise of the practitioner and the education, training, and experience from which that capability was derived.

Advanced practice is more about the impact of a pharmacist's practice and the associated contribution to healthcare that defines someone as an advanced practitioner.

Advanced practice may be recognised in any of the environments that pharmacists practise in; community pharmacy, hospital pharmacy, independent medicines management, education, research, policy and advocacy, regulatory affairs. Within these environments, a pharmacist may have areas of expert professional practice such as oncology pharmacy, leadership and management, diabetes, or medication management review (MMR).

Advanced practice is not defined by the professional service that a pharmacist delivers. It recognises the continuum of a pharmacist's career and a culture of life-long learning, so that those pharmacists who shape and drive the development of the profession through strategic development and leadership are recognised for the experts that they are. For example, whilst a medicines management pharmacist does have skills over and above that at initial registration, an advanced practitioner would be one that is considered an expert in this area by their peers- fellow MMR pharmacists... an individual that shapes the national agenda and policy debate for medicines management through engagement not just within the profession, but external to the profession.

The Australian Pharmacy Council has been endorsed by the organisations that represent the pharmacy profession in Australia, through the APPFSC as the independent entity being responsible and accountable for the credentialing of advance practitioners.

Recommended education courses

- Asthma Educators Course
- Certificate IV in Small Business Management
- Certificate IV in Training and Assessment
- Course in Conduct Immunisation Services within a Community Pharmacy Environment
- Diploma of Management
- Ethics and Dispensing in Pharmacy Practice
- Graduate Certificate in Applied Pharmacy Practice
- Graduate Certificate in Diabetes Education and Management
- Graduate Diploma in Public Health
- Graduate Diploma of Applied Pharmacy Practice
- Manage the delivery and administration of injections and immunisations
- Master of Clinical Pharmacy
- Medication Management Review
- Professional Compounding Chemists of Australia (PCCA) training courses
- Sleep apnoea and continuous positive airway pressure training
- Graduate Certificate in Pharmacy Practice
- Graduate Certificate in Applied Pharmacy Practice

For additional information on training courses please refer to Further study opportunities on page 40 of this Guide.

FOR MORE INFORMATION

5th Community Pharmacy Agreement (5CPA)
5cpa.com.au

Allied Health Professionals Australia (AHPA)
cdm.ahpa.com.au

Pharmacists in General Practice Clinics, *Australian Pharmacist*, January 2014 cover story, A future so bright you will have to wear shades, PSA

Pharmacy Board of Australia – Registration Standards

www.pharmacyboard.gov.au/Registration-Standards

Advanced Practice Pharmacists
Contact the Assistant Director of Credentialing at the Australian Pharmacy Council, Andrew Matthews
E: andrew.matthews@pharmacycouncil.org.au
P: 02 6262 9628

Hospital pharmacy

Pharmacists in hospitals actively contribute to the overview of medication use in the healthcare facility and collaborate with a team of professionals to ensure all prescribed medications are administered in a safe and effective manner.

Hospital pharmacists review medication charts, calculate dosages accurately for indicated diagnosis, monitor the progress of therapy and identify and manage adverse reactions and medication interactions. Pharmacists may also be required to provide education for doctors, nurses, patients and carers in the quality use of medicines. Benefits of working as a hospital pharmacist include opportunities to specialise in particular health areas and services, career progression and collaboration with other healthcare professionals, and competitive salary packages with benefit entitlements.

Public hospitals in NSW are classified into Groups according to the number of services provided and their level for referral. Pharmacists are classified into Grades according to their working hospital group and specific criteria of qualifications in clinical knowledge and experience.

Public hospital groups

GROUP 1	Gosford, John Hunter, St Vincent's (Darlinghurst), Royal North Shore, St George, Concord, Westmead, Royal Prince Alfred (including Balmain and Rachel Forster), Prince Henry, Prince of Wales Group (includes Sydney Children's Hospital)
GROUP 2	Newcastle Mater Misericordiae, Children's Hospital (Westmead), Liverpool, Nepean, Wollongong, Blacktown/Mt Druitt, Bankstown/Lidcombe, Macarthur Health Service
GROUP 3	Coffs Harbour, Wagga Wagga Base, Sutherland, Tamworth Base, Rozelle, Canterbury, Lismore, Ryde, Hornsby, Fairfield, Dubbo Base
GROUP 4	Manly, Auburn, Balmain, Sydney, Royal Newcastle, Albury, Wyong, Blue Mountains/Katoomba, Griffith Base, Orange, Bathurst Base, Shellharbour, Shoalhaven, Gladesville/Macquarie, Armidale, Tweed Heads/Murwillumbah
GROUP 5	Belmont, Cessnock, Maitland, Kurri Kurri, Muswellbrook, Neringah, Royal Ryde Rehabilitation, Royal South Sydney, War Memorial Waverly, Bowral, Cootamundra, Manning River Base, Kempsey, Wauchope, Young, Goulburn Base, Bulli, Casino, Kyogle, Grafton, Mono Vale, Cowra, Royal Hospital for Women, Parkes/Forbes, Lithgow, Condobolin, Inverell, Moree/Narrabri, Glen Innes

Pharmacist grades

GRADE 1	Registered as a practising pharmacist with the Pharmacy Board of Australia
GRADE 2	Pharmacist with at least 3 years of experience in hospital pharmacy and can demonstrate competency in the essential criteria required at this level
GRADE 3	Pharmacist is responsible to the Director of Pharmacy for the management and efficient performance of a specific unit or function of the hospital's pharmacy department.
GRADE 4	Director of Pharmacy Group 4 Hospitals and Deputy Director of Pharmacy Group 2 Hospitals
GRADE 5	Director of Pharmacy Group 3 Hospitals and Deputy Director of Pharmacy Group 1 Hospitals
GRADE 6	Director of Pharmacy Group 2 Hospitals
GRADE 7	Director of Pharmacy Group 1 Hospitals

Job positions for pharmacists in hospital pharmacy

The positions listed are not all inclusive and the information for the job positions listed is a guide only and varies from hospital to hospital.

Clinical pharmacist

- Is a term used for all pharmacists working in hospitals
- Reviews medication charts in hospital wards to ensure patients are administered the optimum dose of the most appropriate medications for their conditions
- Attempts to prevent potential side effects and interactions from polypharmacy
- Educates patients and other healthcare professionals to support the Quality Use of Medicine (QUM)

Clinical speciality areas

- Adult medicine
- Ambulatory care
- Antimicrobial stewardship*
- Cardiology
- Clinical trials*

- Community liaison*
- Compounding*
- Critical care*
- Drug use evaluation
- Education
- Emergency medicine*
- Endocrinology
- Haematology
- Hospice
- Immunology
- Internal medicine
- Geriatrics
- Medication safety/pharmacovigilance*
- Medicines distribution*
- Medicines information*
- Nephrology
- Neurology
- Nuclear/radiopharmacy*
- Nutrition support
- Oncology*
- Operating room

- Outpatient*
- Paediatric
- Palliative care*
- Poison information*
- Sports medicine
- Psychopharmacy/mental health*
- Transplant
- Veterinary

(**pharmacist specialties discussed below*)

Pharmacists working in specialty areas have acquired unique knowledge and skills specific to the specialty area. To become a specialist pharmacist in NSW, additional study and training partnered with at least 3 years of experience in the associated areas are required. There are opportunities to conduct research or complete further study at a registered training organisation or an accredited teaching institute.

Clinical specialties

ANTIMICROBIAL STEWARDSHIP

- Aims to reduce unnecessary use of antimicrobial agents that are likely to cause harm or have the potential to stimulate resistant bacteria
- Manages pharmacotherapy for patients with infectious diseases through evidence-based research
- Coordinates with infectious disease physicians to manage antimicrobial prescribing and ensures patients receive optimal treatment

CLINICAL TRIALS

- Monitors the safety profile of drugs undergoing clinical trials in the hospital
- Creates protocols for the management of adverse reactions
- Involved in the research of medicines on trial

COMMUNITY LIAISON

- Ensures continual healthcare by coordinating pharmaceutical care plans
- Provides a link between hospital and community care by facilitating communication with the patient, relevant pharmacies and members in the healthcare team
- Promotes QUM and the importance of medication management in minimising hospital admissions through community education programs

COMPOUNDING

- Manufactures extemporaneous products that may not be available from pharmaceutical companies
- Alters formulations and calculates appropriate dosages required by special populations groups
- Processes aseptic products and intravenous fluid solutions
- Makes skin preparation products
- Follows practice protocols in dispensing

CRITICAL CARE

- Provides advice on medication use based on medical history and interpretation of clinical evidence
- Focuses on optimising medication safety for patients susceptible to adverse effects or drug interactions
- Participates in a multidisciplinary team with other healthcare professionals to care for patients with a poor health profile; often in the intensive care unit or coronary care unit

DRUG USE EVALUATION

- Monitors prescribing patterns and adheres to medical guidelines to improve the quality use of medicines
- Evaluates drug use by considering the cost-effectiveness for the healthcare facility
- Analyses results and presents findings to the relevant board of directors at meetings and conferences

EDUCATION

- Provides education and training on pharmaceutical knowledge in the health facility
- Acts as a preceptor for intern pharmacists, supervisor for student placements and mentor for pharmacy technicians
- Creates teaching resources and organises education sessions for other healthcare professionals and patient groups
- Specialised positions are possible through further study and training for instance in asthma or diabetes disease state management

EMERGENCY MEDICINE

- Maintains continual pharmaceutical care for patients in the emergency department and those discharged back into the community
- Conducts clinical interventions by reviewing the documented medication history taken prior to admission and up until discharge from the hospital
- Identifies drug-related problems and provides clinical advice to the healthcare team to resolve issues
- Educates patients regarding new medication regimens and provides information to carers

MEDICATION SAFETY/ PHARMACOVIGILANCE

- Regulates the practice of protocols to reduce the risk of medication dispensing errors and prevent harm from adverse events due to poor medicine management
- Reports and reviews systems of monitoring by identifying risks in the workplace and initiating programs to improve safety of medicine use
- Educates other healthcare professionals on strategies to ensure safe use of medicines

MEDICINES DISTRIBUTION

- Procures stock and supplies medicines to other departments within the healthcare facility
- Maintains accurate stock records to ensure adequate amounts of medication are available for distribution when required, including after-hours
- Promotes QUM by requisition to avoid wastage of unused medicine
- Utilises systems to supply medications for multiple comorbidities such as daily dose and individual patient cards (dose administration aids)

MEDICINES INFORMATION

- Has high pharmaceutical knowledge and is up-to-date with research in novel therapeutics and off-label prescribing of medicines for indications that have not been approved by the Therapeutic Goods Administration (TGA)
- Researches and evaluates published medical literature to respond to enquiries from patients and other healthcare professionals
- Provides clinical advice on special populations and discusses the best options for therapeutic treatment with other members of the healthcare team

MENTAL HEALTH

- Has broad knowledge of psychiatric disorders and ensures pharmacotherapy is appropriate and safe for patients with mental illness
- Communicates medicine information through counselling to the patient and their carer
- May be involved in publication of material regarding the use of psychotropic medicines

NUCLEAR/RADIOPHARMACY

- Responsible for the quality control of chemicals used, including the disposal of radioactive waste materials
- Prepares radiopharmaceutical agents
- Maintains meticulous records

ONCOLOGY

- Reviews patient health history and status to design pharmaceutical care plans with specialty doctors
- Documents and communicates relevant literature evidence to recommend appropriate medications
- Checks relevant laboratory measurements and uses protocols for reference and dose adjustment calculations

OUTPATIENT

- Reviews medication for patients attending outpatient clinics and at discharge from the hospital
- Ensures treatment is appropriate and safe with adequate supply of medications
- Counsels patients and carers on the necessary medication management such as adherence, storage and disposal

PALLIATIVE CARE

- Focuses on improving the patient's Quality of Life (QoL) through the prevention and relief of suffering
- Cares for patients with a life-threatening illness or incurable malignancies such as cancer, HIV/AIDS and end-stage organ failure
- Collaborates with other healthcare professionals in a multidisciplinary team to create individualised healthcare plan involving use of analgesics and medicines for off-label indications

POISON INFORMATION

- Provides assessment of patients exposed to various toxins and advice on simple treatment in the home or referral to a Health Care Facility
- Advises other health professionals on the management and prognosis of poisonings.
- Answers simple drug information questions
- Utilises and contributes to the development of a range of drug and poisons information resources and management guidelines

For additional information on training courses please refer to Further study opportunities on page 40 of this Guide.

FURTHER STUDY

- Doctor of Philosophy
- Master of Clinical Epidemiology
- Master of Health Communication
- Master of Health Management
- Master of Philosophy
- Master of Public Health
- Master of Radiopharmaceutical Science

FOR MORE INFORMATION

Health Services Union (HSU)
www.hsu.asn.au

Justice & Forensic Mental Health Network
www.justicehealth.nsw.gov.au

NSW Health Government
www.health.nsw.gov.au

SHPA
www.shpa.org.au



Rural pharmacy

Australian pharmacies are categorised using the Pharmacy Access/Remoteness Index of Australia (PhARIA) categories ranging from category 1 (highly accessible) to category 6 (very remote).

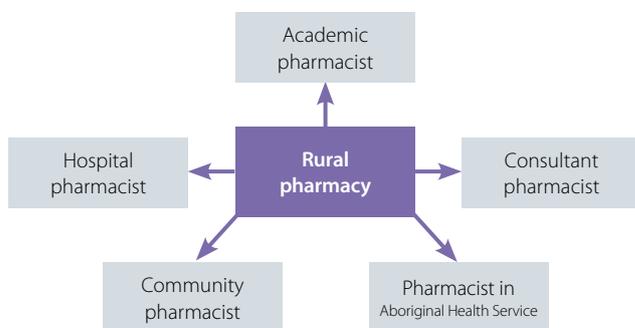
Remote refers to “places that are geographically, professionally and personally isolating with limited access to medical support and peers” (PhARIA Categories 5 and 6); while rural refers to places with “some restricted access to goods, services and social interaction” (PhARIA Categories 2–4).

Rural and remote communities of Australia lack access to healthcare and experience poorer health status than their regional and metropolitan

counterparts. Chronic illnesses are more prevalent and proper management is limited by the shortage of healthcare professionals. Working in a rural practice can broaden a pharmacist’s career prospects, allows them to gain awareness of cultural diversity and offers opportunities to work more collaboratively with healthcare teams.

Rural community pharmacies are usually larger in size, have lower fixed costs and experience less competition than metropolitan pharmacies. The scarcity of health services and the heavy burden of chronic illnesses, means that rural pharmacies also tend to provide a wider range of health related services such as disease screening and disease state management.

Pharmacists may also work in rural/regional hospitals, regional universities and Aboriginal Health Services (AHS). AHS is a State/Territory or community controlled organisation which offers primary healthcare services to Aboriginal and/or Torres Strait Islander people. AHS is responsible for providing medications to patients in a safe and appropriate manner while adhering to relevant legislation.



Positions for pharmacists in rural pharmacy

The positions listed are not all inclusive and the information for the job positions listed is a guide only and varies location to location.

Academic pharmacist

- Regional university
- University Centre for Rural Health
- University Department of Rural Health

Community pharmacist

Consultant pharmacist

- Area health services
- Medicare locals / Primary Health Networks (PHN)
- Medicines review
- QUM services in aged care facilities
- Remote pharmacist

Hospital pharmacist

Pharmacists working in Aboriginal Health Services

Requirements and expectations

- Aware of the social and health issues experienced by rural Australians and Aboriginal and Torres Strait Islander people
- Able to provide culturally appropriate and culturally safe pharmaceutical services
- Able to work effectively in interprofessional teams
- Up-to-date with all new developments
- May have no direct contact with the patient
 - Provide medications to Aboriginal Medical Service
 - Train staff such as nurses and Aboriginal Health Workers
 - Ensure quality use of medicine in remote sites

Incentives to work in rural pharmacy

Rural Pharmacy Workforce Program

- Rural Pharmacy Scholarship Scheme (RPSS)
 - Offers financial assistance to encourage and allow students from rural and remote communities to complete an undergraduate or graduate studies in pharmacy at university
 - A minimum of 30 scholarships are offered per year valued at \$10,000 per annum per student

- Rural Intern Training Allowance (RITA)
 - Offers financial support to help intern pharmacists from rural and remote areas access compulsory intern training program activities
 - Interns can claim up to \$1,500 per financial year to allow them to cover travel and accommodation costs from undertaking compulsory intern training workshops, training days and examinations
 - Applicants must be Australian citizens or permanent residents who live and work in a rural or remote area of Australia
- Continuing Professional Education (CPE) Allowance
 - Provides financial support to help pharmacists from rural and remote areas to access CPE and other Professional Development (PD) activities
 - Applicants must be Australian citizens or permanent residents who are practising pharmacists (including intern pharmacists and pharmacists planning to re-enter the workforce)
 - Must live and work in a rural or remote area of Australia
 - Eligible pharmacists can claim up to \$2,000 in allowance for travel and accommodation expenses related to CPE and PD

Nursing and Allied Health Rural Locum Scheme (NAHRLS)

- Allows rural and remote health professionals to take leave by helping them find suitable locums to temporarily fill positions
- Offers rural locum placements anywhere across rural and remote Australia
- Provides an opportunity to travel, meet new people, for career progression and the development of new skills

FOR MORE INFORMATION

Australian Pharmacy Council – Remote Rural Pharmacists Project
pharmacycouncil.org.au

5th Community Pharmacy Agreement (5CPA)

5cpa.com.au

- Continuing Professional Education Allowance
- Rural Intern Training Allowance
- Rural Pharmacy Scholarship Scheme

Nursing and Allied Health Rural Locum Scheme

www.nahrls.com.au



Pharmaceutical industry

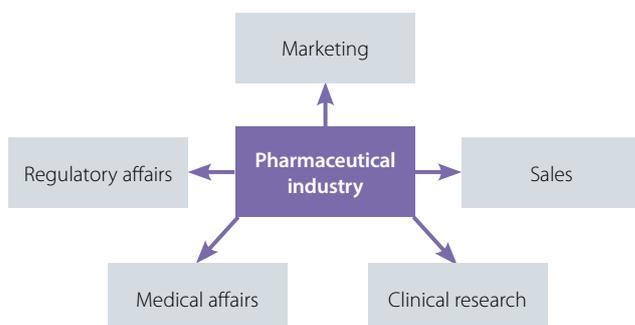
The comprehensive medical knowledge and skills gained from pharmacy degrees create a high demand for pharmacists in the manufacturing, medical, sales and marketing departments of pharmaceutical companies.

It is highly regarded to have worked in a clinical pharmacy, experience with home medication reviews, adverse events reporting and worked closely with general practitioners (GPs), doctors and other healthcare professionals before entering the pharmaceutical industry.

Working in the pharmaceutical industry (pharma) allows pharmacists to develop new skills and gain experience in business development with opportunities to travel within Australia and overseas.

Some major local drug companies

- Aspen
- AstraZeneca
- Baxter
- Bayer
- Charm Health
- Eli Lilly
- GlaxoSmithKline
- Novartis
- Pfizer
- Roche
- Sanofi



Job positions for pharmacists in pharma

The positions listed are not exhaustive and the information for the job positions listed is a guide only and varies from company to company.

SALES

Job positions:

- Sales representative
- Sales manager

Duties:

- Promotes company's products to healthcare professionals including GPs, specialists and pharmacists
- Coordinates educational meetings in assigned territory
- Reports adverse events
- Provides healthcare professionals with updated information relating to products in their disease state portfolio
- Provides feedback for marketing and monitoring of sales

Requirements:

- Qualifications needed will depend on the company
- Bachelor of Science, Pharmacy or similar is highly regarded
- Results-based sales experience
- Ability to meet target sales quotas in a set time frame
- Easily builds strong rapport and has good organisational and planning skills

MEDICAL SCIENCE LIAISON (MSL)

Duties:

- Acts as the main scientific expert in the key therapeutic area and creates resources for the therapy team
- Offers assistance on projects in the key therapeutic area including medical affairs, continuing medical education and scientific reviews
- Collaborates with the therapy unit to identify, develop and manage emerging prospects for products

Requirements:

- Doctor of Philosophy (PhD) qualification in a specific therapeutic area or Bachelor of Medicine and Bachelor of Surgery (MBBS)
- Pharmacists without a PhD can initially gain experience in the Medical Affairs team and work their way into an MSL role
- Experience working with clinicians
- Strong therapeutic area knowledge and understanding of clinical data

MARKETING

Job positions:

- Marketing associate
- Marketing manager
- Marketing director
- Product manager

Duties:

- Provides in-depth therapeutic and product knowledge and evaluates therapeutic options
- Develops promotional material and activities for the sales force
- Develops and implements marketing strategy
- Manages the performance and profitability of company products
- Trains new sales representatives

Requirements:

- Marketing degree
- Bachelor of Pharmacy/Science or similar is ideal for technical background knowledge
- Results-based sales experience
- Easily builds strong rapport, good organisational and planning skills

MEDICAL AFFAIRS

Medical Affairs is an umbrella terminology and roles such as medical information, drug safety (pharmacovigilance) and medical science liaison belong to this department.

Job positions:

- Medical affairs associate
- Medical affairs manager

Duties:

- Ensures the context of promotional material is scientific, unbiased and reasonable and all the information is properly documented
- Advises of the relative risk of materials
- Identifies and documents areas of non-compliance
- Consults with stakeholders in a collaborative manner

Requirements:

- Recommended to have a track record in completing promotional review or medical review activities within a pharmaceutical company
- Good knowledge of Medicines Australia Codes of conduct

MEDICAL INFORMATION

Job positions:

- Medical information associate
- Senior medical information associate
- Medical information manager

Duties:

- Offers balanced, evaluated information and advice on the clinical use of medicines to external customers (such as pharmacists, GPs, specialists and patients) and internal customers (such as sales and marketing)
- Reviews published literature and company data to keep up-to-date with current product issues
- Reviews and approves advertising and promotional materials to ensure Code of Conduct Compliance

Requirements:

- Degree in Pharmacy or Life Sciences
- Experience in community pharmacy or healthcare agency
- Clinical/hospital pharmacy experience is beneficial
- Computer literate and previous experience with online literature research is beneficial
- High attention to detail, strong verbal and written communication skills

DRUG SAFETY (PHARMACOVIGILANCE)

Job positions:

- Drug safety associate
- Senior drug safety associate
- Drug safety manager

Duties:

- Collects adverse event data for the company's products and records them onto regulatory databases, and notifies the appropriate regulatory authorities
- Offers adverse event report training to clinical trial investigators, sales and other colleagues
- Monitors drug safety as part of postmarketing surveillance

Requirements:

- Pharmacy background and experience
- Attention to detail and ability to identify and process adverse events data

REGULATORY AFFAIRS

Job positions:

- Regulatory affairs associate
- Senior regulatory affairs associate
- Project manager
- Regulatory affairs manager

Duties:

- Prepares and reviews new drug applications, labels, reports and submissions
- Prepares regulatory documentation such as regulatory submissions to the TGA
- Drafts product information (PI) and consumer information
- Collaborates with all other functions in the company; guides internal teams on research, testing, product development and quality assurance
- Identifies and assesses potential pharmaceutical safety hazards

Requirements:

- Bachelor of Science, Pharmacy or similar degree qualifications
- Higher education such as a Master degree is beneficial
- Experience working with the TGA
- Ability to evaluate technical and legal information
- Ability to meet and expedite specific timelines

CLINICAL RESEARCH

Job positions:

- Clinical research associate
- Senior clinical research associate
- Clinical project manager
- Clinical research manager

Duties:

- Manages and reports on all clinical trials from Phase I through to Phase IV but mostly involved in Phase III trials
- Identifies and recruits clinical investigator/sites
- Trains investigators and provides resources
- Oversees data collection and analysis
- Ensures Good Clinical Research Practice (GCRP) guidelines are being followed

Requirements:

- Bachelor's or higher degree in a health/science related field or a similar background in life sciences
- Good understanding of the drug development process
- Experience as a clinical trial administrator or clinical trial coordinator
- Courses undertaken at ARCS* are highly regarded
- Good report writing skills

For additional information on training courses please refer to Further study opportunities on page 40 of this Guide.

FURTHER STUDY

- Master of Health Economics
- Master of Pharmaceutical Medicine
- Master of Public Health
- PhD

*ARCS Australia Ltd (previously the Association of Regulatory and Clinical Scientists) is a professional development association for individuals working in the development of therapeutic goods.

www.arcs.com.au

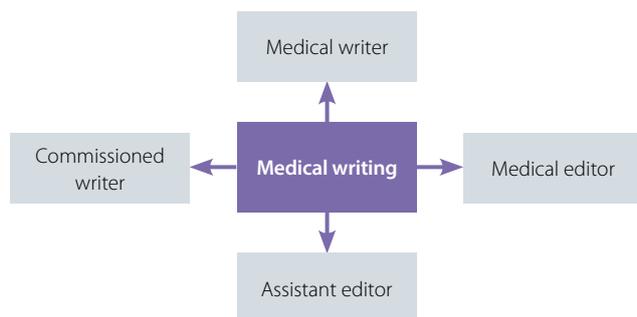
Pharmaceutical and Medical Professionals provide recruitment services to the pharmaceutical, medical, healthcare, scientific and biotechnology sector.

www.pmpconnect.com

Medical writing

Medical writing involves the production of different types of scientific documents including regulatory and research related publications, disease or drug-related educational and promotional literature as well as articles for health related journals.

Writers need a clear understanding of the medical concepts and terminology, be able to communicate scientific information to the target audience and are aware of relevant guidelines on the structure and contexts of certain documents. A medical editor's role is to review a writer's work; checking for content accuracy and adherence to strict editorial guidelines. Positions for medical writers and editors are generally not specific for pharmacists; individuals from other health and communication disciplines compete for these roles.



Medical writing organisations

The organisations and roles covered in this chapter are not all inclusive. Other organisations, not mentioned here, may have writing and editing jobs suited to pharmacists' knowledge and skills. The information provided here is a general overview and is subject to change.

AusPharm

AusPharm consists of a suite of publications incorporating auspharmlist.net.au and auspharmacist.net.au and the daily ezine AusPharm(e)news. It keeps pharmacists updated on all the recent news and information on pharmacy practice in Australia, including: feature articles, practise 'pearls', industry news and links to published media coverage of pharmacy news. The AusPharmList discussion forum – established in 1996 – is Australia's busiest pharmacy related forum.

Australian Medicines Handbook (AMH)

The AMH publishes books and electronic reference resources with the purpose of improving the quality use of medicines. The AMH is an evidence-based independent reference, specifically created for healthcare practitioners in Australia. All the information is researched and written by pharmacists and is peer reviewed by Australian experts and practising health professionals.

Monthly Index of Medical Specialties (MIMS) Australia

MIMS publishes medicine information obtained from a variety of sources including TGA, World Anti-Doping Agency (WADA), Pharmaceutical Benefits Scheme (PBS), *Australian Medicines Terminology* (AMT) and manufacturing companies to healthcare professionals. It provides a variety of information resources e.g. consumer medicines information (CMI) leaflets which are given by health care professionals to patients and carers.

NPS MedicineWise

NPS MedicineWise is an independent, evidence-based and not-for profit organisation which provides consumers and healthcare professionals with practical tools and information about medications, health conditions and medical tests to help achieve better health and economic outcomes. This organisation publishes *Australian Prescriber*, *NPS Radar* and *NPS MedicineWise News*.

Pharmaceutical Society of Australia (PSA)

PSA is a national professional pharmacy organisation representing pharmacists in Australia. It publishes the *Australian Pharmaceutical Formulary and Handbook: The everyday guide to pharmacy practice* (APF) which is a comprehensive pharmacy practice resource helpful to pharmacy students and pharmacists. PSA also publishes the *Australian Pharmacist* which is the organisation's monthly journal. It contains pharmacy education and practice features, research papers, health and pharmacy news and information about PSA activities. PSA develops and updates Practice standards and guidelines for pharmacists and is the custodian of the *National Competency Standards Framework for Pharmacists in Australia*, written in collaboration with pharmacy expert groups.

Therapeutic Guidelines (TG)

TG is an independent not-for-profit organisation that publishes up-to-date therapeutic information for a range of diseases. The published information is based on the latest evidence and is written by multidisciplinary expert groups. Its products include the electronic and print versions of the TG topics.

Job positions for pharmacists in medical writing

The organisations listed are not all inclusive. The information for the job positions listed is a guide only and varies from organisation to organisation; it is correct at time of publication but is subject to change as organisations change internal structures and directions.

COMMISSIONED WRITER

Organisations:

- PSA (Australian Pharmacist)(APF)
- NPS MedicineWise (Australian Prescriber)

Examples of commissions:

- Pharmacists may be commissioned to write articles in their particular field of expertise rather than be employed exclusively as medical writers. Some organisations will use commissioned writers exclusively while others may have a mix.
- The Australian Pharmacist commissions pharmacists as external authors for CPD articles based on their expertise in designated areas and based on an annual CPD program of articles; they rarely use unsolicited CPD materials in their journals. The company may accept PhD research papers regarding pharmacy practice research, which are then peer reviewed and published.
- The Editorial Executive Committee of Australian Prescriber (from NPS MedicineWise) commissions authors with particular expertise to write articles with balanced review for Australian Prescriber. The Committee does not accept unsolicited articles. A nominal fee is payable for articles written for Australian Prescriber.

Requirements:

- Graduate qualification in pharmacy, pharmacology, medicine or health sciences
- Experience in writing at a professional level

MEDICAL WRITER

Organisations:

- NPS MedicineWise

Duties:

- Writes engaging and accurate material for the organisation's publications
- Maintains up-to-date knowledge by participating in relevant continuing education programs, conferences, seminars and workshops

Requirements:

- Tertiary qualifications in a science or health-related field
- Experience in medical writing
- Excellent critical appraisal skills with an in depth understanding of evidence-based medicine
- Demonstrated ability to search medical and pharmaceutical literature rigorously using common databases
- Ability to interpret clinical study results

Recommended knowledge/experience/training:

- Clinical background in medicine, pharmacy, nursing or allied health profession
- Research based higher degree (e.g. PhD) in a health-related field
- Strong project management experience in commercial and not for profit sectors

ASSISTANT EDITOR

Organisation:

- AusPharm

Duties:

- Scans the mainstream media daily for pharmacy related news
- Scans the clinical literature daily for pharmacy related research reports/news
- Writes and uploads 'news' items
- Edits and uploads submitted articles
- Constructs the daily AusPharm(e)news
- Distributes AusPharm(e)news daily by email

Requirements:

- Experience as a pharmacist (or other role in the industry)
- High level knowledge of the pharmacy industry and is 'pharmaco-political savvy'
- Ability to work to tight timelines
- High level written communication skills
- Knowledge of and proficiency in a range of computer software applications, including the ability to work with and edit images

Recommended experience/training:

- Established industry network

MEDICAL EDITOR

Organisations:

- AMH
- MIMS
- NPS MedicineWise
- PSA; APF
- TG

Duties:

- Writes, reviews and edits medical information or technical information
- Follows a strict editorial process to guarantee data integrity and ensures content developed is consistent with the publication's intended purpose and readership
- Prepares and finalises manuscripts for publication of electronic and/or print products

Requirements:

- Graduate qualification in pharmacy, pharmacology, medicine or health sciences
- At least a few years' of post-graduate experience working in either hospital or community practice
- Computer literacy including a high degree of proficiency in word processing
- Ability to perform literature searches, and to interpret the evidence
- High level of critical analysis and review skills
- Previous experience in copy-editing and proof reading (APF)

Recommended experience/training:

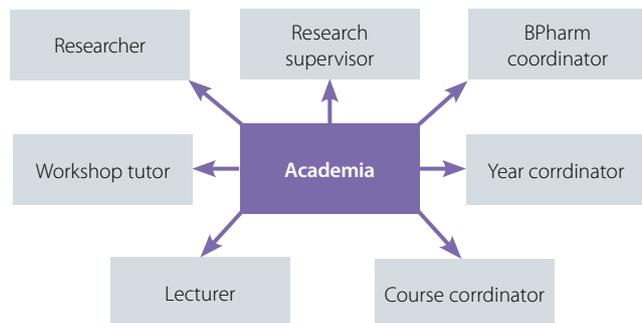
- Experience in technical scientific writing and editing at a professional level
- Effective verbal and written communication skills
- Well-developed organisational skills

Academia

Academic pharmacists are faculty members of an educational institute and are crucial to the teaching and training of future pharmacists, as well as driving research in various aspects of health.

Working in academia comes with many benefits such as the chance to contribute to scientific and clinical knowledge, enhance personal careers, personal satisfaction from teaching or supervising students and the opportunity to collaborate with other professionals.

Although academics are required to be able to balance heavy administrative loads and keep to strict deadlines, working within this field can be rewarding and beneficial when transitioning to other fields of pharmacy such as industry.



Areas of academia

This is not an all inclusive list of the job positions available in academia. The duties and requirements listed for each job position may differ among universities.

Learning and teaching

- Develops education material
- Writes new curricula
- Conducts lectures, tutorials, workshops and practice sessions
- Organises and marks assessments
- Responds to student enquiries
- Maintains websites and student portals
- Gains professional development in teaching skills for e.g. by mentoring or teaching courses

Research and innovation

- Supervises postgraduate students
- Employs and supervises research assistants
- Discusses area of research at laboratory meetings, seminars and conferences
- Participates and contributes abstracts for conferences
- Reads and writes journal articles and books

Community engagement

- Talks to prospective students on information days at the university
- Visits schools to talk about pharmacy as a career
- Participates in public debate about health issues for e.g. on television programs, writing an opinion articles
- Engages in research within the community

Qualifications/experience

- Generally, permanent academic positions require PhD degree
- To enrol in a PhD, the applicant must have prior research experience such as completion of an Honours degree
- If the applicant has no previous research experience, consider completing a Master or Degree before enrolling in a PhD

If interested in practice-based research, experience as a registered pharmacist is important.

Job positions for pharmacists in academia

The information for the job positions listed is a guide only and varies for different education institutions.

WORKSHOP TUTOR

Duties:

- Prepares for and organises the efficient running of workshops such as allocating tasks to each group of students
- Promotes interactive learning among students
- Provides workshop feedback to course coordinator
- Marks assessments
- Answers student enquiries

Requirements:

- Clinical experience in community and/or hospital pharmacy
- Familiar with topic areas covered in workshops
- Teaching experience or mentored by a supervisor
- Good communication and leadership skills, empathetic and organised
- Usual to be undertaking further studies e.g. Master of Clinical Pharmacy or PhD

RESEARCHER

Duties:

- Assists with the development of experiment procedures and ensures high standard of care
- Involved in data analysis
- Works with other researchers in publishing work
- Conducts detailed and systematic literature reviews
- Organises ethics committee submissions and writes grants to obtain funding for conducting research

Requirements:

- Pharmacy, medical, science or related degree
- Highly recommended to have previously conducted research; PhD would be beneficial
- Understands and appreciates a variety of different research methods within the broad area of pharmacy practice
- Excellent communication and interpersonal skills with the ability to work autonomously and as part of a team
- Good time management skills and has high attention to detail

RESEARCH SUPERVISOR

Duties:

- Supervises postgraduate and honours students, and meets regularly with them to provide input on their research
- Works with students or other researchers in publishing work
- Reads and edits manuscripts for publication
- Writes grants in order to obtain funding for conducting research
- Responds to student enquiries

Requirements:

- Understands and appreciates a variety of different research methods within the broad area of pharmacy practice
- Highly recommended to have conducted research; PhD would be beneficial
- Good time management and organisational skills

LECTURER

Duties:

- Composes and presents lecture materials
- Marks student assessments
- Updates course material following research
- Provides guidance and advice to students
- Answers student enquiries

Requirements:

- Pharmacy, medical, science or related degree
- Research or clinical experience
- Widely read with content expertise
- Experience in presenting lectures and seminars or willing to gain experience
- Experience in developing teaching material for lectures and seminars
- Excellent written and verbal communication skills

COURSE COORDINATOR

Duties:

- Responsible for the development and day-to-day operation of a specific course
- Provides students with course syllabus that covers course objectives, schedule and assessment requirements.
- Creates a structured course schedule for students and staff
- Facilitates course improvement through reflection and student evaluations
- Sets and grades assessments

Requirements:

- Pharmacy, medical, science or related degree
- PhD
- Education based qualification e.g. Graduate Certificate in Educational Studies is recommended
- Must be knowledgeable of the course and content

YEAR COORDINATOR

Duties:

- Conducts face-to-face teaching
- Prepares teaching materials for lectures and tutorials and checks academic robustness of own materials and those of work colleagues
- Co-ordinates course logistics such as lecture and assessment arrangements
- Provides input into teaching improvements and answers student enquiries
- Ensures assessments and assessment marks are released on time

Requirements:

- PhD and recommended to have an education based qualification e.g. Graduate Certificate in Educational Studies
- Conducted or has interest in educational research
- Experience working within the Faculty or department of Pharmacy is recommended
- Experience teaching contents to students in the year
- Good understanding of all course curricula and content

BACHELOR/MASTER OF PHARMACY COORDINATOR

Duties:

- Involved in the development and teaching of the Bachelor/Master of Pharmacy curriculum
- Ensures the efficient delivery of the curriculum
- Collaborates with Unit of Study coordinators
- Addresses student appeals
- Assists in the recruitment of clinical educators to run student workshops
- Member of the University committee/s

Requirements:

- Pharmacy, medical, science or related degree
- PhD
- Extensive teaching experience
- Thorough understanding of the Bachelor/Master of Pharmacy curriculum
- Understands the available support services for students



Research

Research in pharmacy practice observes the effectiveness of pharmacists' contribution to the healthcare system in improving patient health outcomes.

Other areas of research include drug discovery for pharmacotherapy or development of medicinal devices. This may involve using pharmacology knowledge for product development through formulation modifications of novel drugs in the approval process from Phase I through to Phase IV trials. Professional skills are required in the application of scientific, medical and new knowledge for data management and statistical analysis of findings.

Pharmacists' role in research studies may include direct management or oversight as a team member with colleagues of varying backgrounds such as medical specialty doctors, statisticians and medical writers. Projects are frequently teamwork orientated and collaboration with experts in other fields is common. There may be opportunities to educate other professionals and build connections through long-term communication.

These research studies are often sponsored by universities or other pharmaceutical bodies. There is a diversity of job opportunities in the research sector with flexible working hours, adequate job security and income in the upper-mid range. However, there are limited job opportunities in NSW, with most company headquarters situated overseas.

Job positions for pharmacists in research

The information for the job positions listed is a guide only and varies for different organisations, industry and institutions.

Job opportunities

- Hospitals
- Pharmaceutical industries
- Tertiary institutions
- Examples of research organisations in Sydney:
 - Cancer Council
 - The Garvin Institute of Medical Research
 - The Woolcock Institute of Medical Research
 - The Centenary Institute of Cancer Medicine and Cell Biology
 - The Children's Medical Research Institute
 - The George Institute of Global Research

Skills

- High level of attention to detail
- Innovative thinking
- Problem solving
- Works well in teams
- Good communication

Recommended Training requirements

- Work-experience in research
- Holiday research scholarships
- BPharm (Honours)
- MPharm (Research)
- Master of Philosophy
- Doctor of Philosophy (PhD)
- Master of Qualitative Health Research

For additional information on training courses please refer to Further study opportunities on page 40 of this Guide.



Professional organisations

Professional organisations in pharmacy advocate for the profession to ensure pharmacists are adequately represented and provide a quality service in the healthcare system.

Organisations may represent certain sectors of the pharmacy profession and provide advocacy and services that meet the needs of that sector. Services provided by professional organisations include CPD programs to assist pharmacists maintain competence in their current practice and develop extended models of practice, business and industrial relations advice, professional indemnity insurance, and networking and mentoring opportunities.



Professional organisations

The organisations and roles covered in this chapter are not exhaustive. Other organisations, not mentioned here, may have positions suited to pharmacists' knowledge and skills. The information provided here is a general overview and is subject to change.

Australian Association of Consultant Pharmacy (AACP)

The AACP is jointly owned by the PSA and the PGA. The AACP was established to develop a national approach to the practice of consultant pharmacy as an expansion of the professional health role of pharmacy in Australia. As such, it promotes and seeks recognition for the practice of consultant pharmacy and the provision of value-added, professional services in Australia. The AACP, through its programs and activities, seeks to improve the overall quantity and quality of pharmacists becoming accredited to conduct medication reviews and, once accredited, to support those pharmacists in maintaining and enhancing their accreditation knowledge and skills.

Australian College of Pharmacy (ACP)

The institution began as the Australian College of Pharmacy Practice (ACPP) operating since 1978. In July 2004, the ACPP merged with the Australian Institute of Pharmacy Management Ltd (AIPM) and became the Australian College of Pharmacy Practice and Management; this was renamed as the Australian College of Pharmacy (ACP). ACP's objectives include the provision of education, training and research programs, to define, promote and recognise high standards of practice and to develop and promote the practice of pharmacy. ACP is authorised by the Australian Pharmacy Council to accredit CPD activities for pharmacists to be used as supporting evidence of continuing competence.

NPS MedicineWise

NPS MedicineWise provides evidence-based information tools to improve the use of medicines and health technologies. This organisation has resources such as medicine lists, education programs and publications (such as *Australian Prescriber*) which are available to healthcare professionals in Australia and internationally.

Pharmaceutical Society of Australia (PSA)

The PSA is a national professional pharmacy organisation representing pharmacists in Australia. The PSA's vision is to improve our nation's health through excellence in the practice of pharmacy by providing continuing professional development (CPD) and practice support. The PSA speaks to government, regulatory agencies and other bodies in the health sector on behalf of its members on topics including health practitioner registration, pharmacy services in rural and remote areas, and in-pharmacy immunisation. As a registered training organisation (RTO), it provides an extensive program of educational and professional development activities, including the ITP and other relevant qualifications for pharmacy assistants, students and pharmacists.

Pharmacy Guild of Australia (PGA)

The Guild is a national body that represents community pharmacy owners. The Guild seeks to serve the interests of its members and is committed to maintaining a community pharmacy model that supports the delivery of quality health outcomes with medications and related services. The Guild also negotiates with manufacturers, wholesalers, government and other stakeholders involved in the healthcare system of Australia.

Society of Hospital Pharmacists of Australia (SHPA)

The SHPA is the national professional organisation for over 3,000 pharmacists, provisional pharmacists, pharmacy technicians and associates working across Australia's health system. The SHPA is committed to facilitating safe and effective use of medicines, which is the core business of pharmacists, especially in hospitals. SHPA supports pharmacists to meet medication and related service needs, so that both optimal health outcomes and economic objectives are achieved for individual Australians, for the community as a whole and for healthcare facilities.

Job positions for pharmacists in professional organisations

Please note that the roles listed below do not apply to all organisations. The duties and requirements are indicative only and will differ depending on the organisation.

PROGRAM COORDINATOR

Many organisations run programs such as intern training, needle syringe exchange, opioid replacement, where a pharmacist's knowledge would be very beneficial.

Duties:

- Researches, investigates and analyses issues with regards to program delivery, implementation and external requirements
- Manages, coordinates and effectively runs events and facilitates program participation and completion of external program requirements
- Liaises with, assists and supports relevant committees for program improvements

Requirements:

- Degree level qualifications in Pharmacy with eligibility for registration in Australia or similar health related educational achievement, background or work experience
- Good knowledge or experience in understanding issues, needs and directions of the pharmacy profession in NSW, nationally and internationally

PROJECT PHARMACIST

Many organisations run projects which require systematic planning and coordination; these may be conferences, courses or the development of education or practice support material.

Duties:

- Supports the development, implementation and delivery of projects
- Delivers Key Performance Objectives (KPOs) as required to meet the project objectives

Requirements:

- Degree level qualifications in Pharmacy with eligibility for registration in Australia or similar educational achievement, background and work experience
- Knowledge and experience in contemporary pharmacy practices
- Good project management, interpersonal and communication skills

PROGRAMS MANAGER

Pharmacists with high level organisational and people management skills may find positions as program managers overseeing the delivery of programs and managing teams.

Duties:

- Leads and manages the development, implementation and delivery of the organisation's programs and services
- Develops program resources
- Reviews material to meet standards and requirements set by the organisation and responds to enquiries
- Contributes to publications for literature reviews and summaries
- Researches and answers program related information queries

Requirements:

- Degree level qualifications in Pharmacy with eligibility for registration in Australia or similar educational achievement, background and work experience
- Knowledge and experience in contemporary pharmacy practices
- Excellent ability to interpret, assimilate and apply theoretical concepts and research into practical programs and initiatives

CLINICAL PROGRAM LEAD

Pharmacists with high level organisational, people management and leadership skills may find positions as overseeing the delivery of programs and managing teams.

Duties:

- Inputs and reviews clinical content of various educational and reflective activities on specific therapeutic areas
- Trains a national field force on content delivery for Australian health professionals on therapeutic areas
- Presents at various health professional conferences
- Responds to clinical queries from the trained field force
- Liaises with and manages stakeholder relationships

Requirements:

- Graduate qualifications in medicine, pharmacy, science or related health discipline
- Substantial relevant clinical experience

CLINICAL SERVICES SPECIALIST

Pharmacists with high level organisational, and networking skills and excellent clinical knowledge may find positions in a clinical services role.

Duties:

- Facilitates educational visits with GPs and other allied healthcare professionals on health topics involving quality use of medicines and quality use of medical tests
- Facilitates case-based meetings with GPs and other allied healthcare professionals to provide advice for medication use

Requirements:

- Registered healthcare professional under AHPRA
- At least 3 years work experience in the pharmacy field
- Strong communication skills and positive attitude
- Exercises strong analytical skills and clinical reasoning

CLINICAL CONSULTANT PHARMACIST

Pharmacists with advanced clinical knowledge may find opportunities in consultant roles, to advise on health and medication specific content and resources.

Duties:

- Develops educational resources including: written articles, online modules, standards, guidelines and guidance documents
- Reviews written pharmaceutical articles for publication

Requirements:

- Degree level qualifications in Pharmacy with eligibility for registration in Australia
- Knowledge and experience in developing educational resources
- Ability to work collaboratively with other health professionals

PHARMACY LIAISON OFFICER

A liaison role for pharmacists requires excellent communication and negotiation skills across health sectors and collaboration with other healthcare professionals.

Duties:

- Travels extensively throughout NSW to contact and engage pharmacies in programs
- Promotes and encourages the scheme through the provision of education and support to pharmacy staff
- Introduces the referral to other health professionals/specialists in the area of practice

Requirements:

- Degree level qualifications in Pharmacy with eligibility for registration in Australia or similar educational achievement, background and work experience
- Holds a current NSW driver's licence
- Knowledge of harm minimisation principles is an advantage
- Able to work independently and attain the key performance indicator (KPIs) required for the position
- Familiar with any standards and legislation related to pharmacy and health practice

PRACTICE SUPPORT PHARMACIST

Pharmacists may choose to take on a supporting role in maintaining practice standards for the profession and facilitating practice change

Duties:

- Supports community pharmacies with the implementation and maintenance of the Quality Care Pharmacy Program (QCPP) and other professional services
- Develops and delivers CPD activities
- Trains and develops pharmacy staff

Requirements:

- Degree level qualifications in Pharmacy with eligibility for registration in Australia
- Understands QCPP
- Knowledge of CPA
- 5 years' working experience within community pharmacy is recommended

QUALITY ASSURANCE PHARMACIST

Organisations that are Registered Training Organisations (RTO) or offer accredited education require continual monitoring for compliance with quality assurance. Familiarity, knowledge and practical application of pharmacists' competencies are an asset to a role in compliance.

Duties:

- Accredits internal and external CPD activities
- Undertakes quality assurance on published materials
- Conducts compliance audits
- Prepares documentation for external audits

Requirements:

- Current registration as a pharmacist with AHPRA
- Relevant post-graduate qualifications (e.g. Certificate IV in Training and Assessment) are well regarded

GENERAL MANAGER/CHIEF EXECUTIVE OFFICER (CEO)

The role of the CEO is to provide support to its board of Directors, and Secretariat by overseeing the work of the staff and volunteers, and facilitating the smooth running of the organisation's operations in accordance with its strategic direction/plan.

The key responsibility areas below are indicative only. Requirements and attributes are specific for different organisations and may change from time to time:

- Serves as a spokesperson and demonstrates leadership
- Ensures sound corporate governance through appropriate management of budget resources and risk
- Oversees development and implementation of strategic business plans
- Liaises with other professional organisations, government and key medicine stakeholders
- Oversees development and implementation of policy
- Ensures the needs of the membership are being addressed

Key attributes able to be demonstrated:

- Administrative, financial and corporate governance skills and experience
- Ability to lead a team of staff
- Sound verbal and written communication skills
- Sound understanding of the needs of the profession/membership

FOR MORE INFORMATION

AACP
www.aacp.com.au

ACP
www.acp.edu.au

NPS MedicineWise
www.nps.org.au

PSA
www.psa.org.au

SHPA
www.shpa.org.au

The Guild
www.guild.org.au

Military pharmacy

Pharmacists play a crucial role in collaborating with other healthcare professionals in supporting the health and wellbeing of the Australian Defence Force (ADF) staff in the Army or the Air Force.

Working in the ADF offers a competitive salary, subsidised accommodation, free medical treatment and travel opportunities. ADF sponsors suitable candidates to complete tertiary studies at an Australian university after successfully completing their first full year of study. Successful applicants will need to meet general entry requirements which include passing the aptitude, medical and fitness assessments. After the completion of tertiary studies, candidates are required to join the ADF for a period of service.

Entry

- Full-time officer (undergraduate or graduate)
- Reserve (graduate: Army; specialist: Air Force)



General requirements

Age:

- Graduate: 17-56 years old
- Graduate reserve: 17- 60 years old
- Specialist reserve: 17- 65 years old
- Undergraduate: able to complete degree and Return of Service Obligation before compulsory retirement age (normally 60 years of age)

Australian citizenship

Aptitude tests:

- Verbal
- Spatial
- Numerical
- General mathematics

Medical and fitness assessments:

- Must be medically and physically fit for entry
- Must successfully pass a physical fitness test before enlistment

(Refer to ADF website for further details)

Period of service:

- Undergraduate
 - Length of sponsorship + 1 year
- Graduate
 - Initial Minimum Period of Service (IMPS) of 3 years
- Graduate reserve – Army
 - Any length of service up to age of 65 years
- Specialist reserve – Air Force
 - Serves an initial appointment of 5 years followed by extensions (subject to approval) of 5 year periods

Job positions for pharmacists in military pharmacy

AIR FORCE PHARMACIST

Duties:

- Clinical roles:
 - Provision of pharmacy services including dispensing, monitoring, evaluation and assurance of safe and effective use of medications
 - Provision of professional advice on medications to patients, prescribers and other health service personnel
 - Development of medication policy for ADF health facilities
 - Participation and instruction in health training programs
- Health logistics roles:
 - Inventory control for ADF health facilities including pharmaceuticals, consumables and equipment
 - Management of medical, dental and general equipment for ADF health facilities
 - Supervision of pharmacy and supply staff
 - Maintaining deployable health assets, including field hospitals (Expeditionary Health Facilities) and aeromedical evacuation kits

Specific requirements:

- Undergraduate:
 - Must have completed at least 1 year of a 3 or 4 year degree in pharmacy or
 - At least 2 years of a 5 year degree majoring in pharmacy from a recognised tertiary institution
- Graduate role:
 - Have a university degree in pharmacy (BPharm, MPharm) or equivalent
 - Have undergone a recognised graduate training year
 - Be registered with AHPRA. Evidence of registration is required.

- Specialist reserve:
 - Have a university degree in pharmacy (BPharm, MPharm) or equivalent
 - Have undergone a recognised graduate training year
 - Have at least 2 years post-graduate experience
 - Be registered with AHPRA. Evidence of registration is required.

Employment training:

- Successful graduate and undergraduate applicants must undertake the Operational Health Support and the Logistics Officer Initial courses and as their career progresses they will have the opportunity to undertake additional logistic management and planning training

Pay:

- Undergraduate
 - Students are financially supported by the ADF to complete tertiary studies
 - Students' salary will continue to increase following successful completion of each year of study
 - Tertiary institution fees, student contribution charges, library and examination fees, and textbooks are paid for by the ADF
 - Receive uniform and service allowances
- Graduate
 - Salary will continue to increase based on rank and the number of years of service completed in that rank
 - Receive uniform and service allowances
- Specialist Reserve
 - Receive a daily rate of pay and a reserve allowance

PHARMACEUTICAL OFFICER IN THE ARMY

Duties:

- Hospital dispensary duties, supervision of pharmaceutical accounts, ordering and stock policy management of pharmaceuticals, as well as management of medical equipment and related consumables
- Whilst posted to a field unit, pharmacists are responsible for the medical logistics and may set up their units in remote areas

Specific requirements:

- Undergraduate:
 - Completed Year 12 with passes in English and three other Board of Secondary School Studies
 - Completed the first full year of study of a full-time pharmacy degree
- Graduate, Specialist Reserve
 - Applicants must have the appropriate degree in pharmacy from a recognised tertiary institution and be registered with AHPRA or undergoing pre-registration training

Employment Training:

- Successful undergraduate and graduate applicants must undertake a Regimental Officers Basic course

Pay:

- Undergraduate
 - Students are financially supported by the ADF to complete tertiary studies
 - Students' salary will continue to increase following successful completion of each year of study
 - Tertiary institution fees, student contribution charges, library and examination fees, and textbooks are paid for by the ADF
 - Receive uniform and service allowances
- Graduate:
 - Salary will continue to increase based on rank and the number of years of service completed in that rank
 - Receive uniform and service allowances
- Specialist Reserve:
 - Receive a daily rate of pay and a reserve allowance

FOR MORE INFORMATION

Australian Defence Force Jobs
www.defencejobs.gov.au

Government agencies

Occupations in the pharmacy government sector focuses on the impact of the pharmacy profession on public healthcare through associations in pharmacy law, regulatory affairs and public policies.

Pharmacists working in this area make decisions that could determine systems on the overall processes for clinical research and safety of medication use. Pharmacists may collaborate with other professional agencies to monitor compliance or practices with laws and regulations and educate early career pharmacists on new policies.

Pharmacists in government associated position are often highly experienced, have a strong attention to detail and understand regulations that could apply to diverse practice settings. With an expertise in medicines, pharmacists require innovative thinking skills to help shape and define the practice. They have flexible working hours and receive a competitive income with favourable benefits. A career in government health agencies can be competitive as positions may not be specific for pharmacists and some are available for other healthcare professionals.



Government agencies

The agencies and roles covered in this chapter are not exhaustive. Other agencies, not mentioned here, may have positions suited to pharmacists' knowledge and skills. The information provided here is a general overview and is subject to change.

Australian Government – Department of Human Services

The Department administers the Pharmaceutical Benefits Scheme (PBS), an Australian Government programme that subsidises the cost of listed prescription medicines, making it more affordable for all Australians.

to receive payment for the supply of pharmaceutical benefits (PBS medicines), approved pharmacists must comply with the *National Health Act 1953* and its relevant legislative instruments.

Clinical Excellence Commission (CEC)

The CEC promotes and supports best practice clinical care, safety and quality across the NSW health system by: conducting high-level analysis and reviews that identify risks and opportunities for improvement; providing expert support, advice, tools and information; and working collaboratively with patients, clinicians, managers, health service partners and the broader community. Current programs related to medication safety of interest to pharmacists include: High Risk Medicines, Medication Safety Self-Assessment, Continuity of Medication Management, Venous Thromboembolism Prevention, Quality Use of Antimicrobials and Other Medication Safety and Quality Initiatives.

State Government

The State Government is responsible for the development and amendment of policies and guidelines to complement the legislation; to ensure medicines and poisons are appropriately available and are supplied in accordance with legislative requirements to minimise harm from these substances in the community; issue authorities to medical practitioners to prescribe drugs of addiction and psychostimulants. Other duties include but are not limited to the investigation of self-administering health professionals, investigation of inappropriate prescribing by medical practitioners, issuance of authorities for drugs to carry out research, issuance of authorities to use highly dangerous poisons, and issuance of wholesale licences for the supply of drugs and poisons.

NSW Poisons Information Centre

The Poisons Information Centre provides up-to-date and evidence-based information regarding the risk assessment, management and treatment of human poisoning to the general public and healthcare professionals. The centre aims to be a focal point

for toxicology education and training, as well as for clinical research in toxicology and poisons information in Australia.

Pharmacy Board of Australia (PBA)

The PBA is regulated by AHPRA. All pharmacists must be registered with AHPRA for professional practice. The Board develops standards, codes, and guidelines for the pharmacy profession. The PBA approves accreditation standards and accredited courses of study in pharmacy. In NSW, the Board has a co-regulatory arrangement for the handling of notifications, complaints, investigations and disciplinary hearings with the NSW Health Care Complaints Commission (HCCC). A similar arrangement has now been set up in QLD; where their arrangement is with the QLD Health Ombudsman.

Pharmacy Council of NSW

The Pharmacy Council of New South Wales (NSW) is a statutory body established to manage complaints about pharmacists practising in NSW and NSW pharmacy students, to regulate NSW pharmacy premises and to maintain a Register of Pharmacies.

The Health Professional Councils Authority (HPCA) is a business unit of the Health Administration Corporation (HAC) and provides executive and corporate support services to a number of health professional Councils, including the Pharmacy Council.

The HPCA operates in tandem with AHPRA, which is responsible for registering health professionals across Australia through the National Registration and Accreditation Scheme.

Therapeutic Goods Administration (TGA)

The TGA regulates therapeutic goods through administration of the *Therapeutic Goods Act 1989* and undertaking:

- pre-market assessment
- post-market monitoring and enforcement of standards
- licensing of Australian manufacturers and verifying overseas manufacturers' compliance with the same standards as their Australian counterparts.

Therapeutic goods are divided broadly into two classes: medicines and medical devices. Medicines must be entered as either registered or listed medicines and medical devices must be included on the Australian Register of Therapeutic Goods (ARTG) before they may be supplied in or exported from Australia, unless exempted. If a problem is discovered with a medicine, device or manufacturer, the TGA is able to take action. Possible regulatory actions vary from continued monitoring to withdrawing the product from the market. All pharmacists can report adverse events to the TGA using their online forms.

As a pharmacist at the TGA there are opportunities to apply your technical expertise in areas that undertake pre-market assessments or post-market monitoring of prescription, over-the-counter (OTC) and complementary medicines. The TGA also employs pharmacists in a range of roles that require knowledge of government processes such as communications, policy and parliamentary roles. Once a staff member has joined the TGA there may be opportunities to work in different areas. This includes other roles within the Department of Health in the Pharmaceutical Benefits Division, Medical Benefits Division, Office of Chemical Safety and many more. The TGA employs highly qualified people including doctors, scientists, biomedical engineers, pharmacists and other scientific and technical specialists. The TGA aims to attract and retain skilled staff and supports a culture of high performance, continuous learning, and scientific excellence.

Job positions specific for pharmacists in government agencies

This is not an inclusive list of roles in the agencies mentioned. The type and availability of positions in government agencies is subject to change.

PHARMACIST

Government agencies: Therapeutic Goods Administration

Examples of some of the duties performed:

- In the Experimental Products Section (EPS), a pharmacist may process applications and issue permits for accessing therapeutic goods that are not approved on the Australian Register of Therapeutic Goods.
- A Senior Evaluator in the OTC Medicines Evaluation Unit may evaluate applications relating to OTC medicines and draft OTC medicine monographs.
- A Complementary Medicines Technical Reviewer may reviewing labelling, product specification (manufacturing data) and evidence provided by a sponsor in relation to a complementary medicine.

Requirements:

- Bachelor/Master of Pharmacy degree
- Registration as a pharmacist with AHPRA

COMPLIANCE PHARMACIST

Government agencies: Department of Human Services

Duties:

- Involved in advisory services relating to claiming for the supply of PBS medicines
- Oversees the delivery of PBS compliance outputs including tactical assessments, action plans, correspondence to approved pharmacists and audit outcome reports
- Conducts analysis and provides specialist advice to approved pharmacists regarding PBS programme specific issues
- Assists in the development and implementation of PBS audit policies and procedures

Requirements:

- Degree qualification in pharmacy
- Registration as a pharmacist with AHPRA
- Extensive knowledge of the relevant legislation and policies that apply to claiming for the supply of PBS medicines
- Relevant experience or knowledge of the practice of pharmacy

OFFICER

Government agencies: State Government

Duties:

- Undertakes activities and projects to inform policy and strategic directions with the aim of improving clinical safety, quality and governance within the health system
- Issue authorities, carries out investigations, inspections for compliance with legislation
- Liaise with other regulatory bodies
- Requirements:
- Pharmacy degree, or tertiary qualifications in health related discipline with substantial knowledge in pharmacology
- Understanding of clinical safety, quality and governance issues
- Understanding of health policy issues and the health system at state and national levels

MANAGER

Government agencies: State Government

Duties:

- Leads and manages a team undertaking multiple activities and projects to inform policy and strategic directions and improves clinical safety and governance with the health system
- Provides expert advice to the hierarchy and key staff on strategic directions, risks, issues, and trends to facilitate informed decision making and ensures issues are resolved or addressed
- Builds and maintains collaborative relationships with key internal and external stakeholders in public and private health systems, state and national government agencies to influence the development and management of strategies, policies, initiatives and the resolution of complex issues
- Plans, manages and monitors projects assigned to the team to ensure project outcomes within agreed budgets and timeframes

Requirements:

- Pharmacy degree, or tertiary qualifications in health related discipline with substantial knowledge in pharmacology
- Significant knowledge and understanding of clinical safety, quality and governance issues
- Significant knowledge and understanding of health system at state and national levels and health policy issues
- Experience in managing human and financial resources to deliver quality outcomes to meet tight deadlines

PHARMACY ADVISOR (INSPECTOR)

Government agencies: Pharmacy Council of NSW

Duties:

- Leads and manages inspection of pharmacies throughout NSW to ensure compliance with provisions of Health Practitioner Regulation National Law (NSW) and the Health Practitioner Regulation (NSW) 2010
- Investigates complaints against pharmacists in accordance with the Council's policies and procedures
- Monitors and provides advice on the supply and management of Pharmacy Medicines and Pharmacist Only Medicines to aid in raising standards in the QUM
- Provides advice to practising pharmacists regarding their legislative and compliance responsibilities and effectively communicates the Council's policies and procedures to stakeholders

Requirements:

- Extensive experience in pharmacy practice and current registration as a pharmacist
- Knowledge of pharmacy/pharmacist regulation and compliance issues
- Holder of a current driver's licence for extensive travel throughout NSW

PROFESSIONAL OFFICER

Government agencies: Pharmacy Board of Australia

Duties:

- Manages the pharmacy intern program, by approving supervised practice applications; contributes to the development and validation of questions for oral examinations; runs the oral exams; responds to enquiries from interns and stakeholders; represents AHPRA and PBA; provides information to pharmacy students and ITP interns regarding AHPRA and the Board's registration requirement
- Responds to verbal and written enquiries from applicants for registration, registrants and the public with respect to registration, supervision, ethical and professional issues regarding pharmacy
- Prepares agenda papers for the Board's Registration and Examinations Committee to enable them to make informed decisions in accordance with the Board's standards and guidelines

Requirements:

- Registered pharmacist under AHPRA
- Extensive experience in pharmacy practice

Job positions not specific to pharmacists in government agencies

MEDICATION SAFETY AND QUALITY OFFICER

Government agencies: Clinical Excellence Commission

Duties:

- Manages a medication safety related project
- Analyses medication incidents and explores contributing factors to these events
- Develops medication related policies, procedures and safety notices for NSW Health facilities
- Organises meetings to engage external organisations to facilitate information sharing
- Provides expert opinion and develops education resources for various medication related issues

Requirements:

- Degree qualification related to healthcare and/or a minimum length of previous work in the profession where it is a legal or industrial requirement in relation to the position
- Solid background in safe medicine use, processes involved in quality improvement and research methods
- Good understanding of the NSW Health system
- Skills in project management, communication and negotiation

SPECIALIST IN POISONS INFORMATION

Government agencies: NSW Poisons Information Centre

Duties:

- Provides clinical information to both medical personnel and the general public via the telephone regarding the assessment and treatment of poisoning cases, drug queries and bites and stings
- Advises on the management and prognosis of poisonings
- Advises on the effects of drugs in pregnancy and lactation
- Answers general queries relating to poisoning, pesticides and chemical safety
- Accurately records information provided directly into the call record database during the call
- Actively audits Poisons Information Centre records during each shift

Requirements:

- Degree qualification in pharmacy or science/ medical science with pharmacology major
- Previous experience in provision of poisons information or at least two years' post graduate experience in clinical pharmacy practice
- Demonstrated ability to accurately assess and interpret medical information
- Available to work a 24 hour rotating roster
- Computer literacy, in particular experience in searching medical and drug information databases and the internet

SENIOR POISONS SPECIALIST IN RESEARCH AND AUDIT

Government agencies: NSW Poisons Information Centre

Duties:

- Leads, coordinates and participates in research relating to poisons information, clinical toxicology and toxicovigilance under the supervision of the clinical toxicologist in charge of research
- Extracts and analyses data from the NSW Poisons Information Centre call entry database and liaises with external agencies
- Provides clinical information to medical professionals and the general public regarding the assessment and treatment of toxins

Requirements:

- Degree qualification in pharmacy or science/ medical science with pharmacology major
- Formal research training as part of postgraduate degree or at least 12 months research experience in clinical toxicology, epidemiology or public health
- Experience with data management and analysis
- Recent clinical experience in a hospital setting or with clinical trials
- Knowledge of ethics committee applications
- Evidence of publications in peer-reviewed scientific or medical journals and/or scientific presentations at professional conferences

PROGRAM LEADER FOR ANTIMICROBIAL STEWARDSHIP

Government agencies: Clinical Excellence Commission

Duties:

- Leads and coordinates antimicrobial stewardship at state level for NSW public hospitals
- Attends meetings and provides educational resources for clinicians in hospitals, ensuring that resources are supported by literature, developed in consultation with clinicians and promote best practice
- Communicates, provides advice and prepares high-level reports on behalf of CEC to government agencies and professional organisations regarding antimicrobial stewardship
- Develops and maintains effective relationships with people or groups of people involved with antimicrobial stewardship in NSW public hospitals
- Manages and supports resources of the antimicrobial stewardship program

Requirements:

- Qualifications and experience as a healthcare professional in Australia in discipline relevant to antimicrobial stewardship
- An understanding of quality and safety in healthcare, with experience in quality improvement and managing change
- Excellent interpersonal and communication skills
- Skills in project management, data analysis and problem-solving
- Ability to manage a team to meet program goals and objectives

For additional information on training courses please refer to Further study opportunities on page 40 of this Guide.

FURTHER STUDY

- Master of Clinical Epidemiology
- Master of Health Communication
- Master of Health Law
- Master of Health Policy
- Master of Pharmaceutical Medicine
- Master of Public Health

FOR MORE INFORMATION

Australian Pharmacy Council (APC)
pharmacycouncil.org.au

Clinical Excellence Commission (CEC)
www.cec.health.nsw.gov.au

Department of Human Services
www.humanservices.gov.au

Health Professional Councils Authority (HPCA)
www.hpca.nsw.gov.au

NSW Poisons Information Centre
www.chw.edu.au/poisons

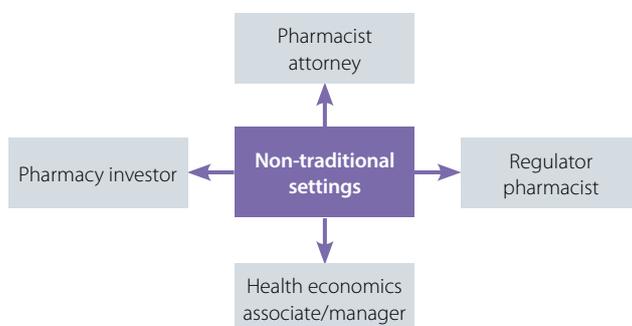
Pharmacy Board of Australia (PBA)
www.pharmacyboard.gov.au

Therapeutic Goods Administration (TGA)
www.tga.gov.au



Non-traditional settings

There is a diversity of career options for pharmacists in non-traditional roles. Career development in other fields beyond health requires further study in other specialties for example in law or commerce for a dual career.





Job positions for pharmacists in non-traditional settings

The examples mentioned below are not an all inclusive list of career options available.

PHARMACIST ATTORNEY

Duties:

- Analyses factors relating to course of action for pharmacists
- Responds to enquiries relating to legal liability for professional practice and mitigates issues
- Opportunities to work in pharma and regulatory affairs in corporate law departments

Requirements:

- Degree qualification in Law as recognised in Australia
- Qualification and experience in the pharmacy field is an advantage

PHARMACY INVESTOR

Duties:

- Provides detailed observation of stocks and trades healthcare stocks to make profits for clients
- Uses knowledge of medicines and ability to understand clinical reports and medical research papers to make decisions
- Is up-to-date with health-related news and research reports

Requirements:

- Degree qualification in Commerce or equivalent experience in Finance
- Qualification and experience in the pharmacy field is an advantage

REGULATORY PHARMACIST

Duties:

- Secures payment for medication from health facilities
- Provides resources to State associations and authorises reimbursements in the state
- Updates and educates pharmacists on legislations regarding professional practice

Requirements:

- Degree qualification in pharmacy and registration under AHPRA
- Knowledge of regulatory policies and procedures

HEALTH ECONOMICS ASSOCIATE/ MANAGER

Duties:

- Prepares submission for Pharmaceutical Benefits Advisory Committee (PBAC) for PBS listing
- Collaborates with clinical trial groups during trial design
- Develops pharmacoeconomic protocols
- Liaises with government and patient-interest groups

Requirements:

- Degree or Major in Epidemiology, Public Health or Health Economics
- Qualification and experience in the pharmacy field is an advantage

For additional information on training courses please refer to Further study opportunities on page 40 of this Guide.

Further study opportunities

There are a number of accredited educational institutions that offer further study opportunities to train pharmacists and other allied healthcare professionals on skills to develop their careers.

These studies may lead to career opportunities in advanced practice, business, research, health studies and health policy development.

Note: This courses listed below are mainly for NSW and are not all inclusive. Individuals interested should contact specific providers for further details on their programs, as the information below offers only a general overview of courses and admission requirements may be subject to change.

Advanced practice

SLEEP APNOEA AND CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) TRAINING

This program provides the knowledge and skills needed to help individuals who have been diagnosed with sleep apnoea. It covers the signs, symptoms and associated risk factors of sleep apnoea as well the treatments available including the use of CPAP.

Course duration: 3 hours

Providers: Premium Health

General admission requirements:

- No pre-requisites, however, they only offer group training for up to 15 participants

GRADUATE CERTIFICATE IN DIABETES EDUCATION AND MANAGEMENT

The course approaches diabetes education and management from scientific, aetiology and pathophysiological perspectives it also explores theories of health behaviour and the implications these have for practise. Systems to prevent and manage diabetes is examined with an emphasis on the self-management model of care

Course duration: 1 year part-time

Providers: UTS

General admission requirements:

- Applicants must have completed a UTS recognised bachelor's degree, or an equivalent or higher qualification, or submitted other evidence of general and professional qualifications that demonstrates potential to pursue graduate studies.
- Previous qualifications must be in a health-related field such as nursing, allied health or medicine.
- Applicants must have at least one year's full-time professional employment in their health-related discipline, part of which has been in a diabetes-related clinical area

GRADUATE CERTIFICATE IN EDUCATIONAL STUDIES

Postgraduate qualification focused on combining both theory and practice to help students apply their knowledge in modern educational environments. Students will develop an advanced understanding of the broader issues which affect the learning environment.

Course duration: 6 months (full-time), 1 year (part-time)

Providers: USYD, UoN

General admission requirements:

- Applicants need to have completed a degree from a recognised tertiary institution or have equivalent qualifications

ASTHMA EDUCATORS COURSE

The Asthma Educators Course provides health professionals with an in-depth understanding of asthma and client care. Enabling the learner to implement and conduct asthma programs in the workplace and community. It is developed to provide health professionals with an in-depth understanding of all aspects involved in the care of a person with asthma.

Lung Health Promotion Centre course include the topics: latest advances in management and care, diagnosis, medication and device use, acute management, asthma and allergy, self management and adherence strategies, emergency management, smoking cessation and childhood asthma.

Asthma Foundation course topics include: pathophysiology, medications and devices, asthma management strategies, asthma care in acute settings, introduction to spirometry, asthma and allergies, childhood asthma, adult asthma, educating different population groups, planning asthma interventions and presentation skills and client education.

Course duration: 3 days (Lung Health Promotion Centre at The Alfred in Melbourne), 4 days (Asthma Foundation in South Australia (SA) and Asthma Foundation in Western Australia (WA)). The Alfred also offers courses in Smoking cessation, COPD, HIV and Respiratory.

Providers: Asthma Foundation SA, Asthma Foundation WA, Lung Health Promotion Centre at The Alfred in Melbourne

General admission requirements:

- Asthma Foundation SA and WA: Health professionals, allied health professionals or pharmacists/pharmacy assistants who have asthma education as part of their role.
- Lung Health Promotion Centre: Registered health professionals

COMPOUNDING COURSES PROVIDED BY PCCA

PCCA provides training and education to pharmacy owner members and their staff to maintain and enhance their profession's skills at making up preparations tailored to meet individuals' needs. The Therapeutic Goods Act 1989 specifically allows pharmacists to prepare medicines for individual patients when a suitable commercially manufactured product is unavailable.

The PCCA Comprehensive Compounding Course (C3) is accredited by the PSA and is a comprehensive five day program designed for pharmacists, based on Australian professional practice standards. Areas of discussion and training include compounding techniques, equipment review and use, dosage forms, quality and safety procedures, legal issues and marketing techniques. PCCA also conducts Australian Pharmacy Council (APC) accredited continuing education programs in a variety of topics, including pain and wound management, nutrition, hormone replacement. Staff at PCCA member pharmacies also have access to online webinars and specialist training programs including Veterinary Compounding.

Course duration: variable

Provider: PCCA

General admission requirements:

- Member of PCCA

CONDUCT IMMUNISATION SERVICES WITHIN A COMMUNITY PHARMACY ENVIRONMENT COURSE

This is a nationally accredited course that aims to prepare pharmacists to conduct immunisation services within a community pharmacy. Legislation changes are still pending in a number of States of Australia to allow pharmacists to immunise. Pharmacists will learn how to prepare a patient for immunisation, how to prepare and safely administer the vaccine and implement first aid procedures when necessary.

Course duration: 2 face to face training days and completion of pre-learning activities

Providers: PGA

General admission requirements:

- Pharmacist must be registered with AHPRA and submit a copy of their registration certificate before attending the course
- Must show currency in Provide First Aid (HLTAID003) and Anaphylaxis for Pharmacists courses

GRADUATE CERTIFICATE IN APPLIED PHARMACY PRACTICE

This certificate builds upon knowledge in primary healthcare and develops essential management and strategic skills required in contemporary pharmacy practice. Qualification is assessed as part of the PSA ITP

Course duration: 6 months – 2 years (full-time)

Providers: PSA

General admission requirements:

- Applicant must be a pharmacy graduate participating in the PSA ITP

GRADUATE DIPLOMA OF APPLIED PHARMACY PRACTICE

This course is beneficial for pharmacists throughout their career and course knowledge is transferable to a wide range of management and leadership roles.

Participants will acquire advanced practical skills to lead real practice change, manage professional services, communicate with influence and deliver better patient care.

Course duration: 1–2 years

Provider: PSA

General admission requirements:

- Registered pharmacist

GRADUATE CERTIFICATE IN PHARMACY PRACTICE

A part-time postgraduate course with two study pathways designed for either pharmacy interns or registered pharmacists. This course is an extension for pharmacists to develop exceptional skills relevant to contemporary pharmacy practice in Australia.

Course duration: 2 years (part-time)

Providers: USYD & MU

General admission requirements:

- Applicant must hold a Bachelor's degree or higher award in Pharmacy or equivalent qualification
- Applicant must be planning to commence internship (pre-registration) practical training under AHPRA within 90 days of commencing the course OR candidate is already a registered pharmacist

Admission requirements for Pharmacy interns (MU):

- An Australian bachelor of pharmacy (Australian Qualifications Framework (AQF) level 7 qualification); or
- A New Zealand bachelor of pharmacy; or
- Successful completion of APC (Australian Pharmacy Council) requirements if the applicant is an overseas practitioner from a country other than New Zealand.

Admission requirements for registered pharmacists:

- An Australian bachelor of pharmacy (Australian Qualifications Framework (AQF) level 7 qualification) or equivalent.
- Registered as a pharmacist.

MASTER OF CLINICAL PHARMACY

This course allows students to develop skills in evidence-based practice, quality use of medicine, practice-based research, and provision of clinical pharmacy services at a high level.

Course duration: 2-4 years part time (equivalent to 1 year full time) (MU), 1.5 years (full time or part-time equivalent) (UQ, CU & UniSA)

Providers: MU (online), UQ (online), CU (on campus), UniSA (online and attendance at compulsory workshops held in Adelaide or Singapore).

Admission requirements:

- Applicant must hold a Bachelor of Pharmacy degree or equivalent
- Pharmacist registered with AHPRA
- An Australian Qualifications Framework (AQF) level 8 qualification in pharmacy (e.g. Bachelor of Pharmacy with Honours or Graduate Certificate or Graduate Diploma) or equivalent (MU)
- Proof of English language proficiency (if applicable) (MU & CU)
- Appropriate honours degree or relevant postgraduate diploma with above average grades (CU)
- Experience in a direct patient care environment
 - A minimum of one year's work experience as a registered pharmacist, preferably with experience in hospital pharmacy, is also required (CU)
 - Working in a clinical setting in an Australian or New Zealand Hospital (MU)

MEDICATION MANAGEMENT REVIEW (MMR) ACCREDITATION

MMR is a health service for pharmacists to enhance continuity of care by ensuring medication use is optimal and fully understood. Comprehensive information about the consumer and their medicine use is collated and assessed to resolve medication-related needs, resolve and prevent possible complications. There are only two professional bodies in Australia able to accredit pharmacists to undertake MMRs and they are the AACP and SHPA.

Accreditation through the AACP, involves pharmacists meeting eligibility criteria and completing Stage One (preparatory training) before lodging application for AACP's Stage Two Accreditation Assessment process

Stage One Training Workshop aims

- Prepares participants for the AACP MMR accreditation assessment process
- Provides participants with an understanding of the MMR process, and knowledge and skills required to successfully undertake a MMR

It is recognised that some candidates require updating of their clinical and pharmacotherapy knowledge. However, Stage One courses are not intended to provide substantial clinical education. Candidates should be encouraged to self-assess their competency in these areas and undertake self-directed education and courses in these areas if necessary.

Course duration: 2 full days (PSA & PGA)(face to face programs), 3 months (ACP)(Online)

Providers: PSA, PGA, ACP and many other organisations

General admission requirements:

- Registered pharmacist or Intern pharmacist

Stage Two Accreditation assessment

Provider: AACP

- Requires the completion of an online clinical assessment program consisting of multiple choice questions and 4 case study assessments (2 HMRs and 2 RMMRs)
- Reaccreditation requirements:
 - Annual CPD requirement of 60 credits
 - Clinical MCQ assessment every three years

Course duration: up to 1 year (Online)

General admission requirements:

- Fully registered pharmacist with appropriate experience
- Completed Stage 1 (Preparatory) Course

SHPA accreditation for medication reviews differs from the MMR accredited by AACP. Prior to issuing an initial accreditation certificate of one year's duration, pharmacists must provide a written commitment confirming their intention to complete annual reaccreditation requirements.

Provider: SHPA

- Pharmacists must show evidence of participation in an approved CPD program
- Reaccreditation requirements:
 - Annual CPD requirement of 60 credits (of which no more than 10 credits are Group 1)

General admission requirements:

- Registered pharmacist with evidence of at least two years of pharmacy practice experience
- Pharmacists must have one of the following qualifications:
 - Certified by the Board of Pharmacy Specialities (BCPS)
 - Certified as a Geriatric Pharmacist (GCP)
 - Credentialed by NAPE
- Evidence of successful completion of competency based assessment addressing topics of relevance to the skills required for medication management reviews:
 - Certification as a Geriatric Pharmacy Specialist (Duration of credentialing: 5 years)
 - Certification as a Pharmacotherapy Specialist (Duration of credentialing: 7 years)
 - Master of Clinical Pharmacy or Master of Pharmacy Practice plus meeting credentialing criteria from a NAPE university (Duration of credentialing: 5 years)



Business

CERTIFICATE IV IN SMALL BUSINESS MANAGEMENT

This course is designed to help students work towards setting-up and running their own business or taking on a management role. Delivers training in a range of key skills such as: legal and risk management, financial management, operations management, work priorities and people management

Course duration: 12 months

Providers: PSA and many other providers

General admission requirements:

- Applicants need to be currently managing or intending to manage a small business

CERTIFICATE IV IN TRAINING AND ASSESSMENT

This course educates students on the latest in training and mentoring techniques and increases effectiveness in training, coaching and mentoring staff, interns and students.

Course duration: 12 months

Providers: PSA and many other providers

General admission requirements:

- Applicants need to be currently working, or intending to work, in a facilitating or tutoring role

DIPLOMA OF MANAGEMENT

Designed for those who would like to become a manager of a business or are currently in a management position in their workplace and want to develop or improve their management skills. Delivers training in a range of performance areas: innovation and leadership, people management, marketing and customer service and business management.

Course duration: 10–18 months

Providers: PSA and many other providers

General admission requirements:

- Need to be working in a pharmacy management role with the opportunity to implement changes in the workplace or to develop the skills required to undertake a management role

MASTER OF HEALTH ECONOMICS

It is designed to provide students with the analytical skills and conceptual knowledge to understand the complexities of health care systems and to analyse and evaluate health care interventions and health policies.

Course duration: 2 years (full-time) (ANU), 1.5 years (full-time) (or part-time equivalent) or 2 years (full-time) (or part-time equivalent) (UQ)

Providers: ANU, UQ

Admission requirements:

- Applicants need to have an approved bachelor's degree in an appropriate discipline with an average mark/GPA deemed acceptable by the university

PHARMACY OWNERSHIP READY SERIES SEMINAR

This seminar is designed to help prepare first-time pharmacy owners in buying a pharmacy, offer advice on how to proceed in a purchase and share knowledge about the market

Course duration: 6 hours

Providers: Medici Capital

General admission requirements:

- Registered pharmacist

Research

BACHELOR OF PHARMACY (HONOURS)

Honours option is an opportunity for meritorious candidates to experience a career in research by completing an alternative set of units of study in their degree and participating in a research project.

Course duration: 4 years (full-time)

Providers: USYD, UoN, CSU

General admission requirements:

- Candidates to be of no more than three years standing, and have no fail or absent fail results
- Candidates must have achieved exceptional academic results and/or have previous research experience as deemed commendable by the university
- Successful students must obtain credit average marks to progress throughout the program

MASTER OF PHARMACY (RESEARCH)

The course is intended for students who wish to pursue a career in pharmacy research or gain competitive advantage in their career by completing additional postgraduate qualification. Students gain research training and skills while developing extensive knowledge and expertise in an area of research.

Course duration: 2 years (full-time) or 4 years (part-time)

Providers: UTS

General admission requirements:

- Applicants must have completed a bachelor's or equivalent or higher qualification
- Applicants must have other evidence of general and professional qualifications that demonstrates potential to pursue graduate research studies

MASTER OF PHILOSOPHY (PHARMACY)

This degree is awarded on the successful examination of a thesis based on original research. The coursework component consists of a Research Methods unit of study. Candidates are to carry out supervised research on a topic approved by the Faculty on the recommendation of the head of the discipline and write a thesis embodying the results of the research.

Course duration: 1–2 years (full-time), 2–4 years (part-time)

Providers: USYD, UoN

General admission requirements:

- Applicant must have a bachelor's degree with first or second class honours from the University of Sydney in pharmacy or science
- Applicant may have a bachelor's degree from another approved institution without honours if the candidate has previous research experience from a professional/employment capacity or previous higher education study
- Applicant will be required to provide certified academic transcripts, a CV, academic references, a research proposal, a one page cover letter outlining reasons for application and proof of Australian residency status

DOCTOR OF PHILOSOPHY (PHARMACY)

A doctoral degree is awarded for research conducted independently at a high level of originality and quality. Research should uncover new knowledge either by the discovery of new facts, the formulation of theories or the innovative re-interpretation of known data and established ideas. Some research areas include cancer, cardiovascular and diabetes, mental health, healthy ageing and respiratory disease. Research may also extend to studies in drug discovery, development and delivery to patient counselling and education in pharmacy. At the end of the course, the candidate will be expected to submit a thesis.

Course duration: 3–4 years (full-time), 6–8 years (part-time)

Providers: USYD, UoN, UTS

General admission requirements:

- Candidate must have a relevant bachelor's degree with honours (class 1 or class 2) or equivalent qualification, or a master degree with a minor thesis
- Applicant may be admitted if they have previous research experience from a professional or employment capacity or previous higher education study
- Head of the department must certify the proposed course of advanced study and research and deem it appropriate and acceptable, with relevant supervisory, resources and facilities to be able to complete the course

MASTER OF QUALITATIVE HEALTH RESEARCH

The course educates students to become qualitative researchers; to observe, interview, conduct focus groups and examine related documents of data. Students will study qualitative research methodologies, analysis and writing and the designing of research projects. At completion of this degree, graduates may pursue a career in health promotion, policy making or research thesis. The Graduate Certificate in Qualitative Health Research (1–3 years part-time) is embedded in the degree.

Course duration: 1.5 years (full-time), up to 3 years (part-time)

Providers: USYD

General admission requirements:

- Applicants must have a bachelor degree in a related discipline including health sciences, allied health, medicine, nursing, pharmacy, psychology, humanities, arts, law, social sciences, political sciences, policy analysis, international development, social work, marketing, communication, journalism, education, from the University of Sydney or equivalent qualification

GRADUATE CERTIFICATE IN PHARMACEUTICAL MEDICINE

The course educates on core skills relevant to understanding the early stages of drug development. It focuses on drug discovery and developmental issues relating to codes of practices, standards and regulation of medicines in Australia. There is an emphasis upon Administrative Law and review of regulatory decisions provided by the Therapeutic Goods Act.

Course duration: 2 years (part-time only)

Providers: UNSW

General admission requirements:

- Applicant should have a three year undergraduate degree or relevant experience in the pharmaceutical industry

GRADUATE DIPLOMA IN

PHARMACEUTICAL MEDICINE

The program is designed for participants wishing to pursue careers that are related to the development and safe use of medicines. Students examine issues relating to the formulation of new medicines, focusing on the quality of the product by examination of impurities and stability of medication. The program educates on methods of assessment and prevention of adverse events, reporting responsibilities, use of safety information databases, protection of intellectual property and use of statistics throughout the drug development process.

Course duration: 2 years (part-time only)

Providers: UNSW

General admission requirements:

- Applicant should have a recognised three year undergraduate degree in a related discipline which is defined as a degree in one of the following: biomedical/ biological sciences, pharmacy, nursing, veterinary science, chemistry/medicinal chemistry, medicine

MASTER OF PHARMACEUTICAL MEDICINE

The degree builds on knowledge of drug development by giving the opportunity for students to specialise in an area of interest within pharmaceutical medicine. Areas of interest include therapeutics and molecular basis of disease, advanced pharmaceutical development in medicines, pharmacoeconomics, advanced pharmacokinetics, therapeutic basis of drug use and development, advanced regulatory affairs and advanced clinical trials management.

Course duration: 3 years (part-time)

Providers: UNSW

General admission requirements:

- Applicant should have:
 - A recognised three year bachelor degree in a cognate discipline plus relevant industry experience OR
 - A four year undergraduate degree OR
 - Higher qualifications in a cognate discipline

MASTER OF RADIOPHARMACEUTICAL SCIENCE

The program trains graduates with a chemistry, pharmacy/pharmacology or biomolecular sciences background for the use of radiopharmaceuticals in diagnostic and therapeutic medicine. Graduates will be able to perform common analytical techniques for the application of chemistry in medicine and also understand the requirements for gaining accreditation of laboratories and control processes.

Course duration: 2 years (full-time), 4 years (part-time)

Providers: MQ

General admission requirements:

- Australian level 7 bachelor's qualification or recognised equivalent

Health studies

MASTER OF CLINICAL EPIDEMIOLOGY

This degree focuses on public health by educating students on how to conceptualise, design and carry out epidemiological research addressing priority health concerns in both clinical and community settings. The course prepares students to work in healthcare service to avoid communicable epidemics or for other career pathways in research, academia or policy advising.

Course duration: 1–2 years (full-time)

Providers: UoN

General admission requirements:

- Applicant should have a relevant degree in health
- In some circumstances, applicants holding acceptable academic or professional qualifications with relevant work experience may be admitted

GRADUATE CERTIFICATE IN HEALTH COMMUNICATION

This certificate delivers core media skills to help the candidate become an effective communicator across health and medicine, public affairs, public relations, community relations and journalism.

Course duration: 6 months (full-time), 1 year (part-time)

Providers: USYD

General admission requirements:

- Applicant must have a bachelor's degree from a recognised educational institution with a major in a relevant subject area in the humanities, social sciences or public health, or an equivalent qualification
- Applicants with relevant recent professional qualifications and experience of at least 3 years duration may be assessed as suitable for admission by the Dean

GRADUATE DIPLOMA IN HEALTH COMMUNICATION

This program is an extension from the Graduate Certificate in Health Communication. The diploma delivers core media skills to help the candidate become an effective communicator across health and medicine, public affairs, public relations, community relations and journalism.

Course duration: 1 year (full-time), up to 4 years (part-time)

Providers: USYD

General admission requirements:

- Applicant must have a bachelor's degree with a minimum 60% average calculated over the whole degree, or an equivalent qualification

MASTER OF HEALTH COMMUNICATION

This course delivers core media skills to help the candidate become an effective communicator across health and medicine, public affairs, public relations, community relations and journalism. Embedded courses in this degree include: Graduate Certificate in Health Communication and Graduate Diploma in Health Communication.

Course duration: 1.5 years (full-time), up to 6 years (part-time)

Providers: USYD

General admission requirements:

- Applicants should have a bachelor's degree with a minimum credit (65%) average calculated over the whole degree from the University of Sydney, or an equivalent qualification
- Completion of the requirements for the embedded Graduate Certificate or Graduate Diploma in Health Communication with a minimum credit (65%) average, or equivalent qualification

MASTER OF HEALTH MANAGEMENT

This program provides students with knowledge, skills and attributes required to undertake senior managerial roles in health services. The course focuses on strategic planning, quality and safety improvement and monitoring and policy making. Completing this program qualifies for careers in hospital and community healthcare services, aged care services, Ministries and Departments of Health, government agencies and private organisations.

Course duration: 1 year (full-time)

Providers: UNSW

General admission requirements:

- Applicants are required to have a degree in a health-related or public health-related discipline and ONE of the following:
 - Honours or postgraduate qualification in a health-related or public health-related discipline OR
 - Two years full-time professional experience in a health discipline, including as a volunteer or equivalent experience acquired as part of a degree of four or more years duration
- In exceptional circumstances, applications will be considered for entry where the applicant has extensive professional health-related or public health-related experience but does not hold a formal qualification in a relevant discipline

Health policy

GRADUATE CERTIFICATE IN HEALTH POLICY

This certificate offers a critical perspective on the operation of the healthcare system; main emphasis on the importance of power, value choices and interaction with public and private sectors in shaping policy.

Course duration: 1 year (part-time only)

Providers: USYD, UTS

General admission requirements:

- Applicant must hold a bachelor's degree, or equivalent qualification and a minimum of 1 year's work experience in a policy related field OR
- Applicants have a minimum of 5 years professional work experience in a policy related field OR pass preliminary examination(s) as prescribed by the Faculty

Admission requirements for UTS:

- Applicants must have completed a UTS recognised bachelor's degree, or an equivalent or higher qualification, or submitted other evidence of general and professional qualifications that demonstrates potential to pursue graduate studies

GRADUATE DIPLOMA IN HEALTH POLICY

This qualification is an extension of the Graduate Certificate in Health Policy.

The program offers a critical perspective on the operation of the healthcare system. Students will gain an understanding of the forces shaping the health policy environment, the capacity to work with professional confidence across the health sector at high-level national and international health policy networks.

Course duration: 1 year (full-time), 18 months (part-time)

Providers: USYD, UTS

General admission requirements:

- Applicants have a bachelor's degree, or equivalent qualification and a minimum of 1 years work experience in a policy related field OR

- Applicants have completed requirements of the embedded Graduate Certificate, or equivalent qualification

Admission requirements for UTS:

- Applicants must have completed a UTS recognised bachelor's degree, or an equivalent or higher qualification, or submitted other evidence of general and professional qualifications that demonstrates potential to pursue graduate studies.

MASTER OF HEALTH POLICY

This course equips students with knowledge and skills to understand, interpret, influence and shape health policy. This course provides a pathway for health professionals, government employees and consultants to pursue a career in health policy.

Course duration: 1 year (full-time), 2–3 years (part-time)

Providers: USYD, UTS

General admission requirements:

- Applicants have a bachelor's degree with a first or second class honours, or equivalent qualification and a minimum of 1 year's work experience in a policy related field OR
- Applicants have completed requirements of the embedded Graduate Certificate and Graduate Diploma or equivalent qualification

Admission requirements for UTS:

- Applicants must have completed a UTS recognised bachelor's degree, or an equivalent or higher qualification, or submitted other evidence of general and professional qualifications that demonstrates potential to pursue graduate studies.

UTS also offers a Master of Health Policy Extension with the same entry requirements as above

GRADUATE CERTIFICATE IN PUBLIC HEALTH

The certificate provides a range of critical, research and practical skills in the areas of policy analysis, economic evaluation, epidemiology, qualitative methods and health promotion. The course provides graduates with the ability to determine the nature of community health problems and skills to initiate steps in defining and alleviating these issues using various services available.

Course duration: 6 months (full-time), 1 year (part-time)

Providers: UNSW, UWS

General admission requirements:

- Applicants to have completed a university degree or equivalent qualification

GRADUATE DIPLOMA IN PUBLIC HEALTH

This diploma educates students to develop skills and gain knowledge necessary for the effective practice of public health.

It provides graduates with the ability to determine the nature of community health problems and the skills in defining and alleviating dilemmas by combining various services available. Core units of the course provide basic health knowledge and skills in epidemiology, biostatistics, qualitative research methods, health promotion, and public health.

Course duration: 1 year (full-time)/up to 6 years (part-time) (USYD), 1 year (full-time) (UNSW), 1 year (full-time)/1.5 years (part-time) (UWS)

Providers: USYD, UNSW, UWS, UON

General admission requirements:

- Applicants should have completed a university degree or equivalent qualification

MASTER OF PUBLIC HEALTH

This course takes a comprehensive assessment of all determinants of health and aims to improve the health of populations through knowledge, values, actions and outcomes. Students will be exposed to public health values, decision-making, practice and policy studies. There is a variety of specialisations available for focus in the units of study list for this course. Graduates from this degree can work in public health research to examine health trends or focus towards educating health information. Embedded courses: Graduate Diploma in Public Health

Course duration: 1 year (full-time)/up to 6 years (part-time) (USYD), 1 year (full-time) (UNSW), 2 years (full-time)/4 years (part-time) (UWS)

Providers: USYD, UNSW, UWS, UoN

General admission requirements:

- Applicants must have completed a bachelor's degree in public health, medicine, medical science, nursing, allied health, dentistry, veterinary science, education, communication, science, policy analysis, government, law, commerce and many others for admission
- In exceptional circumstances, the Dean may admit applicants without these qualifications who have other evidence of experience and achievement sufficient to successfully undertake the award

MASTER OF HEALTH LAW

This degree is a specialist postgraduate qualification providing wide-ranging interdisciplinary coverage of contemporary legal and social issues in healthcare.

The course may be of interest to lawyers with a health/professional liability service, as well as other eligible healthcare professionals. The program is an opportunity to utilise dialogue between legal and health professions about legislative and ethical issues of relevance to both practice and administration. Embedded courses include: Graduate Diploma in Health Law and Graduate Diploma in Public Health Law.

Course duration: 1 year (full-time), 2 years (part-time)

Providers: USYD

General admission requirements:

- Applicant requires a bachelor's degree with a minimum credit average from the University of Sydney in law, medical science, medicine, nursing or other appropriate discipline as determined by the Faculty, or an equivalent qualification
- Applicant may be considered if they have a completion of the requirements of an embedded graduate diploma with a minimum credit average or equivalent qualification

FOR MORE INFORMATION FROM COURSE PROVIDERS

Asthma Australia
www.asthmaaustralia.org.au

Australian Association of Consultative Pharmacists (AACP)
www.aacp.com.au

Australian College of Pharmacy (ACP)
www.acp.edu.au

Australian National University (ANU)
www.anu.edu.au

Charles Sturt University (CSU)
www.csu.edu.au

Macquarie University (MQ)
www.mq.edu.au

Pharmaceutical Society of Australia (PSA)
www.psa.org.au

Pharmacy Guild of Australia (PGA)
www.guild.org.au

Premium Health
www.premiumhealth.com.au

Professional Compounding Chemists of Australia (PCCA)
www.pccarx.vom

University of Newcastle (UoN)
www.newcastle.edu.au

University of New South Wales (UNSW)
www.unsw.edu.au

University of Queensland (UQ)
www.uq.edu.au/study

University of Sydney (USYD)
www.sydney.edu.au

University of Technology (UTS)
www.uts.edu.au

University of Western Sydney (UWS)
www.uws.edu.au

Glossary

AACP	Australian Association of Consultative Pharmacists	HCP	Healthcare professional
ABN	Australian Business Number	HECS-HELP	Higher Education Contribution Scheme-Higher Education Loan Program
ACNM	Advisory Committee of Non-prescription Medicines	HMR	Home Medicines Review
ACP	Australian College of Pharmacy	HPCA	Health Professional Councils Authority
ACPP	Australian College of Pharmacy Practice	HSC	Higher School Certificate
ADF	Australian Defence Force	HSU	Health Services Union
AHPA	Allied Health Professionals Australia	IELTS	International English Language Testing System
AHPRA	Australian Health Practitioner Regulation Agency	IMPS	Initial Minimum Period of Service
AHS	Aboriginal Health Service	INR	International Normalised Ratio
AIPM	Australian Institute of Pharmacy Management	ITP	Intern Training Program
AMH	Australian Medicines Handbook	KPI	Key Performance Indicator
AMT	Australian Medicines Terminology	KPO	Key Performance Objectives
ANU	Australian National University	MBBS	Bachelor of Medicine and Bachelor of Surgery
APC	Australian Pharmacy Council	MCAT	Medical College Admission Test
APEC	Australian Pharmacy Examining Council	MIMS	Monthly Index of Medical Specialties
APF	Australian Pharmaceutical Formulary and Handbook	MMR	Medication Management Review
APP	Australian Pharmacy Professional (conference)	MPharm	Master of Pharmacy
APPFSC	Advanced Practice Pharmacist Framework Steering Committee	MSL	Medical Science Liaison
AQF	Australian Qualifications Framework	MQ	Macquarie University
ARTG	Australian Register of Therapeutic Goods	MU	Monash University
ATAR	Australian Tertiary Admission Rank	NAHRSL	Nursing and Allied Health Rural Locum Scheme
BPharm	Bachelor of Pharmacy	NAPE	National Alliance for Pharmacy Education
CAE	Certificate in Advanced English	NCSFPA	National Competency Standards Framework for Pharmacists in Australia
CEC	Clinical Excellence Commission	NDSS	National Diabetes Services Scheme
CEO	Chief Executive Officer	OTC	Over The Counter
CMI	Consumer Medicines Information	OTP	Opioid Treatment Program
CPA	Community Pharmacy Agreement	PBA	Pharmacy Board of Australia
CPAP	Continuous Positive Airway Pressure	PBAC	Pharmaceutical Benefits Advisory Committee
CPD	Continuing Professional Development	PBS	Pharmaceutical Benefits Scheme
CPE	Continuing Professional Education	PCCA	Professional Compounding Chemists of Australia
CSP	Commonwealth Supported Place	PD	Professional Development
CSU	Charles Sturt University	PGA	Pharmacy Guild of Australia
CU	Curtin University	PhARIA	Pharmacy Access/ Remoteness Index of Australia
DAAs	Dose Administration Aids	Pharma	Pharmaceutical industry
EPS	Experimental Products Section	PhD	Doctor of Philosophy
GAMSAT	Graduate Australian Medical Admissions Test	PHN	Primary Health Network
GCRP	Good Clinical Research Practice	PI	Product Information
GP	General Practitioner	PII	Professional Indemnity Insurance
GPA	Grade Point Average	PPI	Pharmacy Practice Incentives
HAC	Health Administration Corporation		

PSA	Pharmaceutical Society of Australia
PTE	Pearson Test of English
QCPP	Quality Care Pharmacy Program
QoL	Quality of Life
QUM	Quality Use of Medicines
RITA	Rural Intern Training Allowance
RMMR	Residential Medication Management Reviews
RPSS	Rural Pharmacy Scholarship Scheme
RTO	Registered Training Organisation
RUM	Return of Unwanted Medicines
SHPA	The Society of Hospital Pharmacists of Australia
STAT	Special Tertiary Admissions Test
TG	Therapeutic Guidelines
TGA	Therapeutic Goods Administration
TOEFL	Test of English as a Foreign Language
UNE	University of New England
UniSA	University of South Australia
UNSW	University of New South Wales
UoN	University of Newcastle
UQ	University of Queensland
USYD	University of Sydney
UTS	University of Technology Sydney
UWS	University of Western Sydney
VET FEE-HELP	Vocational Education and Training Fee Higher Education Loan Program
WADA	World Anti-Doping Agency
WAM	Weighted Average Mark

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