

**Accreditation
Standards 2020**
for Pharmacy Programs

**Pharmacy Learning
Domains for pharmacy
degree programs**

Effective from 1 January 2020 (Updated September 2023)



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List of Abbreviations

Abbreviation	Term
APC	Australian Pharmacy Council
APC AC	APC Accreditation Committee
CPD	Continuing Professional Development
CV	Curriculum Vitae
ITP	Intern Training Program
PharmBA	Pharmacy Board of Australia

Background

Preamble

The [*Accreditation Standards for Pharmacy Programs 2020*](#) incorporates an increased focus on the processes and outcomes of pharmacy degree programs as a basis for accreditation, and are accompanied by a tailored performance outcomes framework which outlines the performance expected of pharmacy degree program graduates and applicants for general registration.

However, in order to ensure that the performance outcomes can be demonstrated, the curriculum must include a number of elements relating to knowledge, skills and behaviours which are generally recognised as critical for developing the capacity for safe and socially accountable pharmacy practice.

The 2020 Accreditation Standards and Performance Outcomes Framework allow flexibility in the design and delivery of pharmacy programs. The Pharmacy Learning Domains identify critical content areas for pharmacy programs (i.e. the knowledge and skills underpinning the curriculum).

This base knowledge is to be contained within the degree programs, and therefore **the Pharmacy Learning Domains do not apply to ITPs.**

The **Pharmacy Learning Domains** will generally be used in the development and review of degree program curriculum. They may form the basis for curriculum mapping, or providers may choose to include evidence about curriculum in other formats. For specific criteria in the Accreditation Standards, providers will be expected to describe their curricula, and the **Pharmacy Learning Domains** provide guidance as to the content areas which are expected to be included.

Pharmacy Learning Domains for pharmacy degree programs

Learning domain 1: The health care consumer

The health care consumer is central to the practice of pharmacy. Degree programs must reflect this by ensuring that the program focuses on person-centred health care, and by incorporating the promotion of wellness and the prevention of poor health outcomes in addition to the treatment of disease. A focus on social accountability, including both the prevention of harm and the active promotion of person and societal good, should underpin the curriculum. This requires pharmacists to apply their understanding of the biological, physiological, cultural, environmental, psychological and social foundations of treatment.

Indicative elements

- social determinants of health and health disparities
- health, wellbeing and illness: definitions, models and perceptions
- social accountability and duty of care to the health care consumer and the wider public
- the unique expertise of the pharmacist in the health care team in contributing to the optimal use of medicines
- cultural awareness, competence, responsiveness and safety
- Indigenous history and culture, communication approaches and health
- promotion of good health and disease prevention
- population and global health
- personal and interpersonal skills, including written and oral communication skills to build trust, support, motivate and influence professional colleagues and health care consumers with varying levels of health literacy
- adherence to medicines use
- normal bodily functions including anatomy, biochemistry, genetics, nutrition, immunology, physiology, pathology, pathophysiology and infective processes and how these alter with aging and disease
- aetiology and epidemiology of major diseases and the principles of their treatment
- symptom recognition and management, differential diagnosis, diagnostic methods and tests, and medical terminology
- clinical reasoning, collaborative decision-making and documentation
- disease state, health, medical, medication management and health care consumer self-management using an evidence-based, person-centred approach
- management of ambulatory conditions (primary care) including the need for referral when appropriate
- dressings and other wound management products and treatments
- drug and substance misuse, physiological and psychological dependence, clinical toxicology associated with medication overdose, substance misuse or accidental exposure, harm minimisation approaches.

Learning domain 2: Medicines – the drug substance and drug action

Pharmacists have a unique role within the health care team as medicines experts and must therefore have a sound understanding of the sources, properties and actions of medicinal substances.

Indicative elements

- sources and purification of medicinal substances (including natural, synthetic, immunological, biotechnological, radiopharmaceutical and emerging sources)
- physicochemical aspects of medicines and medicinal action in biological systems (including thermodynamics and chemical kinetics)
- specifications and quality of substances used in medicine, including physical and chemical tests
- analytical methods, including principles, design, development, validation and application
- prediction of medicinal properties from molecular structure
- medicine design and discovery: principles, approaches and future prospects
- cell and molecular biology, including genomics, proteomics and gene therapy, relevant to pharmacy
- biotechnology and biotechnological processes
- molecular basis of medicines action and the actions of medicines within living systems; molecular, cellular, biological and physical aspects
- drug absorption, distribution, metabolism and excretion processes; influences on these processes including formulation, route of administration, dosage regimen, age, genetics, disease state, co-morbidities
- clinical therapeutic uses of drugs and medicines in humans, including contraindications for, adverse reactions to, and interactions of medicines and their relevance to treatment
- mechanisms of toxicity and clinical toxicology
- personalised medicines
- evidence-based complementary and alternative therapies, and their interactions with medicines
- clinical evaluation of new and existing medicines, including post-marketing surveillance
- emerging approaches in therapeutics and health promotion.

Learning domain 3: Medicines – the medicinal product

The formulation of medicines to produce safe, efficacious and high-quality medicinal products, together with the compounding of personalised dosage forms tailored to individual needs remain central aspects of patient care, and pharmacists must possess appropriate knowledge and skills to ensure safety and high-quality person-centred care.

Indicative elements

- materials used in formulations and devices for the delivery of medicines, their biological, chemical and physical properties, and the development and application of standards
- biopharmaceutics, pre-formulation and formulation studies; design and standardisation of medicines for administration by different routes and for delivery to specific target sites
- the influence of manufacture and distribution processes on product quality with respect to biological safety, bioavailability (including bioequivalence), dosage uniformity and stability
- quality assurance of pharmaceutical products and processes, including Good Manufacturing Practice
- quality assurance of compounded pharmaceutical products and the processes for producing them
- microbiological contamination: sources, determination, consequences and control
- sterilisation procedures and aseptic procedures in the preparation of pharmaceutical products and medical devices; monitoring of sterilisation processes
- environmental control in manufacturing and compounding facilities, and in the supply chain
- degradation of medicines; evaluation and control of biological, chemical and physical degradation
- packaging and labelling; purpose, design and evaluation.

Learning domain 4: Health care systems and the wider context

Pharmacists must be familiar with the health care systems, legal, ethical and professional frameworks and economic systems within which they practise, and be skilled in functioning in interprofessional teams. Pharmacists also need a realistic and well-informed view of how health care and pharmacy operate within the health care system.

Indicative elements

- health care systems in Australia including roles of pharmacists and other health care professionals in primary, secondary and tertiary health care. Rural and remote health care systems, including Aboriginal and Torres Strait Islander Health Services
- laws related to medicines, poisons and controlled substances
- medicines: schedules of medicines, poisons and controlled substances; PBS; consumer protection, including product liability and unapproved medicines
- professional and ethical standards, and guidelines for practice
- self-reflection and reflective practice, self-audit, CPD and maintenance of competency
- interprofessional practice, communication, teamwork and collaborative decision-making
- clinical governance: clinical audit and risk management, quality assurance and improvement, managing and learning from errors
- use of information technology in the provision of health care
- the political and legal framework, requirements and processes relevant to pharmacy
- occupational and environmental health and safety
- health policy and economics, including pharmacoconomics
- scientific, clinical, health services and social services research; methods, results and their application and dissemination as they are relevant to pharmacy.



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