



australian
pharmacy
council®

Accreditation standards for pharmacist prescriber education programs

Environmental scan and literature review

April 2026

Australian Pharmacy Council Ltd
ABN: 45 568 153 354
ACN: 126 629 785

T1, Level 2
6 Brindabella Circuit South
Brindabella Business Park
Canberra Airport
ACT 2609

Telephone: +61 2 6188 4288
Email: accreditation@pharmacycouncil.org.au
Website: www.pharmacycouncil.org.au

© Australian Pharmacy Council 2026
ISBN: 978-1-7646540-0-5

Acknowledgement of Country

We gratefully acknowledge the Ngunnawal people, the traditional owners of the land on which the APC is based. We pay our respects to the Ngunnawal people and recognise their deep connection to this incredible place we now share. We also pay our respects to the resilience, strength, and wisdom of Aboriginal and Torres Strait Islander Elders, past, present, and emerging across the nation.

We recognise First Nations people's vast knowledge in native plants and their uses. Indigenous Australians were our first pharmacists. Country has provided medicines and healing throughout history. We acknowledge this important connection to Country and the impacts colonisation continues to have on this integral practice.

Canberra means meeting place in Ngunnawal, and is a place where people have been meeting, living and learning for thousands of years. We hope to continue this tradition as we work toward our vision of collaborative, committed and safe pharmacy practice.

Acknowledgements

The Australian Pharmacy Council would like to thank the *Pharmacist Prescribing and Advanced Practice Research and Education Centre for Excellence (PPREC)* at The University of Newcastle for their work in researching and producing this Literature Review Report.

The Australian Pharmacy Council would like to thank the following organisations who have contributed to the development of this work.

- The Pharmacy Board of Australia (a NRAS National Board), as the sponsor of the pharmacist prescriber accreditation standards project
- Members of the APC Governance Group

Australian Pharmacy Council Ltd

(ACN 126629 785)

The Australian Pharmacy Council (APC) is the national accreditation authority for pharmacy education and training. We do this under the National Registration and Accreditation Scheme (NRAS) working with the Pharmacy Board of Australia and Ahpra.

We're an independent, not-for-profit company. Our work protects public health by setting and maintaining high standards of pharmacy education.

We help pharmacists deliver effective health care to meet our community's changing needs. We do this through skills assessments and accreditation of programs and providers.

Contents

Introduction	7
Review aims and focus	9
Part A: Review of the literature relevant to pharmacist prescribing	10
Aim 10	
Methods	10
Results and Discussion	11
Models of pharmacist prescribing	11
Evidence for accessibility due to pharmacist prescribing	13
Efficacy Impact of Pharmacist Prescribing	14
Safety Impact of Pharmacist Prescribing	16
Economic Impact of Pharmacist Prescribing	16
Part B Accreditation of prescriber education programs in Australia	19
Aim 19	
Methods	19
Results and Discussion	20
Midwifery	20
Nursing	20
Optometry	20
Pharmacy	20
Physiotherapy	20
Podiatry	20
Part C Accreditation standards for international pharmacist prescribing programs	25
Aim 25	
Methods	25
Results and Discussion	26
Canada	28
New Zealand	28
United Kingdom	29
United States	29
International Models of Prescribing	30
References	32
Glossary	36
List of Abbreviations	37
List of Tables	38
List of Figures	38
List of Appendices	38

Executive Summary

The Australian Pharmacy Council (APC) commissioned this literature review and environmental scan to inform the update of accreditation standards for pharmacist prescriber education programs. The review synthesises and addresses three core areas: (1) the evidence base for pharmacist prescribing reviews published between 2023 and 2025, (2) accreditation standards for non-medical prescriber programs in Australia, and (3) international accreditation standards for pharmacist prescribing programs.

Context and Rationale

Pharmacist prescribing has evolved globally as a response to health system pressures, including ageing populations, chronic disease burden, and workforce shortages in primary care. While pharmacists in Australia are not currently authorised to independently prescribe Schedule 4 medicines under national legislation, state-based reforms now permit prescribing for defined conditions following completion of accredited training. In April 2026, the Pharmacy Board of Australia commenced a [public consultation on a draft Endorsement](#) for scheduled medicines for pharmacists following recommendation from Health Ministers' meeting in June 2025.¹ The Board's work will inform the review of the APC's Accreditation standards for pharmacist prescriber education programs.²

Internationally, two dominant models exist: independent prescribing, where pharmacists assume full responsibility for diagnosis and prescribing within their competence, and collaborative prescribing, which operates under shared governance arrangements. Jurisdictions such as the United Kingdom and Canada have demonstrated mature implementation of independent prescribing, supported by competency frameworks and structured education pathways.

Part A: Evidence from Literature (2023-2025)

A review of 19 systematic and scoping reviews covering 758 studies provide the available evidence for safety, efficacy, and accessibility of pharmacist prescribing across diverse settings. Searches were conducted across databases (PubMed, CINAHL, Scopus) and Google Scholar using pharmacist prescribing-related terms. Reviews were screened and assessed using PRISMA principles, with systematic reviews generally applying formal bias and quality appraisal tools, while scoping reviews focused on mapping emerging practices. Data extraction was review-level rather than study-level, and findings were synthesised narratively due to heterogeneity in prescribing models and outcome measures.

Key themes identified across the evidence base include:

- **Accessibility:** Reviews consistently report that pharmacist prescribing improves timeliness and convenience of care, particularly in primary care and underserved settings. Models enabling same-day treatment and extended service hours were highlighted as important enablers of access.
- **Clinical Effectiveness:** Evidence indicates that pharmacist prescribing achieves outcomes comparable to physician-led care for common conditions and chronic disease management. Reviews also note its role in improving adherence and supporting guideline-based therapy.
- **Safety:** Reviews indicate that pharmacist prescribing supports safe practice through strong adherence to clinical guidelines. Effective safety outcomes were most evident when programs incorporated structured protocols and collaborative care models, reinforcing the importance of governance and team-based approaches.
- **Economic Impact:** While economic evaluations remain limited, available evidence suggests pharmacist prescribing can deliver cost savings and efficiency gains, particularly in minor ailments, cardiovascular risk management, and hospital collaborative models.

Part B: Accreditation Standards for Australian Non-Medical Prescribers

The grey literature review identified prescribing accreditation standards across midwifery, nursing, optometry, pharmacy, physiotherapy, and podiatry. Key observations:

- Prescribing competencies are embedded in entry-level programs for optometry and podiatry but require postgraduate qualifications for pharmacy, nursing, midwifery, and physiotherapy.
- All professions reference the National Prescribing Competency Framework 3rd Edition September 2025³ or the NPS Medicinewise Prescribing Competencies Framework 2nd edition,⁴ (either framework will be henceforth referred to as the National Prescribing Competency Framework or NPCF within this document) within their accreditation standards, ensuring potential alignment with national prescribing expectations.
- Accreditation domains commonly address program governance, curriculum design, learner experience, and assessment strategies. Pharmacy-specific standards emphasise safe, socially accountable practice, governance, and performance outcomes broadly aligned to the National Prescribing Competency Framework.

Part C: International Accreditation Standards

International models reveal diverse approaches to embedding prescribing authority:

- **United Kingdom:** From 2026, prescribing will be integrated into initial pharmacy education, enabling graduates to qualify as independent prescribers at registration. Current pharmacists require a postgraduate prescribing course comprising 26 days of structured learning and 90 hours of supervised practice.
- **New Zealand:** Pharmacists must complete an accredited postgraduate prescriber program (~600 hours, including clinical placements) aligned with national competence standards.
- **Canada:** Prescribing authority is regulated provincially; while entry-level programs embed prescribing-related competencies, additional jurisdiction-specific training is required for expanded scope.
- **United States:** Prescribing occurs under state-level protocols or collaborative agreements; ACPE accreditation standards ensure graduates possess baseline competencies for therapeutic decision-making and prescribing within team-based care.

International standards consistently emphasise diagnostic reasoning, clinical assessment, shared decision-making, and accountability. Supervised practice and competency-based assessment are universal requirements for prescribing authority.

Implications for Australian Accreditation standards for pharmacist prescriber education programs

The environmental scan and literature review provides available evidence across four key areas - accessibility, clinical effectiveness, safety, and economic impact - which collectively justify the need for rigorous accreditation requirements. These findings reinforce the standards' mandate for pharmacist prescriber programs to be aligned with the National Prescribing Competencies Framework, ensuring consistency with prescribing expectations applied to other non-medical professions.

Introduction

Within this context, Australia's prescribing workforce currently consists of several health professions, including dental practitioners, medical practitioners, endorsed midwives, nurse practitioners, endorsed optometrists and endorsed podiatrists. For some professions, the authority to prescribe medicines is granted upon initial registration, while others are required to undertake additional education and training beyond the entry-level program to achieve endorsement to prescribe scheduled medicines.

Pharmacists are not currently authorised under national legislation to independently prescribe Schedule 4 medicines; however, several jurisdictions now permit pharmacist prescribing for defined low-acuity health conditions where pharmacists have completed an accredited prescribing course and meet jurisdictional authorisation requirements.⁵ In addition to these state-based reforms, pharmacists continue to play a central role in selection and supply of medicines included in Schedules 2 (Pharmacy Only) and schedule 3 (Pharmacist Only) of the Poisons Standard.⁶ This requires the pharmacist to understand the consumer's needs, make a clinical decision regarding optimal therapy (which may or may not include medicines), and communicate that decision with the consumer. This process includes three of the four stages in the prescribing process, according to the Australian definition.⁷

Pharmacist prescribing is defined as the authority of pharmacists to initiate, modify, or discontinue medicines. Pharmacist prescribing has expanded substantially over the past two decades, reflecting broader health system reforms aimed at improving access, safety, and efficiency in medication use.⁸⁻¹⁰ Pressures from aging populations, multimorbidity, and workforce constraints in primary care have catalysed the redistribution of prescribing tasks across professions, including pharmacy, to maintain quality and responsiveness of care.¹¹ Across jurisdictions, this evolution has been accompanied by competency frameworks, regulatory adjustments, and growing evidence of clinical effectiveness and patient acceptability.¹⁰

The global picture is heterogeneous, shaped by statutory authority, professional education pathways, funding mechanisms, and health system integration. Broadly, two predominant models of pharmacist prescribing exist internationally: independent prescribing (IP) and dependent or collaborative prescribing. In IP, pharmacists assess, diagnose, and prescribe autonomously within their competence, typically following completion of accredited postgraduate training and supervised practice.¹² The United Kingdom represents a mature implementation, where pharmacist independent prescribers are legally recognised and supported by an interprofessional competency framework that sets expectations for safe, patient centred prescribing across all prescribing professions.^{13,14} In contrast, dependent/collaborative models (e.g., Collaborative Drug Therapy Management) delegate prescribing functions via written protocols and physician agreements; this is common in the United States, where pharmacists adjust therapy, order tests, and manage ongoing pharmacotherapy under a shared governance arrangement.^{8,15} In Canada, provincial regulations permit a spectrum of activities, from adapting and renewing prescriptions to initiating therapy for defined minor ailments, underpinned by competency and training requirements; evidence syntheses indicate safe and acceptable prescribing with positive impacts on access and antimicrobial stewardship in community settings.^{11,15}

In Australia and New Zealand, prescribing is framed more narrowly and often linked to protocols or specific services, though scope expansions continue to be debated within broader non-medical prescribing policies.⁸ Several European countries (e.g., Denmark, Poland) have introduced or piloted forms of pharmacist prescribing, typically coupling legal authority with structured education and explicit professional accountability.¹⁵ Earlier literature also described variable experiences in South Africa and other settings, illustrating that adoption is sensitive to national policy environments and can be transient when governance or funding is uncertain.^{8,16} The evidence base although not fully matured, comprises of systematic reviews, umbrella reviews, and scoping reviews, consistently suggests that pharmacist prescribing is safe, effective, and patient centred when embedded within robust regulatory frameworks and supported by appropriate training, supervision, and access to clinical information.^{15,17} Syntheses report benefits in access (reduced wait times, improved convenience), quality (guideline consistent prescribing, de-prescribing where appropriate), and antimicrobial stewardship (appropriate selection and duration for common infections), alongside high patient satisfaction.^{11,15}

Nevertheless, successful implementation depends on system integration: clear scopes of practice, shared records, defined referral pathways, and funding models that recognize clinical consultation time and responsibility.¹⁷ A crucial enabler is the competency architecture underpinning pharmacist prescribing. For example, The Royal Pharmaceutical Society's Competency Framework for All Prescribers is widely cited and adopted across professions in the UK; it articulates domains spanning patient centred consultation, shared decision making, clinical assessment and diagnostic reasoning, prescribing governance, and reflective practice.¹³ Contemporary reviews extend these competencies with granular "micro skills" (e.g., applying guidelines, risk stratification, communication techniques) and "macro capabilities" (e.g., clinical judgment, accountability, and reflective practice), providing a blueprint for curricula and continuous professional development.¹⁵ This competency led approach addresses historic concerns raised in early international reviews, such as training sufficiency, liability, documentation, and reimbursement, by standardising expectations and fostering interprofessional trust.^{8,16}

Pharmacist prescribing has transitioned from isolated initiatives to a mainstream, albeit variably implemented, component of modern healthcare systems. The accumulating international evidence supports its clinical safety and system value, contingent on regulation, training, and integration. As jurisdictions continue to expand scope, particularly for minor ailments, chronic disease optimisation, and antimicrobial stewardship, the policy emphasis has shifted from "*if*" to "*how*" best to implement and scale: ensuring equitable access, avoiding care fragmentation, and aligning payment and information infrastructures to enable pharmacists to practice at the top of their license.^{15,17}

In Australia as the population ages, demand for health services increases and so does the burden of chronic diseases management.^{18,19} Use of medicine is a core intervention of healthcare, and it is the healthcare professional's responsibility to ensure safe use of medicine while providing patient centered care with consideration to cultural safety.³ Prescribing in Australia has been defined as "a dynamic process involving the steps of information gathering, clinical and shared decision making, communication and evaluation which results in the initiation, continuation, or cessation of a medicine".³ Prescribing is accepted as a multifaceted process, requiring significant expertise through its multiple components. The NPCF further describes these components as "Prescribing process: Understanding the Person and their need; Understanding the managing options; Explore, discuss and decide on a plan for medicines; Prescribe medicines and communicate the agreed treatment decision; Monitor and review the outcomes of treatment; Prescribe safely and effectively; Prescribe professionally."³ Prescribing is "exclusively permitted for authorised health practitioners who must "Have completed accredited prescribing education and training that is consistent with their scope of practice; be registered with the national board for their specialty, be approved under the National Health Act 1953 for prescriptions of PBS or RPBS medicines, be approved under relevant state and territory legislation and regulation".³

Review aims and focus

The debate currently focuses on the type of model to be endorsed at national level, its educational and training requirements and the legislative framework surrounding the practice. This review aims to contribute through using a previously undertaken environmental scan and conducting grey and published literature reviews from 2023 to 2025.

The review is presented in three parts:

Part A: Reports on a literature review of systematic reviews from 2023 to October 2025 focused and relevant to pharmacist prescribing internationally and nationally in Australia.

Part B: Consists of a review of the grey literature including websites which summarises and compares standards applicable to Australian non-medical prescribing professions

Part C: Comprises an environmental scan of international accreditation standards applicable that permit pharmacists to register as pharmacist prescribers according to relevant jurisdiction regulation, legislation and professional practice requirements.

Part A: Review of the literature relevant to pharmacist prescribing

Aim

This section reports on a literature review of systematic reviews from 2023 to October 2025 focused and relevant to pharmacist prescribing internationally and in the Australian context.

Methods

The same search terms and databases used in the previous report published by the APC were utilised⁷ (Table 1) with the addition of Google Scholar from 2023 to 2025. The search was restricted by using type of articles (all type of literature reviews) and date (2023 to 2025) as filters. The previous environmental scan report did not explicitly state inclusion and exclusion criteria; therefore, a broad and over-inclusive approach was followed throughout the process for the selection of articles. Since the literature on pharmacist prescribing has grown substantially since 2023, this review was pragmatically focused on the numerous reviews published during this period. The Cochrane methodology for reviews of systematic reviews was used²⁰

Table 1 Search terms used to identify literature

Database	Search Terms & Combinations
PubMed	Pharmacist, prescrib*, Australia
	'minor ailment'
	Pharmacist AND prescrib* AND Australia
	Pharmacist AND 'minor ailment'
	Pharmacist AND prescrib* AND safety
	Pharmacist AND prescrib* AND outcome
	Pharmacist AND prescrib* AND effective*
CINAHL	Pharmacist, prescrib*, Australia
	'minor ailment'
	Pharmacist AND prescrib* AND Australia
	Pharmacist AND 'minor ailment'
	Pharmacist AND prescrib* AND safety
	'Pharmacist prescribing' AND safety
	'Pharmacist prescribing' AND effectiv*
Scopus	Pharmacist, prescrib*, Australia
	'minor ailment'
	Pharmacist AND prescrib* AND Australia
	Pharmacist AND 'minor ailment'
Google Scholar	Pharmacist prescribing
	Safety of pharmacist prescribing
	Effectiveness of pharmacist prescribing

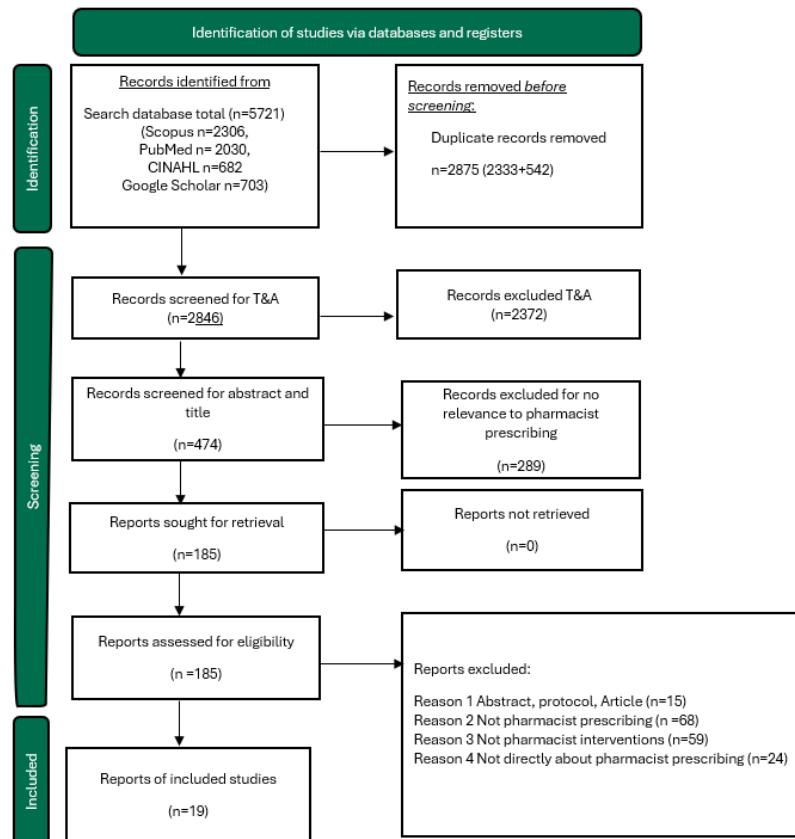
Initial article selection was undertaken by screening titles and abstracts by two reviewers. The full text articles were also reviewed by two reviewers. At all stages, disagreements were resolved by consensus. Data were extracted from the systematic reviews rather than the original reference papers.

Data extraction was undertaken by a single reviewer with a second reviewer assessing the quality of content and extraction.

Results and Discussion

The literature provided 19 reviews; 10 scoping, eight systematic, and one rapid review from several international authors (Appendix 1). 758 studies were covered by the reviews, although some studies were covered in more than one review (Figure 1).

Figure 1 PRISMA diagram



A comprehensive summary of the characteristics of included reviews examining pharmacist prescribing is provided in Appendix 1. The reviews encompass a range of objectives, methodologies, and prescribing models, reflecting the evolving role of pharmacists. The included reviews span from 2023 to 2025, indicating a recent surge of scholarly interest in pharmacist prescribing. The number of studies varies substantially, from nine studies to as many as ninety-two suggesting heterogeneities in evidence bases. Systematic reviews generally include larger datasets compared to scoping reviews, which tend to prioritise breadth over depth. Specialised domains include mental health,^{21,22} cancer services,²³ and emergency departments,²⁴ while broader lenses address community pharmacy practice and non-medical prescribing.^{12,25}

Models of pharmacist prescribing

Prescribing models are predominantly categorised as mixed, encompassing both independent and collaborative approaches. Independent prescribing features prominently in reviews addressing community pharmacy settings,^{11,12,25} whereas collaborative models are emphasised in hospital contexts.²⁶ Protocol-driven prescribing, such as structured protocols for urinary tract infection (UTI) management, illustrates policy-driven implementation for specific conditions.^{27,28} Well-defined models

of care provide clarity and consistency for the services providers and consumers, and the wider healthcare workforce, which assist in adoption of these models including pharmacist prescribing.^{15,29} Prescribing definitions varied greatly across these studies, alongside the pharmacists' responsibilities of the prescribing role.²⁹ Research has called for unity in defining prescribing roles and responsibilities.^{11,29} Standard terminology is essential to formulate the best evidence nationally and to be able to compare it to international evidence, and to guarantee mutual understanding and expectations between stakeholders.²⁹ Independent prescribing: A prescribing model that allows pharmacists to prescribe autonomously without the need of previous agreement with a physician,¹² and pharmacists in this model take full responsibility and accountability for assessment, diagnosing and prescribing.²⁸ Independent prescribing is well placed to fit into patient-centered care rather than; legislation and restrictions centered care. As it focusses on the patients' need, symptoms rather than protocol or formularies limitations.²⁹ Independent prescribing has been established in the UK and Alberta Canada,¹² while formulary prescribing is unique to Idaho, US.²⁹ Government protocol is an "independent prescribing model for pharmacists, containing specific conditions and/or drugs pharmacists can prescribe for".¹² Dependent prescribing; A prescribing model that allows pharmacists to prescribe under the supervision of another health care professional, through a practice agreement with a physician.¹² That agreement or protocol outlines "parameters of how, when, and what may be prescribed".²⁸ Standing orders and statewide protocols are forms of dependent prescribing.²⁸ Collaborative prescribing; is when "prescribers enter into an agreement outlining the authorities delegated, and the roles and responsibilities of each party in the process of prescribing."²⁸ Standard of care is an "independent prescribing model for pharmacists, without specific conditions and/or drugs pharmacists can prescribe for, guided by accepted medical guideline".¹² That model is clearly defined in the UK.¹¹ Prescriptive authority (PA): is defined as "A regulatory framework that depending on the jurisdiction allows pharmacists to initiate, continue, or discontinue medications following a patient assessment".¹²

Several reviews aim to map existing evidence and terminology,^{21,23} while others evaluate clinical and economic outcomes.^{27,30} Systematic reviews such as Akintunde et al.³¹ and Atey et al.²⁴ examine health-related outcomes and quality use of medicines, employing rigorous synthesis methods. Reviews addressing mental health services²² and cardiovascular disease prevention³² expand pharmacist-led interventions into public health and chronic disease management.^{32,33}

Scoping reviews frequently employ the Arksey and O'Malley framework, often supplemented by enhancements from Levac, Colquhoun, and O'Brien, and methodologies from the Joanna Briggs Institute (JBI).^{21,23} Systematic reviews adhere to PRISMA or PRISMA-ScR guidelines.^{12,15} The integration of theoretical lenses, such as the Consolidated Framework for Implementation Research,¹¹ and the Theoretical Framework of Acceptability,³⁴ supports conceptual clarity and structured interpretation of findings. In specialised contexts, access to regulatory body information informs national assessments of prescribing competence.³⁵

Quality appraisal practices vary. Systematic reviews commonly use Cochrane RoB 2, ROBINS-I, and GRADE to assess bias and evidence of certainty.^{24,31} Other tools include MMAT,²² CASP,¹⁵ QuADS,²⁸ MERSQI,³⁵ and JBI checklists for diverse study designs.^{27,32} By contrast, several scoping reviews do not report formal quality appraisal, reflecting the exploratory nature of scoping methodology while signaling a need for consistency.^{21,23}

Three patterns are notable. First, the predominance of mixed models suggests ongoing negotiation between independent and collaborative roles for pharmacists as scopes of practice evolve.^{28,29} Second, systematic reviews demonstrate stronger methodological rigor, whereas scoping reviews often omit formal appraisal, limiting comparability.^{15,31} Third, economic evaluations remain sparse; while some evidence addresses costs and value for money,^{27,30} more comprehensive analyses are required to inform sustainable policy decisions. Stakeholder perspectives, including patient acceptability and professional readiness, are underexplored outside specific contexts such as sexually transmitted infection services³⁴ and naloxone provision beyond community settings.³³

The evidence base underscores the potential of pharmacist prescribing to enhance accessibility, optimise medication use, and improve patient outcomes across settings.^{24,31} Harmonising training standards and competency assessments, particularly through national examinations and structured

competence frameworks, could support safe and effective prescribing.^{15,35} Integrating economic evaluations and implementation research will be critical to guide resource allocation and scale-up decisions, especially in community pharmacy and primary care.^{27,30}

Future reviews should prioritise standardised reporting of quality appraisal in scoping reviews to strengthen credibility;^{12,23} comparative analyses of prescribing models to identify optimal configurations across hospital and community settings;^{11,26} longitudinal evaluations of clinical and economic outcomes to capture sustained impacts;^{27,31} and exploration of patient and stakeholder perspectives to inform implementation strategies and acceptability.^{32,34} The synthesis of included reviews reveals a dynamic, evolving landscape of pharmacist prescribing, characterised by methodological diversity and expanding clinical roles. While systematic reviews provide robust evidence on health outcomes, scoping reviews illuminate emerging practices and contextual considerations. Addressing methodological gaps, and incorporating economic and stakeholder dimensions, will be pivotal in advancing pharmacist prescribing as a cornerstone of integrated healthcare delivery.^{28,31}

Evidence for accessibility due to pharmacist prescribing

Thirteen of the reviews reported either directly or indirectly on one of the pillars driving change in policy leading to the establishment and expansion of scope of practice for pharmacist led prescribing has been the need for increased patient accessibility in primary care (Appendix 2).

Across diverse programs and jurisdictions, pharmacist prescribing is reported to consistently enhance patient access to timely care. Multiple studies demonstrate shorter wait times, expanded hours, and higher rates of same-day treatment compared with physician-led pathways. In community management of minor ailments and acute infections, pharmacist prescribing reduces delays: Beahm et al. reported a median 1.7 days to see a prescribing pharmacist versus 2.8 days for a physician ($p = 0.0153$);^{25,27} Hind et al. observed that 90% of attendees were seen within 10 minutes and that utilisation peaks on Friday-Saturday and after 6pm, when GP access is more limited.²⁷ Booth et al. further noted that a third of pharmacist-led care occurred on weekends, underscoring after-hour accessibility.²⁵

In streptococcal pharyngitis programs spanning British Columbia and Nova Scotia, patients seen by prescribing pharmacists were substantially more likely to receive antibiotics on the same day than those seen by pharmacists without prescribing authority (75.8% vs 35.3% in British Columbia; 42.2% in Nova Scotia).²⁸ A broader multicenter study covering 7,050 patients reported 68.7% same-day antibiotic prescribing overall, with higher rates in Alberta (73.8%) compared with Nova Scotia (40.5%), aligning with Alberta's advanced prescribing authority.¹²

Pharmacist prescribing improves access beyond routine clinic hours and in settings with limited medical availability. Klepser et al. found that 43.9% of patients were seen outside regular medical office hours,²⁸ while Mansell et al. showed that ease of access accounted for 17.2% of patient decisions to choose pharmacy care; additional reasons included avoiding wait times (14.6%), inability to obtain timely physician appointments (9.9%), clinic closure (3.1%), or lack of a regular physician (1.0%).²⁸ Importantly, when pharmacist prescribing was unavailable, substantial proportions of patients indicated they would self-treat, do nothing, or attend emergency departments.²⁸

Accessibility gains extend to chronic disease and preventive services. In cardiovascular risk management, Haby et al. reported an increase in statin eligibility/receipt among patients with atherosclerotic cardiovascular disease from 75.2% to 79.3% after pharmacist prescribing interventions.²⁸ In mental health services, Silvia et al. demonstrated markedly shorter access times to psychiatric pharmacists versus specialist physicians (31.3 vs 104.5 days), with 23% of patients seen within 7 days compared to 0% in the specialist pathway;²⁸ a separate analysis reported 22.6 versus 79.3 days to therapy start in psychiatric pharmacist prescribing compared with behavioural clinic providers.²¹

Contraception and sexual health services exhibit mixed but generally positive accessibility signals.

Women requesting emergency contraception in the UK who received pharmacist-facilitated rapid access and a three-month supply of progestogen-only pills demonstrated a 20.1% higher use of effective contraception in the intervention group than controls (mean 58.4% vs 40.5%).²⁷ Stewart et al. reported patients' perceptions of greater access for pharmacist prescribing-led management of UTI, impetigo, and COPD, with 29/73 citing timeliness.²⁷ While Gibbs found no significant impact on hormonal contraception access,²⁸ other studies, such as Azad et al. in rural contraception, identified pharmacist accessibility as a facilitator.¹⁵ The heterogeneity likely reflects local scope of practice, service design, and patient eligibility criteria; nevertheless, pharmacist-led models often reduce barriers created by appointment requirements and clinic hours.

Naloxone services illustrate pharmacist prescribing capacity to expand access in harm reduction. DeRonne observed increased eligibility for naloxone (33.8% to 46.7%) following pharmacist prescribing initiatives.²⁸ Xu reported an average increase of 331 naloxone dispensings (~53%) after adjusting for confounders.²⁸ Pharmacist co-prescribing models trained law enforcement and facilitated mass dispensing (e.g., 350 officers trained; broad distribution in Indian Country),³³ and collaborative practice increased co-prescribing among patients receiving buprenorphine/naloxone (8.18% vs 5.14% under psychiatrist-only care).³³ Wilson et al. documented that, among chronic opioid users meeting criteria, 49.9% were eligible for naloxone via pharmacist co-prescribing.³³ Collectively, these interventions suggest pharmacist prescribing lowers procedural barriers and accelerates deployment of life-saving medications across clinical and community interfaces. Cancer services similarly benefit from pharmacist prescribing through improved timeliness and reduced cost burden. Lau et al. reported better medication access attributed to lower costs with pharmacist prescribing, and Wright et al. found positive effects on the timeliness of prescriptions in oncology settings.²³

Geographic inequities remain a salient challenge. Bachyrycz et al. identified pharmacist accessibility as a facilitator in naloxone implementation yet noted rural access as a persistent barrier.¹⁵ Green and Gumber observed that expanding non-medical prescribers, including nurse prescribers and pharmacist prescribers, improved access particularly in isolated areas.²¹ Strategic scaling thus requires context-sensitive models that address workforce distribution, transportation, and service integration with local primary care teams. Soon's analysis of emergency contraception showed a 102% increase in pharmacist prescribing (\geq twofold increase among ages 25–54) without reducing physicians' prescribing rates.²⁸ Tinelli reported no difference in time to access prescriptions between physicians and pharmacist prescribing in certain contexts.²⁸ Where pharmacist prescribing delivers pronounced advantages (e.g., minor acute conditions, harm reduction, mental health triage), it often does so by meeting unmet demand rather than displacing existing services.

Synthesis of these findings points to several implementation lessons. First, accessibility improvements hinge on scope-of-practice and authority: jurisdictions granting independent or advanced prescribing achieve higher same-day treatment rates.¹¹ Second, service design matters: extended hours, walk-in pathways, and point-of-care testing enable rapid triage and therapy initiation.^{27,28} Third, collaborative models can amplify reach in complex domains (oncology and harm reduction), while maintaining safety and continuity.^{23,33} Fourth, attention to rural access and digital inclusion remains essential to avoid widening disparities.^{15,21} Future work should standardise outcome measures (e.g., time-to-treatment, proportion receiving same-day therapy, ED deflection rates), expand data from rural settings, and incorporate patient-reported accessibility metrics.

Efficacy Impact of Pharmacist Prescribing

Evidence from multiple studies demonstrates that pharmacist prescribing improves access to care, optimises medication use, and achieves clinical outcomes comparable to physician-led models. This summary synthesises findings across diverse therapeutic areas, including UTIs, minor ailments, cardiovascular risk management, oncology, opioid overdose prevention, mental health, and emergency care (Appendix 3).

Studies consistently report high cure rates for pharmacist-managed uncomplicated UTIs. Beahm et al. documented clinical cure rates of 88.9%, comparable to physician-led care.^{11,25} Booth et al. observed

no significant difference in symptom resolution time between GP and pharmacist care, with pharmacy patients presenting earlier.^{25,27}

Evidence supports pharmacist prescribing in managing minor conditions through structured protocols. Mansel et al. reported improvement in 99.2% of cases,²⁵ while Swiss decision-tree programs achieved 84.7% cure rates, with nearly half of patients avoiding GP or ED visits.²⁷ These outcomes highlight pharmacist prescribing's potential to reduce primary care burden and enhance patient convenience.

Pharmacist-led interventions significantly improve cardiovascular risk factors. RXEACH trials demonstrated reductions in LDL cholesterol, systolic blood pressure, and HbA1c, alongside higher smoking cessation rates.^{25,36} Tsuyuki et al. reported a 21% greater relative reduction in estimated cardiovascular event risk.¹⁵ Programs such as RxACTION and RxACT achieved substantial improvements in blood pressure control and LDL target attainment [20].³⁶ Economic models predict long-term risk reduction, with 30-year CVD risk decreasing from 0.61 to 0.41.³⁰ Diabetes-focused pharmacist prescribing interventions also improved glycemic control.³²

Pharmacist prescribers enhance oncology care through therapeutic drug monitoring and adherence support. Hematopoietic therapy programs achieved 73.9% target ciclosporin levels.²³ Anti-nausea protocols reduced MASCC symptom scores to zero for acute and delayed phases.²³ Oral anticancer adherence improved markedly (88.6% vs. 65.8%), with better patient understanding and molecular response rates.²³ Palliative care clinics led by pharmacists demonstrated significant pain score reductions.²³

The findings provide support for pharmacist-led naloxone programs expanding harm reduction strategies. Collaborative models increased naloxone prescribing and improved medication reconciliation, while public training initiatives enhanced awareness.³¹ These services underscore pharmacist prescriber's role in addressing opioid-related morbidity and mortality.

In addition, specialist pharmacist prescribers reduce depression and anxiety symptoms, with >50% reductions in PHQ-9 and GAD scores.²¹ Continuity-of-care models showed 80% prescription renewal rates and fewer psychiatric emergency visits.²² Pharmacist prescribing thus supports mental health stability and access during care transitions.

Evidence for pharmacist prescribing in hospital settings is mixed. While mortality and length of stay remain unchanged,^{24,31} pharmacist prescribing improves condition-specific outcomes such as INR control, blood pressure, and glycemic metrics.³¹ COVID-19 management by pharmacist prescribers yielded significant improvements in oxygen saturation and vital signs.³¹ Dyslipidemia studies report consistent LDL target attainment.³¹

Across conditions, pharmacist prescribing delivers outcomes comparable to or better than physician-led care, particularly guideline-based interventions. Strengths include infection cure rates, cardiovascular risk reduction, oncology adherence, and harm reduction. Integration within interprofessional teams and standardised protocols enhances success. Practice: Health systems should prioritise pharmacist prescribing for high-volume conditions such as UTIs, minor ailments, hypertension, and diabetes. Oncology and palliative care benefit from pharmacist-led adherence and symptom management. Naloxone programs should be scaled for harm reduction.

Safety Impact of Pharmacist Prescribing

Evaluating the safety of pharmacist prescribing is critical in understanding its role within modern healthcare systems. Evidence from multiple studies suggests that pharmacist-led prescribing improves adherence to clinical guidelines, reduces medication errors, and maintains comparable safety outcomes to physician-led care (Appendix 4).

Pharmacist prescribing demonstrates significant benefits in antimicrobial stewardship, particularly for UTIs. Studies report that guideline-concordant therapy occurred in 95.1% of pharmacist-initiated cases compared to only 35.1% in physician-led care, where physicians were more likely to prescribe longer durations and broad-spectrum agents such as fluoroquinolones.¹¹ Importantly, adverse event rates did not differ significantly between groups, reinforcing the safety of pharmacist interventions.^{25,31} Beyond infections, pharmacists have shown effectiveness in cardiovascular risk management and anticoagulant prescribing for atrial fibrillation. Sandhu et al. (2024) highlighted improved adherence and reduced stroke risk when pharmacists managed anticoagulant therapy.¹⁵ Similarly, pharmacist-led medication reviews and diagnostic testing, such as rapid antigen tests for strep throat, were performed at markedly higher rates than in physician arms, supporting timely and accurate treatment decisions.²⁵ In mental health, pharmacist involvement reduced inappropriate medication use, particularly unnecessary antipsychotic prescribing, with statistically significant improvements ($P = 0.015$).²¹ Hospital-based studies further underscore the safety impact of pharmacist prescribing, especially in emergency departments where co-prescribing and co-charting by pharmacists achieved absolute risk reductions in medication errors ranging from 87% to 97%.²⁴ Omission errors were nearly eliminated, and severe error impacts were reduced by over 93%.²⁴ Collaborative models in Australia demonstrated similar success, reducing prescribing errors from 66% under independent medical prescribing to just 3.6% when pharmacists were integrated into decision-making teams.²⁶ However, interventions limited to staff education without direct pharmacist involvement were relatively less effective, emphasising the importance of active participation in prescribing and charting.²⁴

The evidence supports pharmacist prescribing as a strategy to enhance patient safety, improve adherence to guidelines, and reduce medication errors. Integration of pharmacists into collaborative care models and direct involvement in prescribing decisions should be prioritised. Areas requiring further improvement include communication with primary care providers, and targeted support for conditions where prescribing appropriateness remains suboptimal.²⁷ Despite promising findings, variability in study designs and outcome measures limits cross-study comparisons. Some studies reported incomplete follow-up and insufficient statistical reporting for adverse events, highlighting the need for standardised methodologies in future research.

Economic Impact of Pharmacist Prescribing

Economic findings are reported across multiple reviews and primary studies on pharmacist prescribing in community and hospital settings. The compiled table highlights diverse contexts of minor ailments, cardiovascular disease, oncology, secondary care, mental health, and urinary tract infections areas where pharmacist prescribing has been evaluated for cost consequences, cost-effectiveness and system-level impacts (Appendix 5).

Similar modelling in hypertension demonstrates substantial US-wide savings and QALY gains under large-scale uptake of pharmacist prescribing.²⁵

Oncology services provide granular examples of pharmacist prescribing-driven efficiencies. Dose rounding policies and collaborative pharmacist prescribing have been associated with meaningful annual cost avoidance and improved workflow, while targeted prescribing and generic substitution reduce patient out-of-pocket costs.²³ Empirical reports describe cost avoidance from dose rounding protocols endorsed by professional bodies and improvements in physician efficiency that translate into revenue gains.²³

In acute care, collaborative pharmacist prescribing models in Australian hospitals (e.g., Partnered Pharmacist Medication Charting/Prescribing) are linked to reductions in medication errors, shorter

length of stay and lower admission costs; narrative syntheses indicate 10% shorter stays and per-admission cost savings in implementations with robust credentialing frameworks.²⁶

For UTI, a Canadian decision-analytic study found pharmacist-initiated management cost the public system roughly CAD \$72 per case, versus CAD \$142 and \$368 for GP and ED management respectively; budget-impact modelling projected multi-million-dollar savings with even partial uptake.²⁷

In secondary care, several studies report lower total costs per patient and reductions in hospital and ED utilisation after pharmacist prescribing interventions.³¹ However, a UK pilot RCT in chronic pain suggested pharmacist-led prescribing may be more costly with similar QALYs relative to usual care, underscoring heterogeneity by indication and model.³⁰

Beyond payer-level savings, patient affordability emerges as an important, but under-reported, dimension. Evidence indicates most patients perceive pharmacist prescriber consultation fees as reasonable, and a notable share seek pharmacist care to avoid the costs of physician visits; yet studies seldom measure ability to pay or equity impacts directly, and coverage gaps can deter uptake where consultations or pharmacist-prescribed medicines are not reimbursed.²⁸

Access impacts are particularly salient in rural and underserved areas. Expanded pharmacist prescribing can reduce time-to-treatment, increase dispensing for time-critical therapies (e.g., contraception, anticoagulation), and reallocate physician time toward complex cases. Geospatial analyses of pharmacy density and emergency services further support the role of pharmacists in improving timeliness and safety in high-risk settings.

Economic evaluations of pharmacist prescribing vary in perspective (public payer vs. societal), time horizon, and included cost categories (direct medical costs, consultation fees, training, patient travel/wait times, productivity). Studies employing cost-minimisation assume comparable effectiveness across settings, while Markov models extrapolate long-term event reductions from short-term risk changes, often discounting benefits and assuming waning effects.

Notably, heterogeneity in pharmacist prescribing models, independent vs. collaborative, initiation vs. continuation/modification, complicates comparisons. Many implementations rely on credentialed pharmacists with local governance; transferability across sites remains limited, and economic outcomes depend on remuneration and insurance coverage. Reviews call for more robust RCTs and comprehensive cost–consequence analyses capturing health outcomes, equity, and administrative costs to establish value for money across professions and conditions.³⁰

The weight of evidence suggests pharmacist prescribing delivers economic value in well-specified indications, minor ailments, hypertension/CVD risk reduction, oncology supportive care, and within collaborative hospital models. To maximise system benefits: (1) align remuneration and coverage to remove patient-facing cost barriers; (2) standardise credentialing and clinical governance to enable scalability and transferability; (3) integrate pharmacist prescribing within value-based payment models and electronic health records to streamline workflows; and (4) invest in pragmatic trials and hybrid implementation–economic studies to evaluate outcomes across diverse populations.

For Australian hospitals, national credentials (e.g., PPMC/PPMP) and partnered charting/prescribing frameworks show promise in reducing errors and shortening stays; expanding these models, with clear legislative support and insurer recognition, can yield cost savings at scale and improve access, particularly in regional settings.²⁶

The compiled evidence indicates that pharmacist prescribing can be cost-saving or cost-effective across multiple clinical domains, with benefits accruing to both payers and patients. While results are strongest for minor ailments and CVD, oncology and hospital collaborative models also show favorable economic signals. Future work should priorities rigorous, indication-specific evaluations that incorporate patient affordability, equity, and long-term system impacts to inform sustainable pharmacist prescribing policy.

Across minor ailments, Canadian economic evaluations consistently show cost savings when pharmacists assess and prescribe for conditions such as sore throat, upper respiratory tract infections, contact dermatitis and conjunctivitis.¹¹ In a cost-minimisation analysis spanning five provinces,

community-pharmacy point-of-care testing and pharmacist treatment of severe sore throat reduced costs by approximately CAD \$12–\$24 per patient, yielding annual savings estimated between CAD \$1.3 and \$2.6 million.²⁵ Complementary provincial analyses from Saskatchewan found net societal savings of roughly CAD \$0.55 million in 2014 and projected cumulative savings of about CAD \$3.5 million by year five, with a positive return on investment, reflecting both direct health-system and productivity gains.²⁵

For cardiovascular disease (CVD), modelled long-horizon analyses suggest pharmacist prescribing can be economically dominant. A 30-year Markov model linked to the Rx EACH trial estimated more than CAD \$4.4 billion in health-system savings, 576,689 QALYs gained, and over 8.9 million cardiovascular events avoided with scaled pharmacist care.²⁵

Part B Accreditation of prescriber education programs in Australia

Aim

This review aims to examine grey literature sources, including publicly available websites, that summarise and compare frameworks and accreditation standards applicable to Australian non-medical prescribing professions. The primary objective is to identify and describe the standards that explicitly govern prescribing practice across non-medical health professions authorised to prescribe medicines in Australia.

Methods

A review of publicly available grey literature was undertaken to identify accreditation standards applicable to non-medical health professions that currently prescribe medicines in Australia. Based on the methodology used by Godin et al.,³⁷ the grey literature search incorporated two search strategies: (a) using customised Google search engines to identify relevant literature pertaining to accreditation standards for non-medical prescribing professions; and (b) targeted hand-searching of government and professional organisation websites. This included professional websites, regulatory resources, and accreditation of body publications. Accreditation standards that explicitly addressed the prescribing of medicines were identified, extracted, and reviewed. Where accreditation standards referred to supporting documents such as competency statements or professional practice standards, the relevant components of those documents were incorporated into the summary.

Search strategy

Firstly, documents reporting accreditation standards for non-medical prescribing professions in Australia were identified by searching Google using a range of key words from the search strategy in Table 2. Searches in Google were conducted in a non-private browsing mode from an Australian IP address, with no manual adjustments made to regional settings. As outlined by Godin et al, it is impractical to screen all results retrieved from Google searches; therefore, the relevancy ranking capabilities of the Google search engine were relied upon. Consequently, the decision was made to screen the first 30 pages of Google search results (297 entries). The targeted-hand searches focused on key regulatory and accreditation sources, including profession-specific accreditation bodies and Ahpra. Ahpra's database of Approved Programs of Study was searched, and all programs enabling endorsed or extended non-medical prescribing functions were manually transcribed into a structured Excel database.

Table 2 Search strategy

("approved program of study" OR "prescribing endorsement" OR "non-medical prescriber" OR "extended scope" OR "extended practice") AND (physiotherapy OR pharmacy OR podiatry OR nursing OR midwifery OR optometry) AND ("accreditation" OR "standards" OR "competency" OR "framework") AND (Australia)
--

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) process was applied to the grey literature search methods. The title and source organization of the identified documents were entered into the Excel sheet, and duplicates were removed. Title and abstract screenings were undertaken by one reviewer against inclusion criteria, with an intentionally overinclusive approach. Records deemed potentially relevant progressed to full-text screening, which was also conducted by one reviewer based on the inclusion criteria. When it was unclear whether a report met the eligibility criteria during screening, it was taken for discussion with an additional reviewer for consensus. Reference lists of the accreditation standards included were searched for any other potential documents relating to prescribing endorsement standards. After screening, the grey literature was consolidated into a single Excel spreadsheet, organised by profession, title, year of publication, and URL.

Inclusion criteria

Reports were included if they reported the accreditation standards for endorsed prescribing of non-medical professionals in Australia.

Data extraction and data synthesis

Data extraction was undertaken by one reviewer and included details on profession, program title, qualification required for endorsed prescribing, Australian Qualifications Framework (AQF) level, program provider, and the accrediting body. The full text of each report was reviewed to identify accreditation standards for endorsed prescribing. Accreditation standards were mapped according to the professional accreditation authorities overseeing each profession. For example, the Australian Nursing and Midwifery Accreditation Council (ANMAC) accredits all nursing and midwifery programs in Australia, whereas the Australian Pharmacy Council (APC) oversees accreditation for all pharmacy programs. The extracted information is reported in a series of tables.

Results and Discussion

Six non-medical health professions are currently authorised to prescribe in Australia.

1. Midwifery
2. Nursing
3. Optometry
4. Pharmacy
5. Physiotherapy
6. Podiatry

Table 3 provides a summary of the non-medical professions authorised to prescribe in Australia, including of approved programs of study, their corresponding Australian Qualifications Framework (AQF) levels and the accrediting body for each profession's qualifications.

Table 3 Non-medical professions authorised to prescribe in Australia

Profession	Approved Program(s) of Study (e.g., degree type)	Australian Qualification Framework (AQF) Level	Accreditation Body
Midwifery	Bachelor of Midwifery	7	Australian Nursing and Midwifery Accreditation Council ³⁸
	Bachelor of Midwifery Honours	8	
	Graduate Certificate in Midwifery Screening, Diagnostics and Prescribing	8	
	Graduate Certificate in Midwifery Diagnostics and Prescribing	8	
	Graduate Certificate in Prescribing for Midwives	8	
	Master of Midwifery Practice (Advanced Clinical) with Medication Endorsement	9	
	Master of Midwifery	9	
	Bachelor of Nursing	7	

Profession	Approved Program(s) of Study (e.g., degree type)	Australian Qualification Framework (AQF) Level	Accreditation Body
Nursing (including registered nurses and nurse practitioners)	Bachelor of Nursing (Honours)	8	Australian Nursing and Midwifery Accreditation Council ³⁹⁻⁴¹
	Master of Nursing (Nurse Practitioner)	9	
	Master of Advanced Nursing Practice (Nurse Practitioner)	9	
	Master of Nurse Practitioner	9	
	Specialist Certificate in Registered Nurse Prescribing	Non-AQF*	
Optometry	Bachelor of Vision Science & Master of Optometry	7/9	Optometry Council of Australia and New Zealand ^{42,43}
	Graduate Certificate in Ocular Therapeutics	8	
	Doctor of Optometry	9	
Pharmacy	Bachelor of Pharmacy (Honours)	8	Australian Pharmacy Council ⁴⁴
	Master of Pharmacy	9	
	Doctor of Pharmacy	9	
Physiotherapy	Bachelor of Physiotherapy	7	Australian Physiotherapy Council ⁴⁵
	Bachelor of Physiotherapy (Honours)	8	
	Master of Physiotherapy Practice	9	
	Doctor of Physiotherapy Practice	9	
Podiatry	Bachelor of Podiatry	7	Podiatry Accreditation Committee ⁴⁶⁻⁴⁸
	Bachelor of Podiatry (Honours)	8	
	Bachelor of Podiatric Medicine (Honours)	8	
	Bachelor of Podiatric Practice (Honours)	8	
	Doctor of Podiatric Medicine	9	

Appendix 6 specifies whether endorsed prescribing is incorporated within entry-level programs or requires additional post-qualification training. Optometry and podiatry are the only professions in which prescribing competencies are embedded in the initial qualification, enabling newly registered practitioners to obtain scheduled medicines endorsement upon registration, provided they meet the Board's requirements (e.g., completion of an approved qualification in ocular or podiatric therapeutics

clinically supervised practice, and compliance with relevant registration standards).^{42,43,49–51} Physiotherapy endorsed prescribing is not included in entry-level programs and is currently only permitted in Queensland through an extended practice authority, requiring completion of an AQF Level 8 qualification.⁵² The program must include aspects of prescribing and be aligned to the NPCF, and they must practice supervised under an authorised prescriber. For the remaining professions, midwifery, nursing, and pharmacy, prescribing is not part of entry-level degrees and individuals must complete additional Board-approved or accredited training to become endorsed prescribers.^{44,53}

Table 4 outlines whether information relating to prescribing endorsement is embedded within each profession's entry-level accreditation standards or published in separate regulatory documents. For most professions, midwifery, nursing, pharmacy, physiotherapy and podiatry, prescribing requirements are contained in standalone documents such as registration standards, accreditation standards for prescribing programs, or extended practice authorities. Optometry is the only profession in which prescribing competencies are embedded directly within the entry level accreditation standards, as outlined in the OCANZ Accreditation Standards and Evidence Guide.⁴² The specific document containing prescribing endorsement requirements for each profession is also provided in Table 4.

Table 4 Non-medical health professional prescribing accreditation standards

Profession	Information on prescribing endorsement separate or embedded in entry-level accreditation standards?	Document containing information on prescribing endorsement
Midwifery	Separate	Nursing and Midwifery Board of Australia. Registration Standard: Endorsement for Scheduled Medicines for Midwives ⁵⁴
Nursing	Separate	Nursing and Midwifery Board of Australia. Registration Standard: Endorsement for scheduled medicines-designated registered nurse prescriber ⁵³
	Separate	Nursing and Midwifery Board of Australia. Registration Standard: Endorsement as a Nurse Practitioner ⁵⁵
Optometry	Embedded	Optometry Council of Australia and New Zealand: Accreditation Standards and Evidence Guide for Entry-Level Optometry Programs ⁴²
Pharmacy	Separate	Australian Pharmacy Council: Accreditation Standards for Pharmacist Prescriber Education Programs ⁴⁴
Physiotherapy	Separate	Extended Practice Authority 'Physiotherapists' ^{52*}
Podiatry	Separate	Accreditation Standards: Programs for registered podiatrists and podiatric surgeons addressing the requirements for endorsement of registration in relation to scheduled medicines (ESM programs) ⁴⁶

*Only approved in Queensland

Appendix 7 outlines the Domains relating to prescribing for non-medical health professions within prescribing accreditation standards. Findings across the accreditation standards for non-medical health professions highlight that all non-medical prescribing professions, except midwifery and physiotherapy, explicitly reference the National Prescribing Competency Framework within their accreditation standards. For nursing, optometry, pharmacy, and podiatry, the framework is embedded as a requirement to guide program content, assessment, and demonstration of prescribing competency. The table also summarises the domains contained within each profession's endorsed prescribing accreditation standards, along with the associated domain statements. Because nurse practitioners and midwives share the same accreditation domains for prescribing, these have been reported once under midwifery. Physiotherapy does not currently have a dedicated prescribing accreditation standard, nor are prescribing requirements embedded within entry-level accreditation standards. This reflects the fact that physiotherapy prescribing is a recent development, introduced only in Queensland under an extended practice authority. As such, no formal accreditation domains relating specifically to prescribing exist for physiotherapy at this time.⁵²

Table 5 summarises the scope of practice (SOP) for non-medical health professionals authorised to prescribe medicines in Australia. It outlines the specific prescribing authorities conferred to each profession, including the schedules of medicines they are permitted to administer, obtain, possess, prescribe, supply or use, and the legislative or jurisdictional conditions under which this authority is granted. The table highlights the variability in prescribing SOP across professions and states, with some, such as nurse practitioners, pharmacist prescribers and physiotherapists, having state- or context-specific prescribing conditions, while others, such as optometrists, midwives and podiatrists have nationally defined prescribing endorsements aligned to their professional roles and relevant medicines legislation.

In April 2026, the Pharmacy Board of Australia commenced [public consultation on a draft Endorsement](#) for scheduled medicines for pharmacists following recommendation from Health Ministers' meeting in June 2025. The consultation documents include:¹

- i. draft Registration standard: Endorsement for scheduled medicines
- ii. draft Guidelines: Endorsement for scheduled medicines

This will inform the review of the 2023 Accreditation Standards for Pharmacist Prescriber Education Programs (the Standards),⁴⁴ which the Board has engaged APC to undertake to ensure that the quality and consistency of training and education supports the endorsed pathways.

Table 5 Non-medical health professions prescribing scope of practice

Profession	Healthcare professional	Prescribing SOP
Midwifery	Midwife prescriber	An endorsed midwife qualified to prescribe can prescribe schedule 2, 3, 4 and 8 medicines and to provide associated services required for midwifery practice in accordance with relevant state and territory legislation. ⁵⁴
Nursing	Registered Nurse Prescriber	Endorsed as qualified to administer, obtain, possess, prescribe, supply and/or use Schedule 2, 3, 4 and 8 medicines for the purposes of prescribing as a designated registered nurse prescriber with an authorised health practitioner within the scope of registered nurse practice. ^{53,56}
	Nurse Practitioner	Prescribing authority is conferred under the relevant drugs and poisons legislation of the Australian state or territory in which the NP practises. ^{55,57} The conditions under which each authority is granted, and the scope of that authority depend on the requirements of the specific legislation in each state or territory. ^{55,57} These may range from a blanket authority limited by the NP's scope of practice to a prescribing authority based on a formulary or protocol, or related to a specific context of practice. ^{55,57} NPs must work within the relevant drugs and poisons legislation in their state or territory. ^{55,57}

Profession	Healthcare professional	Prescribing SOP
Optometry	Optometrist	<p>An endorsed optometrist is qualified to administer, obtain, possess, prescribe, supply or use medicines, in accordance with relevant state and territory legislation, in the following classes: ⁵⁸ topical schedule 2, 3 or 4 medicines for the purposes of the practice of optometry.</p> <p>The endorsement relates to relevant schedule 2, 3 or 4 medicine pursuant to section 52D of the Therapeutic Goods Act 1989 (Cth).⁵⁸</p>
Pharmacy	Pharmacist Prescriber	<p>In Australia, trained pharmacists can prescribe certain medications for common, acute conditions like uncomplicated urinary tract infections (UTIs), skin conditions, and hormonal contraception, but prescribing authority varies by state and is subject to specific protocols.^{5,44} Pharmacists must complete accredited postgraduate training to be eligible for expanded prescribing services, and these services are available in varying capacities across states, with some programs permanent and others in pilot phases.^{5,44} Pharmacists are permitted to prescribe schedule 2, 3 and select schedule 4 medicines for certain approved conditions as outlined by each state and territory.^{5,44}</p>
Physiotherapy	Physiotherapist	<p>In Queensland, physiotherapists may prescribe from an approved list of medicines (drug-formulary). Under the Extended Practice Authority, this includes Schedule 2, 3, 4 and 8 medicines for the purposes of prescribing or administering a medicine within the scope of practice as a physiotherapist.⁵²</p> <p>A physiotherapist working in a public sector urgent care setting who has completed training in accordance with Appendix 1 and who has been credentialed to prescribe and administer by the Hospital and Health Service in which they are working, may prescribe and administer a medicine listed in Appendix 2, column 1 only: a) by a route for the medicine stated in Appendix 2, column 2; and b) subject to the conditions for the medicine stated in Appendix 2, column 3 (if any).⁵² Before prescribing or administering a medicine listed in Appendix 2, the physiotherapist must be familiar with the contra-indication(s) and known side effects of the medicine and advise the patient accordingly.⁵²</p>
Podiatry	Podiatrist	<p>Endorsement of registration identifies practitioners with additional qualifications and specific expertise. A podiatrist or podiatric surgeon whose registration is endorsed for scheduled medicines under Section 94 of the National Law is qualified to administer, obtain, possess, prescribe, sell, supply or use Schedule 2, 3, 4 or 8 medicines for the treatment of podiatric conditions, as listed in the National podiatry scheduled medicines list and in accordance with the relevant legislation and regulations in each state or territory where they practise.</p>

Part C Accreditation standards for international pharmacist prescribing programs

Aim

This review comprises an environmental scan of international accreditation standards that enable pharmacists to register as pharmacist prescribers, as defined by the regulatory, legislative, and professional practice requirements of each jurisdiction.

Methods

A review of publicly available grey literature was undertaken to identify international accreditation standards that enable pharmacists to obtain prescribing authority. Sources included professional and regulatory websites, accreditation of body publications, government documents, and prescribing competency frameworks from jurisdictions where pharmacist prescribing is authorised. To maintain consistency in regulatory comparability, the search was restricted to anglophone countries within the Anglosphere that have established pharmacist prescribing pathways, specifically Canada, New Zealand (NZ), the United Kingdom (UK) and the United States of America (US). Documents were included if they described accreditation standards, educational requirements, or regulatory expectations that govern pharmacist prescribing with that jurisdiction.

Where accreditation standards referred to supporting documents such as prescribing competency statements, clinical governance standards or professional practice standards, relevant prescribing-related components of those documents were incorporated into the summary.

Search strategy

Following the methodology outlined by Godin et al.³⁷ the grey literature search used two complementary search strategies: (a) customized Google searches to identify relevant literature pertaining to prescribing accreditation standards for pharmacists; and (b) targeted hand-searching of government and professional organisation websites.³⁷ Google searches were conducted using a combination of key terms related to pharmacist prescribing accreditation (Table 6) and were conducted in a non-private browsing mode from an Australian IP address, with no manual adjustments made to regional settings. As outlined by Godin et al, it is impractical to screen all results retrieved from Google searches; therefore, the relevancy ranking capabilities of the Google search engine were relied upon. Consequently, the decision was made to screen the first 29 pages of the Google search results (286 entries). The targeted-hand searches focused on key international organisations, including national pharmacy regulators (e.g., General Pharmaceutical Council, UK; Pharmacy Council of New Zealand; and provincial regulatory authorities in Canada), accreditation bodies (e.g., UK Quality Assurance Agency, Canadian Council for Accreditation of pharmacy programs), government health departments (e.g., NHS England, Canadian provincial ministries) and professional associations (e.g., Royal Pharmaceutical Society, Pharmaceutical Society of Ireland). Where pharmacist prescribing exists within collaborative, supplementary, or independent models, associated accreditation or training requirements were also captured.

Table 6 Search strategy

("approved program of study" OR "prescribing endorsement" OR "pharmacist prescriber" OR "extended scope" OR "extended practice") AND (pharmacy OR pharmacist) AND ("accreditation" OR "standards" OR "competency" OR "framework") AND (Canada OR United Kingdom OR United States of America OR New Zealand)

Article selection

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) process was applied to the grey literature search methods. Titles and sources of retrieved documents were recorded in an Excel spreadsheet, and duplicates were removed. Title and abstract screening were undertaken by one reviewer against inclusion criteria, with an intentionally overinclusive approach. Records deemed potentially relevant progressed to full-text screening, which was also conducted by one reviewer based on the inclusion criteria. When it was unclear whether a report met the eligibility criteria during screening, it was taken for discussion with an additional reviewer for consensus. Reference lists of the accreditation standards included were searched for any other potential documents relating to prescribing endorsement standards. After screening, the grey literature sources were consolidated into a single Excel spreadsheet organised by country or jurisdiction, regulatory authority, accreditation body, prescribing model (independent, collaborative, supplementary), educational or competency requirements, legislative requirements, URL and year of publication.

Inclusion criteria

Reports were included if they: (a) described accreditation standards, educational requirements, or competency frameworks relevant to pharmacist prescribing; and (b) originated from Anglosphere countries where pharmacists are authorised to prescribe.

Data extraction and data synthesis

Data extraction was undertaken by one reviewer and included details on jurisdiction/country, prescribing model (independent, collaborative, supplementary), accreditation standards governing prescribing programs, competency or training frameworks referenced, entry requirements for prescribing authority, and regulatory or legislative conditions. The full text of each report was reviewed to identify accreditation standards for endorsed prescribing. Extracted information was summarised narratively and tabulated.

Results and Discussion

Table 7 summarises the prescribing requirements and authorised scope of practice for pharmacists across Canada, New Zealand, the United Kingdom and the United States of America. Considerable variation exists across jurisdictions in both the educational pathways required to obtain prescribing authority and the breadth of prescribing activities permitted.

Table 7 International educational requirements and conditions/medications for pharmacist prescribing

Country	Requirement to prescribe	What and where can pharmacists prescribe
Canada	Currently in Canada, there are no specific university based postgraduate prescribing courses as their regulatory bodies regard a certain level of prescribing as a standard qualification for graduates of pharmacy programmes. ^{59,60} However, in some provinces, there are requirements for continuing education modules to provide prescribing for minor ailments that may include ethical, legal, professional or clinical aspects. ^{59,60}	<p>Scope varies considerably by province. ⁵⁹</p> <p>For example, all pharmacists registered on the Alberta College of Pharmacy clinical register may prescribe narcotics, controlled substances, and targeted drugs under defined legislative exemptions. ⁵⁹</p> <p>In Ontario, pharmacists may prescribe in emergencies, for smoking cessation, and for a range of minor ailments, with ongoing reforms expanding this scope to include additional ailments, vaccinations, and point-of-care testing. ⁵⁹</p>
New Zealand	Completion of accredited postgraduate prescriber education program comprising the equivalent of 600 hours of study, half of which must be practical learning. ⁶¹	<p>Pharmacists prescribe from an approved list of medicines as defined in the <i>Medicines (Designated Pharmacist Prescribers) Regulations</i>. ⁶² Although the regulations specify the classes of medicines that may be prescribed, the practical scope of prescribing is shaped by the pharmacist prescriber's area of clinical practice. ^{61,62} Pharmacist prescribers commonly work within defined therapeutic areas or generalist roles, and their prescribing reflects the medicines relevant to those contexts. ^{61,62} Examples include prescribing with specialty services such as renal, paediatrics, aged care, oncology, HIV, mental health, respiratory medicine, diabetes, cardiology, stroke or subspecialties (e.g., heart failure). ^{61,62} Generalist pharmacist prescribers, such as those working in primary care, ambulatory care, emergency departments, or aged-care facilities, may prescribe across a broad range of conditions including chronic disease management, polypharmacy, gout and diabetes. ^{61,62}</p> <p>Prescribing commonly occurs within collaborative team settings in which providers share clinical information and manage patient care jointly. ^{61,62}</p>
United Kingdom	<p>From 2026 independent prescribing education and training delivered at master's level (equivalent to Bachelors in Australia), as defined in UK national qualification frameworks entitles individuals to practice as a prescriber from the date of registration. ^{63,64}</p> <p>Conversely, pharmacists who graduated before 2026 are required to complete a postgraduate prescribing course to become qualified as an accredited independent prescribing. ^{63,65} The program typically requires six months of part-time study, combining face-to-face teaching (often one day per week) with self-directed learning. ^{63,65}</p>	<p>A pharmacist independent prescriber may prescribe autonomously for any condition within their clinical competence. ⁶⁶ This currently excludes three controlled drugs to treat addiction. ⁶⁶</p>
United States of America	Varies by state; may include training modules, supervised practice, or certification through mechanisms such as the Board of Pharmacy Specialties. ⁶⁷	<p>Scope varies widely. ^{67,68} Pharmacists prescribe under state-specific protocols or collaborative practice agreements. ^{67,68} State-wide protocols often cover public-health-focused prescribing, such as smoking cessation, contraception, or vaccinations. ⁶⁷</p>

Canada

In Canada, pharmacist prescribing is not granted through entry-level (Baccalaureate or PharmD) accreditation standards, prescribing authority is instead regulated at the provincial level, with regulators determining the scope of pharmacist prescribing following graduation from an accredited first professional degree. The Canadian Council for Accreditation of Pharmacy Programs (CCAPP) accredits all entry-to-practice Baccalaureate and Doctor of Pharmacy (PharmD) programs, ensuring graduates possess the competencies required for contemporary pharmacist practice across the country.^{69,70}

Across both CCAPP documents, *Accreditation Standards for Canadian First Professional Degree in Pharmacy Programs (2018, revised 2020)* and *Accreditation Standards for Canadian Educational Programs Leading to the Doctor of Pharmacy (2023)*, prescribing-related competencies appear in multiple domains.^{69,70} The standards emphasise the pharmacist's role as a medication-therapy expert, responsible for assessment, clinical decision-making, planning and monitoring therapy, documentation, collaboration, and patient-centred care.^{69,70} These elements support the competencies necessary for prescribing. Both sets of standards require that graduates demonstrate competence in the pharmacist patient care process, which includes collecting information, assessing therapy, planning care, implementing decisions, following up/evaluating outcomes, communicating with patients and teams, and documenting care.^{69,70}

Curriculum requirements mandate depth and breadth across advanced clinical sciences, pathophysiology, pharmacotherapeutics, evidence-based practice, point-of-care testing, diagnostic reasoning, physical assessment, and prescriptive decision-making.^{69,70} Both standards explicitly list prescribing-related practice skills such as patient assessment, outcomes monitoring, shared decision-making, medication therapy management, and prescriptive decision-making under the practice-skills curriculum.^{69,70} Experiential learning is also central. Both sets of standards require extensive direct patient-care practice experiences, including primary care, acute care, and exposure to patients with chronic and acute conditions.^{69,70} These placements must allow students to participate meaningfully in clinical decision-making, manage real medication regimens, and exercise therapeutic reasoning.^{69,70}

Interprofessional practice, communication, and collaboration standards reinforce the requirement that pharmacists be able to function within multidisciplinary teams.^{69,70} Educational outcomes are explicitly aligned with national professional competency frameworks, including the NAPRA Professional Competencies for Canadian Pharmacists at Entry to Practice. Although Canada does not accredit specific postgraduate pharmacist prescribing programs, provincial regulators confer prescribing authority based on these entry-level competencies and additional jurisdiction-specific requirements.

New Zealand

In New Zealand, prescribing is not embedded within entry-level pharmacy programs; instead, pharmacists must obtain prescribing authority through a separate postgraduate pharmacist prescriber qualification. Entry-level BPharm programs are accredited against the *Aotearoa New Zealand Accreditation Standards for Pharmacy Programmes*, which apply across all scopes of practice, but do not themselves confer prescribing capability.⁷¹ These entry-level standards ensure graduates can practise safely as intern pharmacists and, subsequently, as pharmacists, by meeting requirements in areas such as Te Tiriti o Waitangi and hauora Māori, public and patient safety, cultural safety, academic governance, and clinical and experiential learning. Although these standards emphasise legal, ethical, and clinical decision-making relevant to medicines optimisation, they do not include independent prescribing training.

Pharmacist prescribing in New Zealand is instead obtained through a dedicated postgraduate pharmacist prescriber program, accredited and regulated under the *Pharmacist Prescriber Competence Standards*.⁷² These prescribing-specific standards define the capabilities required for pharmacist prescribers, including advanced clinical assessment, diagnostic reasoning, formulation of treatment plans, prescribing within collaborative care agreements, safe and effective monitoring, culturally safe practice, and accountability for clinical decisions.⁷² Prescriber training must demonstrate how learners achieve these competencies, and assessment must verify competence in

complex clinical reasoning, interpretation of diagnostic information, shared decision making, and integration of Māori health perspectives into prescribing practice.⁷² These postgraduate standards also require robust governance structures, supervised clinical placements, direct patient care activities, and demonstration of prescribing autonomy within the prescriber's designated therapeutic area.⁷² The Pharmacist Prescriber Competence Standards note that pharmacists may practise as prescribers in a broad range of specialty and generalist roles, including primary care, emergency departments, aged care, surgical pre-admission, anticoagulation management, antimicrobial stewardship, and complex polypharmacy.⁷²

Consistent with this framework, the University of Auckland's Postgraduate Certificate in Clinical Pharmacy was purpose-built to align with the Pharmacy Council's prescriber competencies.⁷² Its curriculum draws on the UK's model of prescribing education, particularly the clinical assessment and diagnostic components embedded in the UK's initial-education and independent-prescriber standards, but is adapted to the NZ regulatory context, incorporating local requirements for example Te Tiriti responsiveness, hauora Māori, collaborative practice, and safe, culturally appropriate prescribing.

United Kingdom

In the United Kingdom, prescribing is addressed comprehensively across both entry-level and postgraduate accreditation standards. The General Pharmaceutical Council (GPhC) embeds prescribing capability within initial pharmacy education through the *Standards for the Initial Education and Training of Pharmacists*, which require prescribing knowledge and skills to be progressively developed throughout the MPharm program and consolidated during the foundation training year.⁶⁴ These standards integrate diagnostic reasoning, clinical assessment, therapeutic decision-making, legal and ethical aspects of prescribing, and the governance and accountability responsibilities associated with prescribing practice. Prescribing learning outcomes are embedded across all four core domains and culminate in supervised, practice-based prescribing training.⁶⁴ Trainee pharmacists must complete a minimum of 90 hours of supervised prescribing-related practice under the oversight of a designated prescribing practitioner, enabling graduates from 2026 onward to qualify as independent prescribers at the point of registration.⁶⁴ The standards emphasise competence in history taking, interpretation of clinical data, risk stratification, shared decision making, monitoring and reviewing treatment, deprescribing, and safe documentation, ensuring that prescribing becomes an integral part of the pharmacist's initial scope of practice.⁶⁴

For the existing pharmacist workforce, prescribing remains a post-registration qualification and is governed by the GPhC's.⁶⁵ These standards define the accreditation requirements for standalone independent prescribing programs, specifying entry criteria (including registration as a pharmacist and relevant UK practice experience), course structure, governance arrangements, staffing, and quality assurance expectations.⁶⁵ The standards outline detailed learning outcomes that prescribers must achieve, covering person-centred consultations, clinical reasoning, application of clinical therapeutics, diagnostic skills, management of complex patients, prescribing within legal and regulatory frameworks, and professional accountability.⁶⁵ Training comprises at least 26 days of structured learning alongside a minimum of 90 hours of supervised clinical practice with a designated prescribing practitioner, who must meet specific experience requirements.⁶⁵ Assessment standards require learners to demonstrate safe, effective, and evidence-based prescribing without compensation or condonation.⁶⁵

United States

In the US, prescribing authority for pharmacists is regulated at the state level and is commonly enacted through collaborative practice agreements, statewide protocols, or public-health prescribing authorities rather than a national endorsement system. Accordingly, the Accreditation Council for Pharmacy Education (ACPE) *Standards 2025* function as the foundational prescribing-relevant accreditation standards for all entry-level Doctor of Pharmacy (PharmD) programs.⁷³ The Standards require graduates to demonstrate competencies in therapeutic decision-making, person-centred care, clinical assessment, and evidence-based pharmacotherapy, with explicit expectations that students can interpret clinical data, diagnose and manage common conditions, and contribute to prescribing decisions within interprofessional teams.⁷³ Prescribing-related requirements appear throughout the

curriculum standards, including mandated content on “medication prescribing, preparation, distribution, dispensing, and administration,” and pharmacotherapy instruction that encompasses diagnosing, prescribing, and developing therapeutic plans across acute and chronic disease states.⁷³ Experiential training further reinforces these capabilities by requiring participation in therapeutic decision-making during both introductory and advanced practice experiences, consistent with US collaborative prescribing models.⁷³ Although ACPE does not accredit postgraduate prescriber qualifications, the Standards ensure all US pharmacy graduates attain baseline competencies that support prescribing functions permitted under state legislation.⁷³

Table 8 summarises the jurisdictions that permit pharmacist prescribing and details the associated accreditation standards. For Canada, NZ, the UK, and the US, these standards are examined and categorised according to whether they apply to initial university pharmacy education, intern training or to postgraduate prescribing programs.

Table 8 Educational requirements for pharmacist prescribing Authority

Country	Initial registerable pharmacy degree	Intern period	Post graduate	Right to prescribe at:
United Kingdom: Graduation pre 2026	No	No	Yes	National in own area of competency
United Kingdom: Graduation post 2026	Yes	Yes	Yes	National in own area of competency
Canada	No	No	Yes	Provincial courses in various conditions
New Zealand	No	No	Yes	National in own area of competency
United States of America	No	No	Yes	State level for different conditions/medicines

International Models of Prescribing

Three overarching models describe how pharmacists obtain prescribing authority internationally (Table 8). Model A refers to jurisdictions where prescribing rights are embedded within initial pharmacy education and training; once pharmacists complete their entry-level degree and mandated internship or foundation year, they are eligible to prescribe upon registration. Model B applies where entry-level programs develop clinical and therapeutic competencies relevant to prescribing but do not confer prescribing authority, requiring registered pharmacists to complete a nationally accredited postgraduate prescribing qualification to obtain prescribing rights. Model C is similar to Model B in that initial training does not grant prescribing authority; however, prescribing rights are contingent on completing jurisdiction-specific (state or provincial) training or certification, determined by local legislation rather than a national prescribing qualification.

In the United Kingdom, both Model A (for pharmacists graduating from 2026 onwards, who qualify as independent prescribers at registration) and Model B (for the existing workforce requiring a postgraduate independent prescribing program) operate concurrently. In Canada and New Zealand, prescribing follows Model B, whereby entry-level programs provide the foundational competencies, but pharmacists must undertake an additional accredited prescribing qualification to gain prescribing authority (Table 9).

Table 9 Entry-level, Intern-level, and Postgraduate pharmacist prescribing accreditation standards

Country	Title of document	Organisation	What support learning does the prescribing accreditation apply to (i.e., entry-level program, intern-level program, post-graduate program)	Standards for pharmacist prescribing
Canada	Accreditation standards for Canadian first professional degree in Bachelor pharmacy programs ⁶⁹	The Canadian Council for Accreditation of Pharmacy Programs	Entry-level program	Standards for provincial level (unavailable)
	Accreditation standards for Canadian Educational Programs Leading to the Doctor of Pharmacy (PHARM.D.) Degree ⁷⁰	The Canadian Council for Accreditation of Pharmacy Programs	Entry-level program	Standards for provincial level (unavailable)
New Zealand*	Aotearoa New Zealand Competence Standards for pharmacist prescribers ⁷²	Pharmacy Council of New Zealand	Post-Graduate program	Standards (competency standards for pharmacist prescriber)
United Kingdom	Standards for the initial education and training of pharmacists ⁶⁴	General Pharmaceutical Council	Entry-level & Intern-level program	Standards are included within the degree and Intern level programs
	Standards for the education and training of pharmacist independent prescribers ⁶⁵	General Pharmaceutical Council	Postgraduate program	Standards for postgraduate program
United States of America	Accreditation Standards and key elements for the professional program in pharmacy leading to the Doctor of Pharmacy Degree ⁷³	Accreditation Council for Pharmacy Education	Entry-level program	Standards for provincial level (unavailable)

* The University of Auckland's Postgraduate Certificate in Clinical Pharmacy in Prescribing was created to align with the competency standards set by the Pharmacy Council of New Zealand. The program's curriculum was based on the UK's competency requirements and adapted to meet those of the Pharmacy Council of New Zealand, with a key focus on practical, supervised prescribing experience.

References

1. Pharmacy Board of Australia. Public consultation Endorsement for scheduled medicines for pharmacists. Published online 2026. Accessed April 21, 2026. <https://www.pharmacyboard.gov.au/News/Current-Consultations.aspx>
2. Pharmacy Board of Australia. Development of a proposal for an endorsement for scheduled medicines for pharmacists. Published online September 17, 2025. Accessed September 24, 2025. <https://www.pharmacyboard.gov.au/News/2025-09-17-Endorsement-for-scheduled-medicines.aspx>
3. Department of Health, Disability and Ageing. National Prescribing Competencies Framework- Embedding quality use of medicines into practice (3rd edition). Published online September 2025. Accessed April 8, 2026. <https://www.ahpra.gov.au/About-Ahpra/Our-engagement-activities/National-Prescribing-Competencies-Framework.aspx>
4. NPS MedicineWise. Prescribing Competencies Framework: embedding quality use of medicines into practice (2nd Edition). Published online 2021. Accessed April 22, 2025. <https://www.nps.org.au/prescribing-competencies-framework>
5. Pharmacy Guild of Australia. The Role of Community Pharmacy in Primary Health Care. Published online 2025. Accessed November 29, 2025. <https://www.guild.org.au/programs/scope-of-practice>
6. Therapeutic Goods Administration. Therapeutic Goods (Poisons Standard – October 2025) Instrument 2025 The Poisons Standard (SUSMP). Published online 2025.
7. Australian Pharmacy Council. Accreditation Standards for Pharmacist Prescriber Education Programs: Environmental Scan & Literature Review. Published online February 2023. <https://www.pharmacycouncil.org.au/Environmental-scan-literature-review.pdf>
8. Tonna AP, Stewart D, West B, McCaig D. Pharmacist prescribing in the UK – a literature review of current practice and research. *J Clin Pharm Ther*. 2007;32(6):545-556. doi:10.1111/j.1365-2710.2007.00867.x
9. Hoti K. An expanded prescribing role for pharmacists – an Australian perspective. *Australas Med J*. 2011;4(4):236-242. doi:10.4066/AMJ.2011.694
10. Jordan M, Mullan J, Stewart A, Chen TF. A pharmacist integrated into a general practice in Australia: an evolving model of care in medicines optimization. *Int J Pharm Pract*. 2023;31(6):608-616. doi:10.1093/ijpp/riad061
11. Karim L, McIntosh T, Jebara T, Cunningham S. A scoping review of evidence of community pharmacist independent prescribing for common clinical conditions: beyond protocol prescribing. *Int J Pharm Pract*. 2025;33(6):597-612. doi:10.1093/ijpp/riaf063
12. Mesbahi Z, Piquer-Martinez C, Benrimoj SI, et al. Pharmacists as independent prescribers in community pharmacy: A scoping review. *Res Soc Adm Pharm*. 2025;21(3):142-153. doi:10.1016/j.sapharm.2024.12.008
13. Royal Pharmaceutical Society (RPS). A Competency Framework for All Prescribers. Published online September 2021. <https://www.rcpharm.org/professional-standards/a-competency-framework-for-all-prescribers/>
14. Alhawas S, Langran C, Hall K. Enablers and barriers to pharmacists and nurses becoming independent prescribers. *J Prescr Pract*. 2024;6(1):27-41. doi:10.12968/jprp.2024.6.1.27
15. Clemens S, Eisl-Raudaschl L, Pachmayr J, Rose O. Community Pharmacist Prescribing: Roles and Competencies—A Systematic Review and Implications. *Pharmacy*. 2025;13(6):157. doi:10.3390/pharmacy13060157
16. Emmerton L, Marriott J, Bessell T, Nissen L, Dean L. Pharmacists and prescribing rights: review of international developments. *J Pharm Pharm Sci Publ Can Soc Pharm Sci Soc Can Sci Pharm*. 2005;8(2):217-225.
17. Brennan B, Strawbridge J, Stewart D, et al. An umbrella review of pharmacist prescribing: stakeholders' views and impact on patient outcomes. *Int J Pharm Pract*. 2024;32(Supplement_1):i7-i7. doi:10.1093/ijpp/riae013.009
18. Australian Government Department of Health and Aged Care. About prescriptions. Published online March 5, 2024. Accessed November 21, 2025. <https://www.health.gov.au/topics/medicines/about-prescriptions>
19. World Health Organization. Health and Care Workers: Protect. Invest. Together. Technical Brief. Published online 2023. <https://cdn.who.int/media/docs/default-source/universal-health-coverage/who-uhl-technical-brief---health-and-care-workers.pdf>
20. Cochrane Handbook Editorial Team. Chapter V: Overviews of Reviews. In: Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, Welch V A W, editors *Cochrane Handbook for Systematic Reviews of Interventions*, version 6.5 (updated August 2024). Published online 2024.
21. Alsaeed BA, Hall J, Keers RN. Exploring non-medical prescribing for patients with mental illness: a scoping review. *BMC Psychiatry*. 2025;25(1):504. doi:10.1186/s12888-025-06938-6
22. Alshammari MK, Alotaibi NM, Al Suroor SN, et al. Global Advancement in Pharmacy Services for Mental Health: A Review for Evidence-Based Practices. *Healthcare*. 2023;11(8):1082. doi:10.3390/healthcare11081082

23. Johnson L, Khattab S, Strawbridge J, et al. Pharmacist prescribing in cancer services: A scoping review. *Res Soc Adm Pharm.* 2025;21(12):951-974. doi:10.1016/j.sapharm.2025.05.004
24. Atey TM, Peterson GM, Salahudeen MS, Bereznicki LR, Wimmer BC. Impact of pharmacist interventions provided in the emergency department on quality use of medicines: a systematic review and meta-analysis. *Emerg Med J.* 2023;40(2):120-127. doi:10.1136/emermed-2021-211660
25. Piraux A, Bonnan D, Ramond-Roquin A, Faure S. The community pharmacist as an independent prescriber: A scoping review. *J Am Pharm Assoc.* 2024;64(6):102192. doi:10.1016/j.japh.2024.102192
26. Amer H, Marotti S, Widagdo I, Goldsworthy S, Johnson J, Kalisch Ellett L. Collaborative pharmacist prescribing models in Australian hospitals: A scoping study. *Res Soc Adm Pharm.* 2026;22(2):185-194. doi:10.1016/j.sapharm.2025.09.006
27. Swart A, Benrimoj SI, Dineen-Griffin S. The clinical and economic evidence of the management of urinary tract infections by community pharmacists in women aged 16 to 65 years: a systematic review. *Int J Clin Pharm.* 2024;46(3):574-589. doi:10.1007/s11096-023-01679-6
28. Walpola RL, Issakhany D, Gisev N, Hopkins RE. The accessibility of pharmacist prescribing and impacts on medicines access: A systematic review. *Res Soc Adm Pharm.* 2024;20(5):475-486. doi:10.1016/j.sapharm.2024.01.006
29. Ahmed S, Kung J, Chiang V, et al. Mapping the U.S. literature on pharmacists prescribing to initiate medications: A scoping review of terminology, responsibilities, and alignment with international models. *J Am Pharm Assoc.* 2026;66(1):102952. doi:10.1016/j.japh.2025.102952
30. Babashahi S, Carey N, Jani Y, Hart K, Hounsome N. Costs, consequences and value for money in non-medical prescribing: a scoping review. *BMJ Open.* 2023;13(5):e067907. doi:10.1136/bmjopen-2022-067907
31. Akintunde AO, Karaxhija A, Laaksonen R. Effects of pharmacist prescribing on health-related outcomes in secondary care compared with medical prescribing or no treatment: A systematic review. *Res Soc Adm Pharm.* 2026;22(2):254-262. doi:10.1016/j.sapharm.2025.11.003
32. Motlohi NF, Wiafe E, Mensah KB, Padayachee N, Petrus R, Bangalee V. A systematic review of the role of community pharmacists in the prevention and control of cardiovascular diseases: the perceptions of patients. *Syst Rev.* 2023;12(1):160. doi:10.1186/s13643-023-02338-7
33. Rawal S, Osaie SP, Cobran EK, Albert A, Young HN. Pharmacists' naloxone services beyond community pharmacy settings: A systematic review. *Res Soc Adm Pharm.* 2023;19(2):243-265. doi:10.1016/j.sapharm.2022.09.002
34. Bergin KM, Black EK, Murphy AL, Kelly DV, Wilby KJ. Pharmacists' acceptability of provision of sexually transmitted infection services: a scoping review. *Int J Pharm Pract.* 2025;33(4):369-377. doi:10.1093/ijpp/riaf039
35. McLachlan JC, Auta A, Ajiboye A. Assessment and evaluation of prescribing competences: A systematic review and recommendations. *Br J Clin Pharmacol.* 2025;91(8):2119-2137. doi:10.1111/bcp.16033
36. Ali ZZ, Skouteris H, Pirota S, et al. Interventions to Expand Community Pharmacists' Scope of Practice. *Pharmacy.* 2024;12(3):95. doi:10.3390/pharmacy12030095
37. Godin K, Stapleton J, Kirkpatrick SI, Hanning RM, Leatherdale ST. Applying systematic review search methods to the grey literature: a case study examining guidelines for school-based breakfast programs in Canada. *Syst Rev.* 2015;4(1):138. doi:10.1186/s13643-015-0125-0
38. Australian Nursing & Midwifery Accreditation Council. Midwife Accreditation Standards. Published online 2021. Accessed November 29, 2025. https://anmac.org.au/sites/default/files/2025-08/06920_anmac_midwife_std_2021_online_05_fa.pdf.
39. Australian Nursing & Midwifery Accreditation Council. Registered Nurse Prescribing Accreditation Standards. Published online 2025. Accessed November 29, 2025. <https://anmac.org.au/sites/default/files/2025-08/Registered%20Nurse%20Prescribing%20Accreditation%20Standards%202025.pdf>
40. Australian Nursing and Midwifery, Accreditation Council. Registered nurse accreditation standards. Published online 2019. Accessed April 10, 2026. <https://anmac.org.au/accreditation-standards/registered-nurse>
41. Australian Nursing & Midwifery Accreditation Council. Nurse Practitioner Accreditation Standards. Published online 2015. Accessed November 29, 2025. https://anmac.org.au/sites/default/files/2025-08/Nurse_Practitioner_Accreditation_Standard_2015.pdf.
42. Optometry Council of Australia and New Zealand. Accreditation Standards and Evidence Guide for Entry-Level Optometry Programs. Published online 2023. Accessed November 29, 2025. https://www.ocanz.org/assets/Accreditation/b05848c01d/OCANZ-Accreditation-Standards-and-Evidence-Guide_updated-2023.pdf
43. Optometry Council of Australia and New Zealand. Accreditation Standards and Evidence Guide for Programs of Study in Ocular Therapeutics. Published online 2024. Accessed November 29, 2025.

https://www.ocanz.org/assets/Accreditation/31142dd871/Ocular-Therapeutics-Accreditation-Standards-and-Evidence-Guide_FINAL.pdf

44. Australian Pharmacy Council. Accreditation Standards for Pharmacist Prescriber Education Programs. Published online December 2023. Accessed April 11, 2025. <https://www.pharmacycouncil.org.au/resources/Accreditation-Standards-for-Pharmacist-Prescriber-education-programs/>
45. Australian Physiotherapy Council. Accreditation Standards for entry-level physiotherapy practitioner programs. Published online 2025. Accessed November 29, 2025. <https://cdn.physiocouncil.com.au/assets/volumes/downloads/Accreditation-Standards.pdf>
46. Podiatry Board AHPRA. Accreditation standards: Programs for registered podiatrists and podiatric surgeons addressing the requirements for endorsement of registration in relation to scheduled medicines (ESM Programs). Published online 2025. Accessed November 29, 2025. <https://www.podiatryboard.gov.au/Accreditation/Accreditation-publications-and-resources.aspx>
47. Podiatry Board AHPRA. Accreditation Standards for Entry-Level Podiatry Programs. Published online 2025. Accessed November 29, 2025. <https://www.podiatryboard.gov.au/Accreditation/Accreditation-publications-and-resources.aspx>
48. Podiatry Board AHPRA. Accreditation standards: Podiatric therapeutics programs for registered podiatrists and podiatric surgeons. Published online 2025. Accessed November 29, 2025. <https://www.podiatryboard.gov.au/Accreditation/Accreditation-publications-and-resources.aspx>
49. Podiatry Board of Australia. Follow your pathway to endorsement for scheduled medicines. Published online 2018. Accessed November 29, 2025. <https://www.podiatryboard.gov.au/Registration-Endorsement/Endorsement-Scheduled-Medicines>
50. Podiatry Board of Australia. Registration standard: Endorsement for scheduled medicines. Published online 2018. Accessed November 29, 2025. <https://www.podiatryboard.gov.au/Registration-Endorsement/Endorsement-Scheduled-Medicines>
51. Podiatry Board of Australia. Guidelines: Endorsement for scheduled medicines. Published online 2018. Accessed November 29, 2025. <https://www.podiatryboard.gov.au/Registration-Endorsement/Endorsement-Scheduled-Medicines>
52. Queensland Government. Extended Practice Authority "Physiotherapists." Published online 2025. Accessed November 29, 2025. https://www.health.qld.gov.au/__data/assets/pdf_file/0028/1108945/epa-physiotherapists.pdf
53. Nursing and Midwifery Board AHPRA. Registration standard: Endorsement for scheduled medicines- designated registered nurse prescriber. Published online 2025. Accessed November 29, 2025. <https://www.nursingmidwiferyboard.gov.au/Registration-and-Endorsement/Endorsements-Notations.aspx#nurse>
54. Nursing and Midwifery Board of Australia. Registration Standard: Endorsement for Scheduled Medicines for Midwives. Published online 2017. Accessed November 29, 2025. <https://www.nursingmidwiferyboard.gov.au/Registration-Standards/Endorsement-for-scheduled-medicines-for-midwives.aspx>
55. Nursing and Midwifery Board of Australia. Registration Standard: Endorsement as a nurse practitioner. Published online 2016. Accessed November 29, 2025. <https://www.nursingmidwiferyboard.gov.au/Registration-Standards/Endorsement-as-a-nurse-practitioner.aspx>
56. Nursing and Midwifery Board of Australia. Guidelines for registered nurses applying for and with the endorsement for scheduled medicines- designated registered nurse prescriber. Published online 2025. Accessed November 29, 2025. <https://www.nursingmidwiferyboard.gov.au/Registration-and-Endorsement/Endorsements-Notations.aspx#nurse>
57. Nursing and Midwifery Board of Australia. Safety and quality guidelines for nurse practitioners. Published online 2024. Accessed November 29, 2025. <https://www.nursingmidwiferyboard.gov.au/registration-and-endorsement/endorsements-notations.aspx>
58. Optometry Board of Australia. Registration Standard: Endorsement for Scheduled Medicines. Published online 2018. Accessed November 29, 2025. <https://www.optometryboard.gov.au/Registration-Standards/Endorsement-for-scheduled-medicines.aspx>
59. National Association of Pharmacy Regulatory Authorities. Scope of practice for pharmacists in Canadian jurisdictions. Published online 2023. Accessed February 20, 2025. <https://www.napra.ca/wp-content/uploads/2021/12/NAPRA-Scope-of-Practice-Pharmacists-EN-2023-08.pdf>
60. Ghabour M, Morris C, Wilby KJ, Smith AJ. Pharmacist prescribing training models in the United Kingdom, Australia, and Canada: Snapshot survey. *Pharm Educ.* 2023;23(1):100-108. doi:10.46542/pe.2023.231.100108
61. Pharmaceutical Society of New Zealand. New Zealand National Pharmacist Services Framework. Accessed December 1, 2025. https://www.psnz.org.nz/Folder?Action=View%20File&Folder_id=86&File=PSNZPharmacistServicesFramework2014FINAL.pdf
62. New Zealand Legislation. Designated Pharmacist Prescribers Regulations. Published online 2013. Accessed December 1, 2025. <https://www.legislation.govt.nz/regulation/public/2013/0237/latest/DLM5229306.html>

63. NHS England. Workforce, training and education. Becoming an independent prescriber. Accessed December 1, 2025. <https://www.hee.nhs.uk/pharmacy/transforming-pharmacy-education-training/initial-education-training-pharmacists-reform-programme/pharmacy-integration-programme-super/becomingip-2>
64. General Pharmaceutical Council. Standards for the initial education and training of pharmacists. Accessed December 1, 2025. <https://assets.pharmacyregulation.org/files/2024-01/Standards%20for%20the%20initial%20education%20and%20training%20of%20pharmacists%20January%202021%20final%20v1.4.pdf>
65. General Pharmaceutical Council. Standards for the education and training of pharmacist independent prescribers. Published online 2022. Accessed December 1, 2025. <https://assets.pharmacyregulation.org/files/document/standards-for-the-education-and-training-of-pharmacist-independent-prescribers-october-2022.pdf>
66. General Pharmaceutical Council. Independent prescriber education and training. Published online 2025. Accessed December 1, 2025. <https://www.pharmacyregulation.org/students-and-trainees/pharmacist-education-and-training/independent-prescriber-education-and-training>
67. Pollack SW, Skillman S, Frogner BK. Assessing the Size and Scope of the Pharmacist Workforce in the U.S. Published online 2020. Accessed December 1, 2025. https://familymedicine.uw.edu/chws/wp-content/uploads/sites/5/2020/09/Pharmacist-Size-Scope_FR_Sep4_2020.pdf
68. Adams A, Weaver K. Pharmacists' Patient Care Process: A State "Scope of Practice" Perspective. *Innov Pharm.* 2019;10(2):7. doi:10.24926/iip.v10i2.1389
69. The Canadian Council for Accreditation of Pharmacy Programs. Accreditation Standards for Canadian First Professional Degree in Pharmacy Programs. Published online July 2018. Accessed December 1, 2025. <https://ccapp.ca/wp-content/uploads/2020/10/July7-CCAPP-Professional-Standards-ENG.pdf>
70. The Canadian Council for Accreditation of Pharmacy Programs. Accreditation Standards for Canadian Educational Programs Leading to the Doctor of Pharmacy (Pharm.D.) Degree. Published online 2023. Accessed December 1, 2025. <https://indigenousspharmacy.ca/files/2023-pharmacy-stds.pdf>
71. Pharmacy Council of New Zealand. Aotearoa New Zealand Accreditation Standards for Pharmacy Programs. Published online 2023. Accessed December 1, 2025. <https://pharmacycouncil.org.nz/wp-content/uploads/2023/05/Aotearoa-New-Zealand-Accreditations-Standards-for-Pharmacy-Programmes.pdf>
72. Pharmacy Council of New Zealand. Aotearoa New Zealand Competence Standards for Pharmacist Prescriber Competence Standards. Published online 2023. Accessed December 1, 2025. <https://pharmacycouncil.org.nz/wp-content/uploads/2023/05/Aotearoa-New-Zealand-Pharmacist-Prescriber-Competence-Standards-FINAL.pdf>
73. Accreditation Council for Pharmacy Education. Accreditation standards and key elements for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree. Published online 2025. Accessed December 1, 2025. <https://www.acpe-accredit.org/pdf/ACPEStandards2025.pdf>

Glossary

For the purposes of this document, the following definitions apply.

Term	Meaning
Consumer	A person who has used, currently uses, or will use health care services. This includes the person's family and carers.
Minor ailment service	Pharmacist diagnosis and management of common, self-limiting, or uncomplicated conditions.
Independent prescribing	Prescribing undertaken by a professional who assumes responsibility for all parts of the prescribing process according to their scope of practice.
Patient	The term 'consumer' has been used preferentially throughout the document. The term 'patient' is used when the source information (e.g., research study, standard) has employed this term.
Prescribing	An iterative process involving the steps of information gathering, clinical decision making, communication and evaluation which results in the initiation, continuation or cessation of a medicine.
Prescribing Competencies Framework (The Framework)	A national prescribing competencies framework which describes prescribing expectations for prescribers in Australia, regardless of profession.
Scope of practice	A time sensitive, dynamic aspect of practice which indicates those professional activities that a pharmacist is educated, competent and authorised to perform and for which they are accountable.
Supported prescribing	Prescribing undertaken with support provided by a defined formulary, medicines use protocol and/or a collaborative agreement describing shared responsibility.

List of Abbreviations

Abbreviation	Meaning
ADC	Australian Dental Council
AMC	Australian Medical Council
ANMAC	Australian Nursing and Midwifery Accreditation Council
APA	Additional Prescribing Authorisation
APC	Australian Pharmacy Council
CPA	Collaborative practice agreement
CPD	Continuing Professional Development
DBA	Dental Board of Australia
DMP	Designated medical practitioner
DPP	Designated prescribing practitioner
ED	Emergency department
ESM	Endorsement for Scheduled Medicines
EPA	Extended Practice Authority
GP	General Practitioner, General Practice
GPhC	General Pharmaceutical Council (UK)
GPP	General Practice Pharmacist
MAS	Minor ailment service
MBS	Medical Benefits Schedule
NPCF	National Prescribing Competencies Framework
NMBA	Nursing and Midwifery Board of Australia
NNT	Number needed to treat
NP	Nurse practitioner
NPS	National Prescribing Service (also referred to as NPS MedicineWise)
OBA	Optometry Board of Australia
OCANZ	Optometry Council of Australia and New Zealand
PBS	Pharmaceutical Benefits Scheme
PCNZ	Pharmacy Council of New Zealand
PharmBA	Pharmacy Board of Australia
PodBA	Podiatry Board of Australia
PPMC	Partnered pharmacist medication charting
PSA	Pharmaceutical Society of Australia
QUM	Quality use of medicines
UTI	Urinary tract infection
UITPP-Q	Urinary Tract Infection Pharmacy Pilot-Queensland
VTE	Venous thromboembolism

List of Tables

Table 1 Search terms used to identify literature	10
Table 2 Search strategy	19
Table 3 Non-medical professions authorised to prescribe in Australia	20
Table 4 Non-medical health professional prescribing accreditation standards	22
Table 5 Non-medical health professions prescribing scope of practice	23
Table 6 Search strategy	25
Table 7 International educational requirements and conditions/medications for pharmacist prescribing	27
Table 8 Educational requirements for pharmacist prescribing Authority	30
Table 9 Entry-level, Intern-level, and Postgraduate pharmacist prescribing accreditation standards	30

List of Figures

Figure 1 PRISMA diagram.....	11
------------------------------	----

List of Appendices

Appendix 1 Summary of the included review characteristics	39
Appendix 2 Evidence-based summary of accessibility in pharmacist prescribing*	45
Appendix 3 Efficacy impact of pharmacist prescribing	48
Appendix 4 Evidence of safety of pharmacist prescribing*	53
Appendix 5 Economic evidence for pharmacist prescribing*	56
Appendix 6 Level of qualifications required for endorsement for prescribing	59
Appendix 7 Domains relating to prescribing for non-medical health professions within prescribing accreditation standards	62

Appendix 1 Summary of the included review characteristics

Title	Author, Year and Review type	Number of studies	Model of Pharmacist Prescribing	Objective	Framework and guidelines	Quality assessment tool
Mapping the US literature on pharmacists prescribing to initiate medications: A scoping review of terminology, responsibilities, and alignment with international models ²⁹	Ahmed et al October 2025 Scoping review	92	Mixed	To characterise US prescribing terminology and pharmacists' responsibilities when initiating medication under various US prescribing models and map the US literature on pharmacists' initiating medication to the international context.	Arksey and O'Malley's framework an PRISMA-ScR guidelines	Not reported
Effects of pharmacist prescribing on health-related outcomes in secondary care compared with medical prescribing or no treatment: A systematic review ³¹	Akintunde et al November 2025 Systematic review	21	Mixed	To assess the effects of pharmacist prescribing on health-related outcomes in secondary care.	MEDLINE, Cochrane, CINAHL, Scopus, and Web of Science Core Collection databases were searched for studies published in English from database inception to 3 October 2024. Studies were included if the intervention was pharmacist prescribing and the outcomes were health-related and measurable. Narrative synthesis of the outcomes from included studies was conducted. Results: A total of 21 studies from five countries (Australia, Egypt, Hong Kong, UK, USA) were included.	Randomised trials were assessed for quality using the Cochrane revised tool to assess risk of bias in randomised trials (RoB 2). The non-randomised studies were assessed using the ROBINS-I tool for assessing risk of bias in non-randomised studies of interventions. Grades of Recommendation, Assessment, Development and Evaluation tool (GRADE) was used to determine confidence that the cumulative evidence represented closely the true value of impacts of pharmacist prescribing
Interventions to expand community pharmacists' scope of practice ³⁶	Ali et al June 2024	14	Mixed	To describe the interventions that expand the pharmacist's scope of	Joanna Briggs Institute methodology (JBI)	The JBI critical appraisal tool

Title	Author, Year and Review type	Number of studies	Model of Pharmacist Prescribing	Objective	Framework and guidelines	Quality assessment tool
	Scoping review			practice within a community pharmacy setting and assess their effectiveness.		
Exploring non-medical prescribing for patients with mental illness: a scoping review ²¹	Alsaeed et al. May 2025 Scoping review	63	Mixed	To map published research evidence concerning non-medical prescribing for patients with mental illness.	The method used in this scoping review was based on the framework initially established by Arksey and O'Malley, as further enhanced by Levac, Colquhoun, and O'Brien	Not reported
Global advancement in pharmacy services for mental health: A review for evidence-based practices ²²	Alshammari et al April 2023 Review	68	Mixed	This review provides a rapid overview of the scope of services and a segmentation of services with reference to transformation, highlights the associated challenges in services, provides an overview of the quality of the provided services with reference to societal and professional perspectives, and concludes with a futuristic approach to services on the basis of results obtained from pilot projects as well as recommendations to strengthen the pharmacy services in Mental Health.	Assessed for quality and bias	The Mixed Methods Appraisal Tool (MMAT)
Collaborative pharmacist prescribing models in Australian hospitals: a scoping study ²⁶	Amer et al September 2025 Scoping Study	15 models across 35 Hospitals	Collaborative	To identify pharmacist prescribing policies and procedures in Australian hospitals and provide a narrative summary of the models and associated training.	Not reported	Not reported
Impact of pharmacist interventions provided in the emergency department on quality use of medicines: a	Atey et al Feb 2023	31	Mixed	To synthesise evidence from studies examining the impact of interventions provided by pharmacists on the quality	Summary estimates were pooled using random-effects meta-	Cochrane Risk of Bias-2 and Newcastle-Ottawa

Title	Author, Year and Review type	Number of studies	Model of Pharmacist Prescribing	Objective	Framework and guidelines	Quality assessment tool
systematic review and meta-analysis ²⁴	Systemic review			use of medicines in adults presenting to the emergency department.	analysis, along with sensitivity and sub-group analyses	
Costs, consequences and value for money in non-medical prescribing: a scoping review ³⁰	Babashahi May 2023 Scoping review	9	Independent	To identify, synthesise and report the evidence on the costs, consequences and value for money of non-medical prescribing provided by non-medical healthcare professionals.	Preferred Reporting Items for Systematic Reviews and Meta-Analysis extension for Scoping Reviews (PRISMA-ScR) reporting guideline recommended by Tricco et al to report our scoping review study. ²⁹ Also used the five stage methodological framework developed by Arksey and O'Malley and further developed by Levac et al and the Joanna Briggs Institute to ensure rigour in reporting the review and its methodology	Not reported
Pharmacists' acceptability of provision of sexually transmitted infection services: a scoping review ³⁴	Bergin et al June 2025 Scoping review	22	Not reported	To map, characterise, and explicate the acceptability of pharmacist-delivered STI services.	The results were mapped to the theoretical framework of acceptability (TFA)	Not reported

Title	Author, Year and Review type	Number of studies	Model of Pharmacist Prescribing	Objective	Framework and guidelines	Quality assessment tool
Community pharmacist prescribing: Roles and competencies - A systematic review and implications ¹⁵	Clemens et al November 2025 Systematic review	23	Mixed	compares international roles, identifies inferred competencies, and explores implications for role expansion	Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines	studies were appraised with Critical Appraisal Skills Programme (CASP) checklists, and interrater reliability assessed via Cohen's Kappa
Pharmacist prescribing in cancer services: a scoping review ²³	Johnson et al May 2025 Scoping review	41	Mixed	To explore pharmacist prescribing in cancer services, prescribing models used, impact on patient outcomes and stakeholders' views.	The Joanna Briggs Institute's scoping review guidelines	Not reported
A scoping review of evidence of community pharmacist independent prescribing for common clinical conditions: beyond protocol prescribing ¹¹	Karim et al August 2025 Scoping review	10	Independent	To collate and characterise literature on the integration of 'standard of care' model delivered by Pharmacist Independent Prescribers in Community Pharmacy for acute common clinical conditions (CCCs).	Arksey and O'Malley framework. Barriers and facilitators for integration used the Consolidated Framework for Implementation Research as a theoretical lens	Not reported

Title	Author, Year and Review type	Number of studies	Model of Pharmacist Prescribing	Objective	Framework and guidelines	Quality assessment tool
Assessment and evaluation of prescribing competences: A systematic review and recommendations ³⁵	McLachlan et al March 2024 Systemic review	54	Not reported	To summarise existing national-level approaches, provide a systematic review of current literature, indicate the frequency of various methodologies, and make recommendations to promote and extend existing practice.	Regulatory body websites were accessed for details of national examinations	Medical Education Research Quality Instrument (MERSQI)
Pharmacists as independent prescribers in community pharmacy ¹²	Mesbahi et al, October 2024 Scoping review	88	Independent	To summarise evidence around independent Pharmacist Prescribing (IPP) globally and in relevant jurisdictions. It focuses on IPP in community pharmacies, conditions to be managed, medications that could be prescribed, and reimbursement policies.	PRISMA-ScR guidelines	Not reported
A systematic review of the role of community pharmacists in the prevention and control of cardiovascular diseases: the perceptions of patients ³²	Motlohi et al September 2023 Systematic review	45	Independent	To identify the roles of community pharmacists in preventing and controlling cardiovascular diseases and patients' perceptions towards such functions.	Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines The quality of studies was appraised using the Joanne Briggs Institute checklist	Joanne Briggs Institute checklist
The community pharmacist as an independent prescriber: A scoping review ²⁵	Piroux et al Nov-Dec 2024 Scoping review	13	Independent	To analyse the contribution of independent prescribing by community pharmacists, in primary care, using the micro, meso, macro level framework	Not reported	Not reported

Title	Author, Year and Review type	Number of studies	Model of Pharmacist Prescribing	Objective	Framework and guidelines	Quality assessment tool
Pharmacists' naloxone services beyond community pharmacy settings: A systematic review ³³	Rawal et al Feb 2023 Systemic review	76	Mixed	identify pharmacists' naloxone services and their outcomes, and b) examine knowledge, attitudes, and barriers (KAB) related to naloxone service provision in non-community pharmacy settings	Joanna Briggs Institute (JBI) checklist Methodological Index for Non-Randomised Studies (MINORS) tool	National Institutes of Health (NIH) tool, the Mixed-methods Appraisal Tool (MMAT)
The clinical and economic evidence of the management of urinary tract infections by community pharmacists in women aged 16 to 65 years: a systematic review ²⁷	Swart et al Jan 2024 Systematic review	10	Government protocol	To systematically gather, assess, and synthesise the available peer-reviewed published literature on the management of uncomplicated UTIs by community pharmacists in women aged 16–65 years, provide an understanding of the clinical and economic evidence, while also identifying the essential components of interventions employed.	Joanna Briggs Institute (JBI) checklist	Not reported
The accessibility of pharmacist prescribing and impacts on medicines access: A systematic review ²⁸	Walpola et al May 2024	47	Mixed	To assess the direct impacts of pharmacist prescribing on medicines access, and the accessibility of pharmacist prescribing services, in community and primary care settings.	Not reported	Quality Assessment for Diverse Studies (QuADs)

Appendix 2 Evidence-based summary of accessibility in pharmacist prescribing*

Title	Accessibility
Pharmacists as independent prescribers in community pharmacy ¹²	Access to treatment for conditions like uncomplicated UTI for women, hormonal contraception, smoking cessation by pharmacist prescribing has been established in some countries such as Australia and Canada. There is emerging evidence about pharmacists being authorised to initiate treatment for chronic conditions such as hypertension and diabetes. Access for managing these conditions means better access to healthcare.
The community pharmacist as an independent prescriber: A scoping review ²⁵	Beaham et al. reported a significant time difference between accessing the pharmacist and the GP "(1.7 days vs. 2.8 days, respectively; p=0.0153)". Mansell et al. reported pharmacist prescribing for managing minor ailments to avoid medical consultation in "35.2%, and emergency department visit in 3.4%". Booth et al. reported that people who came to the pharmacy for pharmacist-led care were treated quicker than those who came to fill prescriptions, and that a third of the people who received pharmacist care, received it on a weekend when medical offices were closed which highlights the role of pharmacist prescribing to improve access to care [30] for people including those who require access beyond regular operating hours.
A scoping review of evidence of community pharmacist independent prescribing for common clinical conditions: beyond protocol prescribing ¹¹	Papastergiou et al. 2018; in a study included 7050 patients across 204 participating sites, 25.5% tested positive for Group A Streptococcus infection. Same day prescribing of antibiotics was achieved in 68.7%, which highlights the independent pharmacist prescriber's role in improving accessibility. Same day prescribing was 73.8% in Alberta, and 40.5% in Nova Scotia, noting that pharmacists have advanced prescribing authority in Alberta.
Community pharmacist prescribing: Roles and competencies - A systematic review and implications ¹⁵	Bachyrycz et al. 2017; a study that investigated implementation of naloxone prescribing concluded that pharmacist direct accessibility was a noted facilitator in implementing naloxone pharmacist prescribing service, while rural access was a barrier. Azad et al. 2024 investigated access to contraception in rural areas, and concluded that high accessibility was a facilitator to contraception access.
The accessibility of pharmacist prescribing and impacts on medicines access: A systematic review ²⁸	Chavez et al. 2019 found an increase in the percentage of patients diagnosed with depression and eligible to receive medication from 49% to 58%. DeRonne et al. 2021 found an increase in percentage of people eligible to receive naloxone from 33.8% to 46.7%. Haby et al. 2020 found an increase in people with atherosclerotic cardiovascular disease to receive statins increased from 75.2% to 79.3%. Soon et al. 2005 found an increase in total emergency contraception prescribing by 102% compared to the prior 5-year mean in all age groups, with a ≥2-fold increase in prescribing among patients aged 25–54 years. The increase in pharmacist prescribing did not relate to a decrease in physicians' prescribing. Xu et al. 2021 found an averaged increase of 331 in naloxone dispensing which comes to 53% increase after confounding policy variables adjusting. Gibbs et al. 2021 found no significant impact of pharmacist prescribing on hormonal contraception access. Beahm et al. 2018 found that median number of days to see a pharmacist prescribing was 1.7 compared to 2.8 to see a physician in people who received treatment for urinary tract infections.

Title	Accessibility
	<p>Papastergiou et al. 2018 identified that “patients seen by a prescribing pharmacist were more likely to receive an antibiotic on the same day as receiving a positive Group A streptococcus test result than those seeing a pharmacist without prescribing authority (75.8 % vs 35.3 % in British Columbia and 42.2 % in Nova Scotia)”</p> <p>Tinelli et al. 2013 found no difference in time people need to access prescriptions between physicians and pharmacist prescribing.</p> <p>Silvia et al. 2020 showed that time to see the mental health pharmacist prescribing was 3 times less than time needed to see a specialist physician (31.3 days vs 104.5 days respectively), and percentage of patients seen within 7 days of referral was 23% vs 0% between mental health pharmacist prescribing and specialist physician respectively.</p> <p>Klepser et al. 2016 reported that 43.9% of patients were seen by the pharmacist outside regular opening hours of medical clinic office.</p> <p>Mansell et al. 2015 stated that ease of access represented 17.2% of reasons why people chose a pharmacist-led care, “not wanting to wait for a physician’s appointment (14.6 %), being unable to get a physician’s appointment in a timely manner (9.9 %), the medical clinic being closed (3.1 %), or not having a regular physician (1.0 %)”. This study also reported that patients “would have self-selected over-the-counter medicine (43.2 %), gone to a physician (35.2 %), used something at home (8.0 %), done nothing (5.7 %), or attended an emergency department (3.4 %)” if pharmacist prescribing was not available.</p> <p>Papastergiou et al. 2018 reported the following reasons for reusing the pharmacist prescribing service: “fast and efficient service (54 %), it was easy (18 %), it was convenient (16 %), and no appointment was necessary (6 %)” Additionally; the study reported that “54 % of patients reported their physician was unavailable at the time they saw the pharmacist prescriber”. The study stated these probabilities if the pharmacist prescribing was not available; 37% of participants would have attended a walk-in-clinic, 26% would have visited their physician, 14% would have waited for their physician, 9% would have attended emergency department, and 9% would have self-treated or done nothing.</p>
Interventions to expand community pharmacists’ scope of practice ³⁶	Cameron et al. conducted a study in the UK offering women who requested emergency contraception a three-month supply of the progestogen-only pill along with a rapid-access card to a participating sexual health clinic, with the goal of reducing unwanted pregnancies. After the intervention was implemented, the proportion of women using effective contraception was 20.1% higher in the intervention group (mean 58.4%, 48.6–68.2) compared with the control group (mean 40.5%, 29.7–51.3).
Pharmacist prescribing in cancer services: a scoping review ²³	<p>Lau et al. 2020 found that patients’ access to medication was improved due to lower cost burden with pharmacist prescribing.</p> <p>Wright et al., 2020 showed a positive impact of pharmacist prescribing on timely supply of prescriptions.</p>
Pharmacists’ naloxone services beyond community pharmacy settings: A systematic review ³³	<p>Duvivier et al. 2017 found that pharmacist co prescribing of naloxone has increased to the medication, as pharmacists trained 350 law enforcement officers and carried out a mass naloxone dispensing in Indian Country.</p> <p>Mailloux et al. 2021 investigated physician-pharmacist collaborative practice model and found that naloxone prescriptions percentage among people who were treated with buprenorphine/naloxone was 8.18% compared to 5.14% in a psychiatrist only model.</p> <p>Wilson et al. 2017 utilised pharmacist co-prescribing of naloxone, 350 people were eligible to receive naloxone, from 709 who met the chronic opioid use criteria, averaging a percentage of 49.9%.</p>

Title	Accessibility
Exploring non-medical prescribing for patients with mental illness: a scoping review ²¹	<p>Patients reported to have improved access to pharmacist prescribing compared to doctors in two studies.</p> <p>Silvia R et al. 2020 showed that the waiting time for people to start therapy by psychiatric pharmacist was 22.6 days in comparison to 79.3 days with behavioural clinic providers.</p> <p>Green B et al. 2008 and Gumber et al. 2012 showed that increased nurse prescribers and pharmacist prescribing availability enhanced access to service and medications particularly for those in isolated areas.</p> <p>Non-medical prescribing appropriate and accessible services may alleviate challenges related to the mismatch between ADHD increasing rate of diagnosing, and the limitation of the ADHD medications supply in ways including offering alternative therapies.</p>
Global advancement in pharmacy services for mental health: A review for evidence-based practices ²²	<p>Gibu et al. 2017 in a retrospective cohort study on 81 patients investigating a number of interventions reported that 80% of prescriptions were renewed and subsequently Emergency visits by patients were decreased by pharmacist interventions including interim prescribing.</p>
Pharmacists' acceptability of provision of sexually transmitted infection services: a scoping review ³⁴	<p>Hunter et al. 2023; in a study that investigated pharmacist prescribing of PrEP, it was concluded that despite pharmacist initiation of therapy and supportive pharmacists' attitudes the implementation of the service was "short of the vision for significantly expanded access".</p>
The clinical and economic evidence of the management of urinary tract infections by community pharmacists in women aged 16 to 65 years: a systematic review ²⁷	<p>Stewart et al. 2018; investigated a service by pharmacist prescribers to manage UTI, impetigo, COPD in community pharmacy, reported more access to treatment. Patients who commented on the timeliness of service were 29 out of 73 people who responded to a feedback survey.</p> <p>Beahm et al. 2018 evaluated the efficacy, safety and patients' satisfaction of pharmacist prescribing UTI-management services; it was found that patients were seen by a pharmacist sooner than they would see a GP "p =0.0153", and that 92% of the participants who responded to a satisfaction survey (n=398) reported satisfaction with the pharmacists' accessibility.</p> <p>Hind et al. 2018 showed that people presented pharmacies on Friday and Saturday more than other days of the week, and 90% of them were seen within 10 minutes. The study also reported that higher utilisation of the service was experienced "during the afternoon and after 6pm [29], times when GP accessibility might be relatively limited" Accessibility to the service could stem from the nature of pharmacies' opening hours and their availability.</p>
Costs, consequences and value for money in non-medical prescribing: a scoping review ³⁰	<p>Accessibility was not reported in pharmacist prescribing studies in this review, however ease of access to services provided by non-medical prescribing, namely "Physiotherapist IP and Podiatrist IP" was reported by Carey et al.</p>

* Data were extracted from the systematic reviews rather than the original reference paper

Appendix 3 Efficacy impact of pharmacist prescribing

Title	Condition	Pharmacist prescribing impact on efficacy
The community pharmacist as an independent prescriber: A scoping review ²⁵	Urinary tract infections	Beahm et al. 2018; showed a clinical cure rate of 88.9% and found no significant difference in clinical cure between the pharmacist and physician arms in a prospective clinical study. The study reported that pharmacists' management of uncomplicated UTI infections is safe and effective. Booth et al. 2013; reported no significant difference in symptoms' resolution time between GP or pharmacist care. It is worth noting that the symptoms duration before treatment was shorter in the group of patients presented for pharmacist management.
	Minor ailments	Mansel et al. reported improvement in 99.2% of patients.
	Cardiovascular risk management	RXEACH study by Tsuyuki et al reported that the intervention group had a higher smoking cessation rate, lower LDL cholesterol, lower systolic blood pressure, and lower glycosylated haemoglobin.
A scoping review of evidence of community pharmacist independent prescribing for common clinical conditions: beyond protocol prescribing ¹¹	Urinary Tract Infection	Beahm et al. 2018 showed clinical cure in 88.9% of patients with uncomplicated UTI. Most people who did not experience symptoms' resolution had symptoms recurrence (5.5% overall).
	Group A Streptococcus testing	Papastergiou et al. 2018 in study of 7050 patients across 204 participating sites reported that 25.5% of participants tested positive for Group A Streptococcus infection. Same day prescribing of antibiotics was achieved in 68.7%.
Community pharmacist prescribing: Roles and competencies - A systematic review and implications ¹⁵	Cardiovascular risk management	Tsuyuki et al. 2016 reported a 21% greater relative reduction in estimated cardiovascular event risk.
Interventions to expand community pharmacists' scope of practice ³⁶	Contraception	Cameron et al. 2020 conducted a study in which women requesting emergency contraception were offered a three-month supply of progestogen-only pills (75 µg desogestrel, 84 tablets) following their use of emergency contraception, along with a rapid-access card to a participating sexual health clinic. The intervention resulted in a significant increase in the subsequent use of effective contraception.

Title	Condition	Pharmacist prescribing impact on efficacy
	Blood pressure	Tsuyuki et al. 2015 in a randomised trial that evaluated the effect of pharmacist prescribing on improving blood pressure (RxACTION) found significant reductions in systolic and diastolic BPs and significant improvements in the proportion of patients achieving recommended BP targets compared with usual pharmacist and physician care were reported.
	Dyslipidaemia management	Tsuyuki et al. 2016 in a randomised trial that evaluated Community-based approach to dyslipidaemia management (RxACT) “resulted in >3-fold more patients achieving target LDL-c levels”.
	Cardiovascular risk management	Al Hamarneh et al. 2017 in an RCT evaluating the Effectiveness of Pharmacist Interventions on Cardiovascular Risk in Adult Patients with Type 2 Diabetes (RxEach) found “significant improvement in diabetes, hypertension and dyslipidaemia treatments in the intervention-group were observed compared to control group”.
Pharmacist prescribing in cancer services: a scoping review ²³	Cancer	Andrick et al. 2022 evaluated a hematopoietic cellular therapy and reported effective immunosuppression management in 35 eligible patients with 814 out of 1192 blood measurements (73.9%) were achieving targeted ciclosporin trough concentration in institutional guidelines of 160 to 400 ng/dL.
		<p>Jackson et al. 2021 determined the pharmacy impact of implementing a chemotherapy induced nausea or vomiting collaborative disease therapy management protocol in the outpatient oncology clinics at a cancer centre and reported improvement in MASCC (Multinational Association for Supportive Care in Cancer); symptom scores for CINV.</p> <p>Acute nausea median was reduced from 8 to 0. Delayed vomiting median was reduced from 4 to 0. Delayed nausea median was reduced from 10 to 0.</p>
		Lam & Cheung 2016 evaluated the impact of an oncology pharmacist-managed oral anticancer therapy program on oral medication adherence in CML patients versus usual care and statistically significant improved tyrosine kinase inhibitors adherence rate in intervention group (88.6 %) compared to usual care group (65.8 %) (p 0 < .0046) was reported.
		Ma et al. 2016 evaluated 'pharmacist interventions and patient outcomes of a pharmacist-led outpatient palliative care practice. “Trends were observed in pain stabilisation over three clinic visits. ‘A statistically significant change in pain score (mild, moderate, severe) was observed for the third visit (better (33 %), stable (49 %) and worse (19 %)) (p ≤ 0.05) but was not sustained at the next-follow up visit”.
		Muluneh et al. 2018 addressed the growing use of oral anticancer therapy, an integrated, closed-loop, pharmacist-led oral chemotherapy management program was created within an academic medical centre, and reported “Improved knowledge and adherence rates compared to historical data. Understanding of treatment

Title	Condition	Pharmacist prescribing impact on efficacy
		increased from 43 % to 95 %'. Patient-reported adherence was 86% and 94.7 % and MPR adherence was 85 % and 93.9 % for the GI/breast and malignant haematology patient groups respectively. A higher major molecular response rate (83 %) for patients with chronic myeloid leukaemia compared with published clinical trials (average major molecular response rates, 40 % and 60 % with 1- and 2- year follow-up, respectively)".
Pharmacists' naloxone services beyond community pharmacy settings: A systematic review ³³	Harm minimisation	Wulz et al. 2017 reported on pharmacist prescribed naloxone and trained on its use to the public through a collaborative protocol. They also participated in spreading awareness of Alabama HB 208 by providing information on naloxone and opioid overdose to family". A total of 83 clients (heroin and opioid users, concerned family members or friends, and TASC employees) were trained in naloxone.
		Takeda et al. 2016 reported that an interprofessional team, including a pharmacist who implemented naloxone co-prescribing, significantly improved care. Pharmacist-led interventions, including prescribing saved psychiatrists' time and led to more frequent medication reconciliations, improved identification and management of medications for opioid use disorder, better detection of adherence issues, and increased referrals to additional services.
		Mailloux et al. 2021 examined a physician-pharmacist collaborative practice model (PPCPM) to increase access to Medications for Opioid Use Disorder (MOUD). The number of new naloxone prescriptions were slightly higher in PPCPM (Physician-pharmacist collaborative practice model) appointments (n = 8, 18%) than in psychiatrist-only appointments (n = 5, 14%). Sample size of 50 patients who were treated with buprenorphine/ naloxone.
Exploring non-medical prescribing for patients with mental illness: a scoping review ²¹	Depression/anxiety	Mental health specialist pharmacists were found to reduce depression/anxiety symptoms' scores based on the Patient Health Questionnaire (PHQ-9) and Generalised Anxiety Disorder by 50%. They were also found to decrease these scores based on PHQ-9 by more than 50% reduction in another study.
Global advancement in pharmacy services for mental health: A review for evidence-based practices ²²	Mental Health Conditions	Gibu et al. 2017 conducted a retrospective cohort study of 81 outpatients who lost their mental health prescriber due to transfer or turnover. In total 80% of prescriptions were renewed by pharmacists' interim prescribers, in addition to that a decrease in patients' presentation to psychiatric emergency department was reported.
Effects of pharmacist prescribing on health-related outcomes in secondary care compared with medical prescribing or no treatment: A systematic review ³¹	Pain management	Roman et al. 2024 evaluated if "an emergency pharmacist addition to an emergency medicine (EM) team would improve analgesia administration within 30 minutes of patient arrival". No significant statistical difference in length of hospital stays between the intervention and the control groups was reported.
		Hammond et al., 2024 in a study which evaluated in hospital mortality reported that "no statistically significant difference between the pharmacist prescribing and the non-pharmacist prescribing group".

Title	Condition	Pharmacist prescribing impact on efficacy
	Anticoagulant prescribing	Chan et al., 2006 reported that the control of INR was significantly improved ($p < 0.001$) for patients when anticoagulant therapy was prescribed by a pharmacist compared to when managed by a medical prescriber.” “Patients in the pharmacist-managed group spent more patient time (64%) in therapeutic INR range than those in the physician-managed group (59%) ($p < 0.001$). When the INR results from both groups were pooled, the 137 patients spent 61% of time in the therapeutic INR range and 77% of time in the expanded range”.
	Blood Pressure	Vivian et al. 2002 found significantly higher reduction ($p < 0.003$) in blood pressure when the pharmacist prescribed compared to when a doctor prescribed.
	Blood Glucose level	Anaya et al. 2008 found a significant reduction ($p < 0.001$) in both blood glucose levels and glycosylated haemoglobin post-intervention”.
	COVID-19	Kassem et al. 2024 identified that “the management of COVID-19 by an independent pharmacist prescriber exhibited a statistically significant increase ($p = 0.011$) in oxygen saturation levels, a significant reduction ($p = 0.001$) in temperature and respiratory rate, a non-significant increase in platelet count, and a non-significant decrease in white blood cell count.”
	Dyslipidaemia	Weeks et al. 2012: “had too small a sample size to draw statistical comparison” and “concluded that low-density lipoprotein (LDL) levels were consistently at target for the pharmacist intervention group as opposed to the control group”.
		Bowron et al. 2011 identified that the mean reduction in cholesterol levels was significantly higher ($p = 0.038$) in the pharmacist independent prescriber group compared to the doctor group, and no significant difference in glycosylated haemoglobin between pharmacist prescribing and medical prescribing.
Impact of pharmacist interventions provided in the emergency department on quality use of medicines: a systematic review and meta-analysis ²⁴	Quality use of medicines	Limited evidence about the impact of pharmacists’ interventions including prescribing and co-prescribing on in-hospital mortality or length of hospital or Emergency Department stay, however there was some evidence that those interventions are linked to a reduced probability of representing to ED, and readmission to hospital.
A systematic review of the role of community pharmacists in the prevention and control of cardiovascular diseases: the perceptions of patients ³²	Cardiovascular risk management	Al Hamarney et al. 2013 found reduced CV risk findings which were comparable to prior physician-led care interventions, and indicated that “improved blood pressure, blood glucose, and cholesterol measurements and tobacco use over a period of 3 months” have contributed to the lower CV risk attained. The study reported that “1.8% (CI 95% 1.4–2, $P < 0.0001$) change in glycaemic control and 4.1 mmol/L (CI 95% 3.3–5, $P = 0.007$) decrease in fasting blood glucose were achieved in 51% of the enrolled patients following initiation of pharmacist-prescribed insulin”.

Title	Condition	Pharmacist prescribing impact on efficacy
The clinical and economic evidence of the management of urinary tract infections by community pharmacists in women aged 16 to 65 years: a systematic review ²⁷	Urinary Tract Infection	Beahm et al. 2018 in a study that evaluated “the effectiveness, safety of, and patient satisfaction with, pharmacist assessment and management of patients with uncomplicated UTI” reported 88.9% clinical cure rate in a sample size of 750 patients and 39 pharmacies.
		Booth et al. 2013 United Kingdom in a study that compared “the care pathway of patients with UTI symptoms attending GP services with those receiving management from community pharmacies” reported that there was no significant difference in time taken to achieve symptoms’ resolution between Pharmacist and GP management of UTI.
	Minor conditions	Stampfli et al. 2022 in a study that evaluated the “utilisation description, symptom resolving rate of, and the need for more, decision trees for managing minor conditions in community pharmacies”; The overall cure rate was 84.7%. In addition, 43.8% of 1866 clients indicated that they would have consulted a GP or an ED in case of the inaccessibility of that intervention.
Costs, consequences and value for money in non-medical prescribing: a scoping review ³⁰	Cardiovascular Diseases	Marra et al. 2017 reported that “the 30-year risk of CVD in the pharmacist prescriber group was reduced from 0.61 in base case to 0.41 (indicating a reduction of two CVD events in every 10 individuals receiving the intervention)”.

* Data were extracted from the systematic reviews rather than the original reference paper

Appendix 4 Evidence of safety of pharmacist prescribing*

Title	Condition	Safety (Adherence to guidelines, reported adverse events)
The community pharmacist as an independent prescriber: A scoping review ²⁵	Urinary tract infections	Beahm et al. 2018 found no significant difference in adverse events between the pharmacist and physician arms in a prospective clinical study.
	Strep throat	Lathia et al. investigated community pharmacy-based point-of-care testing for strep throat and found that independent pharmacist prescribing reduces inappropriate use of antimicrobials as there was improved detection with pharmacist prescribing. A rapid antigen test was performed in around 25% of presentations to physicians compared to 92% and 75% of presentations to independent pharmacist care in Alberta and Ontario respectively.
A scoping review of evidence of community pharmacist independent prescribing for common clinical conditions: beyond protocol prescribing ¹¹	UTI, cellulitis, adolescent acne, paediatric ear infection and bacterial sinusitis	Ung et al. 2017 reported that 75% of returned questionnaires indicated selecting the most appropriate treatment for UTI, cellulitis, and adolescent acne, while recurrent UTI, paediatric ear infection and bacterial sinusitis were associated with poorer antibiotic prescribing. Eight cases of inappropriately prescribed penicillin to a child with allergy to penicillin documented as “rash”, were reported.
	Urinary tract infections	Beahm et al. 2021 “Therapy was guideline concordant for 95.1% of patients in the pharmacist-initial arm and 35.1% of patients in the physician-initial arm.” Physicians, representing usual care, prescribed for longer treatment durations and more fluoroquinolone”. Beahm et al. 2018 “About 7.2% had transient gastrointestinal related adverse events, 88.9% continuing medication”.
Community pharmacist prescribing: Roles and competencies - A systematic review and implications ¹⁵	Uncomplicated UTI, cellulitis, adolescent acne	In Thailand and Australia, pharmacists demonstrated high appropriateness in antibiotic prescribing for common infections, i.e., uncomplicated UTI, cellulitis, adolescent acne.
	Anticoagulants in Atrial Fibrillation	Sandhu et al. 2024 evaluated pharmacist prescribing of anticoagulants in demonstrated reduced stroke risk. The study showed evidence of increased guidelines, concordant anticoagulant prescribing, and better patient adherence.
Interventions to expand community pharmacists’ scope of practice ³⁶	Cardiovascular Diseases	The Rx EACH study involved assessing laboratory testing, cardiovascular risk and provided treatment recommendations when clinically appropriate including modifying and/or initiating therapies to achieve “glycaemic, blood pressure and lipid-control targets and tobacco cessation”. “The estimated CV risk was reduced from 26.9+/-21% to 26.5+/-21.3% in the control group and from 25.8+/-19.4% to 20.1+/-17.2% in the intervention group within the 3-month follow-up period (ARR 5.38; 95% CI 4.24–6.52; p < 0.001).”
Pharmacist prescribing in cancer services: a scoping review ²³	Cancer	Moore et al. 2021 reported “no increase in the rate of immune-related reactions with ‘rituximab infusions that were deemed eligible for conversion”.

Title	Condition	Safety (Adherence to guidelines, reported adverse events)
Pharmacists' naloxone services beyond community pharmacy settings: A systematic review ³³	Harm minimisation	"Several studies described pharmacists using their prescriptive authority to prescribe and distribute naloxone. In some of these studies, pharmacists followed the mandates of co-prescribing naloxone for at-risk patients or those receiving high-dose opioids of more than 90 MME per day. There was a significant increase ($p < 0.05$) in naloxone prescribing and co-prescribing when pharmacists implemented naloxone services".
Effects of pharmacist prescribing on health-related outcomes in secondary care compared with medical prescribing or no treatment: A systematic review ³¹	Several conditions	"Four of the five studies that assessed the number of adverse events reported decreased number of adverse events in the pharmacist managed group although statistical significance was not reported. The fifth study reported statistically non-significant difference in the number of adverse events between the pharmacist managed group and the physician-managed group. The number of medication errors was evaluated by one study which showed a statistically significant reduction ($p < 0.01$) in medication errors in the post-intervention period compared to the pre-intervention period without the pharmacist prescriber. Pharmacist prescribing was either comparable to or better than medical prescribing in decreasing the number of adverse events and medication errors".
Impact of pharmacist interventions provided in the emergency department on quality use of medicines: a systematic review and meta-analysis ²⁴	Emergency departments	<p>The studies by Taylor et al., Koehl et al. and Vasileff et al. where pharmacists have co-prescribed or co-charted medications in ED have reported the highest reduction in number of medications' errors, with absolute risk reduction per patient ranging from 87% to 97%. Mills et al. and Vasileff et al. showed that the rates of drug omission errors to be reduced by 97.5% and 100%</p> <p>The risk of "errors causing 'moderate/significant' or 'serious/catastrophic' impacts was also reduced by 93.3% and 100% in Taylor et al. and Vasileff et al.</p> <p>Pharmacists' interventions that did not represent direct involvement in ordering, charting, modifying doses of medications, rounds or consultations, such as staff education, were "relatively less effective in reducing the number of errors per patient".</p>
Collaborative pharmacist prescribing models in Australian hospitals: a scoping study ³⁰	Emergency departments, maternity and gynaecology units, surgical and pre-admission units, and haematology and oncology units.	An Australian study has shown rate of prescribing error to reduce from 66% with independent medical prescribing to 3.6% with collaborative pharmacist prescribing. Adopting collaborative approach to clinical and prescribing decisions' making between doctors and pharmacists has proven to reduce prescribing errors in emergency departments, maternity and gynaecology units, surgical and pre-admission units, and haematology and oncology units.
The clinical and economic evidence of the management of urinary tract infections by community pharmacists in women aged 16 to 65 years: a systematic review ²⁷	Urinary tract infections	<p>Beahm et al. 2018 reported a 7.2% rate of adverse events.</p> <p>Beahm et al. 2021 reported that "Pharmacist prescriptions adhered to the guidelines more often than GP prescriptions did ($p < 0.001$). Pharmacists modified 45.9% of guideline discordant GP orders.</p> <p>Booth et al. 2013 reported that 76% of those provided trimethoprim by a pharmacist met the PGD criteria for inclusion. Patients presented sooner to pharmacists than GPs ($p = 0.026$). The difference in time to resolution between pharmacist and GP management was not significant.</p>

Title	Condition	Safety (Adherence to guidelines, reported adverse events)
		<p>Lee et al. 2021 reported that loss to follow up was 35.8%. Of those followed up, only 32% pharmacists send a specific notification to the patient's GP indicating they were treated for UTI. 79.3% of women indicated they would have gone to another primary healthcare service if the pharmacy service was not available.</p> <p>Stewart et al. 2018 found all the 30 reviewed referral cases were deemed appropriate.</p> <p>Thornley et al. 2020 identified that 71.1% of women accessing treatment would have attended their GP had this service been unavailable. 97.8% received first-line treatment.</p>

* Data were extracted from the systematic reviews rather than the original reference paper

Appendix 5 Economic evidence for pharmacist prescribing*

Title	Economic impact of pharmacist prescribing
The community pharmacist as an independent prescriber: A scoping review ²⁵	<p>Lathia et al. conducted an economic evaluation of severe sore throat treatment by community pharmacists which resulted in average savings from \$12.47 to \$24.36 depending on the province. These savings are estimated to be \$1.3 to \$2.6 million per year for the five provinces. These estimates were supported by Rafferty who focused Saskatchewan, Canada.</p> <p>Canada achieved cost savings of \$800,000 savings in 2014 by pharmacists managing minor ailments, these savings are estimated to reach \$3.5 million after one year.</p> <p>Hamarneh et al. estimated pharmacist care to save \$576,689 QALYs and avoided over 8.9 cardiovascular events, with estimated savings of \$4.4 billion over 30 years after pharmacist prescribing in cardiovascular diseases. It was estimated that pharmacist prescribing in blood pressure control would prevent 2100 cases of CVD and 8 cases of kidney disease per 10000 patients over thirty years; the intervention could save more than \$10,000 per patient.</p>
A scoping review of evidence of community pharmacist independent prescribing for common clinical conditions: beyond protocol prescribing ¹¹	Kim et al. 2021 stated that pharmacist prescribing for Upper Respiratory Tract infections, Contact Dermatitis and conjunctivitis resulted in less emergency department, walk-in clinics, family physicians' presentations which ultimately produces cost savings for the health system.
Community pharmacist prescribing: Roles and competencies - A systematic review and implications ¹⁵	Pharmacist-led anticoagulation management and atrial fibrillation monitoring demonstrated high clinical efficacy (treatment and cost efficiency) and safety (stroke risk reduction).
The accessibility of pharmacist prescribing and impacts on medicines access: A systematic review ²⁸	<p>One study examined affordability from the patient's perspective, with 84 % of participants reporting the pharmacist prescriber consultation fee was reasonable or lower than they were expecting. In the same study, 28 % reported seeing a pharmacist prescriber because they would save money by avoiding a physician's visit.</p> <p>Similarly, while many studies described the cost of pharmacist prescriber consultations, only one reported whether services were perceived to be affordable, and no studies reported on people's ability to pay for pharmacist prescribing services. Pharmacist prescribers themselves have previously reported the perception that cost is a major barrier to uptake in jurisdictions where pharmacist consultations and/or pharmacist-prescribed medicines are not covered by health systems or insurers.</p>
Interventions to expand community pharmacists' scope of practice ³⁶	This review noted that the cost burden on the healthcare system could be reduced by optimising the utilisation of pharmacists' knowledge and experience in their role.
Pharmacist prescribing in cancer services: a scoping review ²³	<p>Wright et al. 2020 reported dose rounding for capecitabine and temozolomide to have generated annual cost savings for patients of \$9858.24 and \$3281.85 respectively with pharmacist prescribing.</p> <p>Lau et al. 2020 reported reduced costs via generic substitution and assistance in co-pay covering.</p> <p>Valgus et al. 2011 showed improved physician efficiency which improved revenue gains and conclude that having pharmacists on the team improves physicians' efficiency, allowing them to see more patients and to generate more revenue.</p>

Title	Economic impact of pharmacist prescribing
	Easaw et al. 2019 showed 94% of cost saving per each patient utilising pharmacy care (Emergency department visit costing \$750 vs \$45 for community-based pharmacy service visit).
Global advancement in pharmacy services for mental health: A review for evidence-based practices ²²	Economic impact of pharmacist prescribing was not explicitly discussed for the two studies that involved pharmacist prescribing. Although Gibu et al, showed reduced visits to the emergency department due to pharmacists interim prescribing intervention.
Effects of pharmacist prescribing on health-related outcomes in secondary care compared with medical prescribing or no treatment: A systematic review ³¹	<p>Three studies discussed the economic outcome of pharmacist prescribing:</p> <p>Kassem et al. "Antibiotic expenditure was retrieved from the hospital database. Without the intervention, the medication cost was supposed to be 12695.9 dollars. The medication cost after the intervention was 6195 dollars and the cost for pharmacist service in the intervention was 2483 dollars. About 4017.8 dollars were saved after subtracting the cost of pharmacists' services. The findings showed a statistically significant decrease in the median cost of treatment after pharmacist interventions (82.0\$ pre-intervention vs. 29.3\$ post-intervention)".</p> <p>Anaya et al. "Average costs for inpatient hospitalisation and ED admissions were significantly higher in the pre-intervention period than in the post-intervention period for patients with DM as the primary or secondary diagnosis (\$2434 versus \$636, respectively; p = 0.015).</p> <p>For patients with a primary diagnosis of diabetes, pre-intervention costs were higher than post-intervention costs, but this difference was not significant (\$3082 versus \$696, respectively; p = 0.100).</p> <p>Chan et al. reported that the "mean total cPPPM of the pharmacist-managed group (US\$76 ± 95) was significantly lower than that of the physician-managed group (US\$98 ± 158) (p < 0.01)".</p>
Collaborative pharmacist prescribing models in Australian hospitals: a scoping study ²⁶	Collaborative prescribing reduced the median length of stay from 6.5 to 5.8 days (10% reduction) and reduced average admission cost from \$9803 to 8802 with savings of \$726 per admission.
The clinical and economic evidence of the management of urinary tract infections by community pharmacists in women aged 16 to 65 years: a systematic review ²⁷	Sanyal et al. 2019 measured the cost effectiveness of UTI- management by community pharmacists and it was found that the service would cost \$141,53 and \$368. If it was managed by GP and emergency department respectively while the pharmacist led care cost the public health system \$ 72.47. Additionally, it estimated \$ 2.9 million in year one and \$16.3 million by year 5 if 25% of the targeted population used the pharmacy service. Quality adjusted life months (QALM) were 0.75137, 0.75142, 0.75146 between pharmacists, GP and ED care.
Costs, consequences and value for money in non-medical prescribing: a scoping review ³⁰	<p>Al Hamarneh et al. 2019 reported that pharmacist prescribing was cost-effective and cost saving for patients with CVD.</p> <p>Hale et al. 2018 reported that pharmacist prescribing was cost-effective and cost saving for patients with venous thromboembolism.</p> <p>Marra et al. 2017 found that the pharmacist prescribing intervention was associated with increased cost of C\$7145 due to the intervention and the medication cost; this was mitigated by a cost saving of C\$15094 in CVD and other comorbidities cost and it was concluded that pharmacist prescribing intervention is cost effective.</p>

Title	Economic impact of pharmacist prescribing
	<p>Neilson et al. 2015, in a sample size of 125 patients found that pharmacist prescribing for chronic pain is more costly as it was estimated as £77.5 for prescribing and £54.4 for review arms with similar Quality Adjusted Life Years (QALY), and author recommended larger size to improve reliability and reduce uncertainty.</p>

** Data were extracted from the systematic reviews rather than the original reference paper*

Appendix 6 Level of qualifications required for endorsement for prescribing

Profession	Qualification required for endorsed prescribing	Requirements for endorsed prescribing
Midwifery	<p>Not included as part of an entry-level midwifery degree.</p> <p>Required to apply for endorsement of prescribing scheduled medicines.</p>	<p>When applying for endorsement for prescribing of scheduled medicines as a midwife, a midwife must be able to demonstrate all of the following:⁵⁴</p> <ol style="list-style-type: none"> Current general registration as a midwife in Australia with no conditions or undertakings relating to unsatisfactory professional performance or unprofessional conduct⁵⁴ Registration as a midwife that is equivalent of three years' full-time clinical practice (5,000 hours) in the past six years that is either: ⁵⁴ Across the continuum of care, or in a specified context of practice From the date when the complete application seeking endorsement for scheduled medicines is received by the NMBA Successful completion of: ⁵⁴ an NMBA-approved program of study leading to endorsement for scheduled medicines, or a program that is substantially equivalent to an NMBA-approved program of study leading to endorsement for scheduled medicines as determined by the NMBA (AQF Level 8).
Nursing	<p>Not included as part of an entry-level nursing degree. Required to apply for endorsement of prescribing of scheduled medicines.</p>	<p>Registered nurses (RNs) must be able to demonstrate that they are meeting the following requirements for registration standard at the time of their application for endorsement of prescribing of scheduled medications:</p> <ol style="list-style-type: none"> Current general registration as an RN in Australia with no conditions or undertakings relevant to this endorsement.⁵⁶ The equivalent of three years' full-time post initial registration clinical experience (5,000 hours) as an RN within the past six years, from the date when the complete application seeking endorsement for scheduled medicines as a designated RN prescriber is received by the NMBA.⁵⁶ Successful completion of: NMBA-approved units of study leading to endorsement for scheduled medicines as a designated RN prescriber, or units of study that are equivalent to the NMBA-approved units of study leading to endorsement for scheduled medicines as a designated RN prescriber.⁵⁶
	<p>Requirement for registered nurse practitioner.</p> <p>Required to apply for endorsement of prescribing of scheduled medicines.</p>	<p>A registered nurse seeking endorsement as a nurse practitioner (NP) must be able to demonstrate the following:</p> <ol style="list-style-type: none"> Current general registration as an RN in Australia with no conditions or undertakings on their registration relating to unsatisfactory professional performance or unprofessional conduct. The equivalent of three years' (5,000 hours) full-time experience at an advanced practice level, within the past six years, from the date when the application seeking endorsement as an NP is received by the NMBA. Successful completion of: <p>Pathway 1: an NMBA-approved program of study leading to endorsement as an NP or</p> <p>Pathway 2: a program that is substantially equivalent to an NMBA-approved program of study leading to endorsement as an NP, as determined by the NMBA*</p> <p>Compliance with the NMBA Nurse practitioner standards for practice.</p> <p>*An approved program of study means a postgraduate nursing master's degree (AQF Level 9) approved by the NMBA under section 49 of the National Law and</p>

		included in the NMBA-approved list of programs of study for endorsement as a nurse practitioner. This included NMBA-approved master's level units in advanced health assessment, pharmacology for prescribing, therapeutics and diagnostics and research.
Optometry	Endorsement to prescribe scheduled medicines is now embedded in a majority of entry-level optometry programs.	<p>Entry-level programs in optometry encompass ocular therapeutics. In Australia, from December 2014, therapeutic prescribing became a requirement for an individual's initial registration as a practising optometrist. Australian optometrists have a notation on their registration indicating whether they are qualified for scheduled medicines endorsement.</p> <p>The OCANZ Standards explicitly require program providers to provide documentary evidence.</p>
Pharmacy	<p>Not included as part of an entry-level pharmacy degree.</p> <p>Required to complete additional training in the area of prescribing.</p>	<p>Pharmacists are required to complete an accredited pharmacist prescriber education program. The accreditation standards for pharmacist prescriber education programs will ensure that graduates from an accredited program:^{3,44}</p> <ul style="list-style-type: none"> a. Meet the competencies in the National Prescribing Competency Framework (3rd Edition) which describes the practice expectations of Australian prescribers regardless of profession.^{3,44} d. Are competent and qualified to prescribe medicines according to their scope of practice as authorised under state and territory medicines and poisons legislation. e. Are ethical, safe practitioners for the benefit and well-being of the public they serve.⁴⁴ Are flexible, adaptable and responsive to the evolving needs of individuals and communities and fully comprehend their role as prescribers within that changing environment.⁴⁴ <p>The Performance Outcomes Framework that accompanies the accreditation standards for pharmacist prescriber education programs is aligned to the National Prescribing Competency Framework (3rd Edition).^{3,44}</p>
Physiotherapy	<p>Not included as part of an entry-level physiotherapy degree.</p> <p>AQF level 8 program required.</p>	<p>Approved training is a tertiary level study program equivalent to Australian Qualifications Framework (AQF) level 8.⁵² The study program must cover:</p> <ul style="list-style-type: none"> a. the knowledge, skills and behaviours set out in the National Prescribing Competencies Framework 3.⁵² b. Assessment must cover the essential competencies of clinical therapeutics, safe prescribing and quality use of medicines.⁵² c. A period of supervised practice must be a component of the study program, and the physiotherapist prescriber must be supervised by an authorised prescriber for this element.⁵²
Podiatry	Endorsement to prescribe scheduled medicines is now embedded in a majority of entry-level	<p>The registration standard outlines two pathways to endorsement: Pathway A: Approved qualification pathway or Pathway B: Supervised practice pathway.⁴⁹⁻⁵¹</p> <p>Pathway A: Approved qualification pathway</p> <p>A podiatrist or podiatric surgeon is qualified for endorsement if they hold a qualification that is Board approved for endorsement for scheduled medicines. The approved qualification is obtained by completing a Board-approved program of study for endorsement for scheduled medicines.^{49-51*}</p> <p>Pathway B: Supervised practice pathway</p> <p>A registered podiatrist or podiatric surgeon is eligible for endorsement for Scheduled medicines through a combination of:</p> <ul style="list-style-type: none"> a. Holding an approved qualification in podiatric therapeutics (or another qualification the Board considers substantially equivalent, or based on similar competencies to, an approved qualification in podiatric therapeutics) and

		<p>^{d.} Completing additional requirements as outlined in the Board's ESM registration standard. ⁴⁹⁻⁵¹</p> <p>*An approved qualification for endorsement for scheduled medicines means a qualification obtained by completing a podiatry program of study that has been accredited by the podiatry accreditation committee and subsequently approved by the Board as providing a qualification for the purpose for endorsement for scheduled medicines for the podiatry profession under Pathway A. ⁴⁹⁻⁵¹</p> <p>The program of study is aligned to the National Prescribing Competencies Framework and includes education and training in podiatric therapeutics as well as clinically supervised practice to ensure that graduates have the required competencies for endorsement for scheduled medicines. ⁴⁹⁻⁵¹</p>
--	--	--

Appendix 7 Domains relating to prescribing for non-medical health professions within prescribing accreditation standards

Profession	National Prescribing Competency Framework referenced?	Domain within the standards of the endorsed prescribing accreditation standard	Standard (statement)
Midwifery ⁵⁴	Yes	Domain 3: Program development and structure	<p>The program of study is developed in collaboration with key stakeholders reflecting contemporary trends in midwifery, prescribing practice and education. It should comply in length and structure with the Australian Qualifications Framework for the qualification offered and enabling graduates to meet the National Prescribing Competency Framework.</p> <p>Domain 3.3 of the standards state:</p> <p>A map of subjects against the National Prescribing Competencies Framework that clearly identifies the links between learning outcomes, assessments and required graduate competencies.</p>
		Domain 4: Program content	<p>The program content delivered by the program provider comprehensively addresses the National Prescribing Competency Framework within the midwifery context and incorporates Australian and international best practice perspectives on midwifery practice.</p> <p>Domain 4.</p> <p>A comprehensive curriculum document, based on the conceptual framework that includes: links between subject objectives, learning outcomes, learning assessments and the National Prescribing Competency Framework in the midwifery context.</p> <p>4.2 The program's central focus is on contemporary prescribing in midwifery practice. In addition to the content required to meet the attainment of the National Prescribing Competency Framework, this includes:</p> <ul style="list-style-type: none"> a. comprehensive understanding of the relevant State and Territory Drugs and Poisons legislation and Pharmaceutical Benefits Scheme requirements b. professional relationships and referral, including establishing collaborative arrangements with General Practitioners and Obstetricians and/or health services c. comprehensive understanding of and ability to work with the Medical Benefits Schedule and Pharmaceutical Benefits Scheme.
		Domain 5: Student assessment	<p>The curriculum incorporates a variety of approaches to assessment that suit the nature of the learning experience and robustly measure achievement of required learning outcomes, including a summative assessment of student performance against the current National Prescribing Competency Framework.</p> <p>The program provider must demonstrate evidence of:</p> <p>5.6 Appropriate assessments used in professional practice experience to evaluate students' abilities to meet the National Prescribing Competency Framework within midwifery practice.</p> <p>5.11 Summative assessments of student achievement of competence against the current National Prescribing Competency Framework within midwifery practice, conducted by a health professional who is appropriately qualified, prepared and able to demonstrate current</p>

Profession	National Prescribing Competency Framework referenced?	Domain within the standards of the endorsed prescribing accreditation standard	Standard (statement)
			<p>experience in assessing prescribing practice in an Australian midwifery context before program completion.</p> <p>5.12 Clearly articulated models of supervision, support, facilitation and assessment being in place to enable students to achieve required learning outcomes and current National Prescribing Competency Framework within midwifery practice.</p>
Nursing (Inclusive of registered nurse and nurse practitioner). ^{53,55-57}	Yes	Domain 3: Program of study	<p>3.3 Program content and subject alignment ensure:</p> <ul style="list-style-type: none"> a. achievement of competencies described in the National Prescribing Competency Framework b. preparation of students to prescribe scheduled medicines c. knowledge and understanding of legal and medicolegal principles and relevant legislative frameworks that enable designated registered nurses to prescribe in each state and territory d. understanding of ethical and professional obligations of prescribing within the scope of designated registered nurse prescribing practice e. an opportunity for students to demonstrate an integrated approach to prescribing f. an understanding of the designated registered nurse prescribing model g. knowledge of relevant medicine funding models in Australia h. prescribing practice learning plans
		Domain 5: Student assessment	<p>5.2 Subject learning outcomes, with associated subject assessments, are clearly mapped to the National Prescribing Competencies Framework</p> <p>5.4 Assessments include the prescribing process, underpinned by the quality use of medicines and the National Prescribing Competencies Framework</p>
Optometry ⁵⁸	Yes	Domain 4: Program of study	The curriculum should provide students with the competencies to prescribe medicines judiciously, appropriately, safely and effectively, as set out in the National Prescribing Competencies Framework.
Pharmacy ^{5,44}	Yes	Domain 1: Safe and socially accountable practice	The program develops pharmacist prescribers who are competent to prescribe safely with a socially accountable responsible, person-centred approach to practice.
		Domain 2: Governance and quality	Program governance, quality assurance and quality improvement structures and systems are effective in developing and delivering sustainable, high-quality pharmacist prescriber education programs.
		Domain 3: Program	Program design, implementation and resourcing enable graduates of the program to demonstrate achievement of all prescribing performance outcomes.
		Domain 4: Learner experience	Learners are provided with equitable and timely access to information and support relevant to the program.

Profession	National Prescribing Competency Framework referenced?	Domain within the standards of the endorsed prescribing accreditation standard	Standard (statement)
		Domain 5: Outcomes and assessment	Graduates of the program demonstrate achievement of all the required performance outcomes and to a standard commensurate with competent, safe, and socially accountable professional prescribing practice.
Podiatry	Yes	Domain 2: Academic governance, quality assurance and resourcing	The focus of this standard is on the overall context in which education about podiatry scheduled medicines is implemented; specifically, the administrative and academic organisational structure to support that. This standard also focuses on identifying the degree of control that the academics who lead and implement the program, the podiatry profession and other external stakeholders have over the relevance and quality of the program, to produce graduates who are safe and competent to administer, obtain, possess, prescribe, sell, supply or use Schedule 2, 3, 4 or 8 medicines for the treatment of podiatric conditions.
		Domain 3: Program design	Program design, including curriculum, learning and teaching and work integrated learning enables students to achieve all the professional capabilities for prescribing scheduled medicines for podiatric conditions. This standard focuses on how the program is designed and implemented to produce graduates who have demonstrated the relevant professional capabilities that are required for endorsement of registration for scheduled medicines. These include the National Prescribing Service Competencies Framework, and the relevant professional capabilities as described in the Professional capabilities for podiatrists and the Professional capabilities for podiatric surgeons.
		Domain 4: Assessment	The Committee expects the education provider to show how they assure that every student who passes the unit and/or subject has achieved all the professional capabilities required for a podiatrist or podiatric surgeon to qualify for endorsement of their registration in relation to scheduled medicines. The education provider must use fit for purpose and comprehensive assessment methods and formats to assess learning outcomes, and to ensure a balance of formative and summative assessments throughout podiatry scheduled medicines education.



australian
pharmacy
council[®]

T1 Level 2, 6 Brindabella Circuit South, Brindabella
Business Park, Canberra Airport ACT 2609

PO Box 1227 Fyshwick ACT 2609

p +61 2 6188 4288 | www.pharmacycouncil.org.au