

PRACTICE STANDARDS

Standards of Practice for Clinical Pharmacy Services

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OVERVIEW

The practice of clinical pharmacy continues to evolve with the changing needs and demands of contemporary health care. These standards are applicable to the delivery of clinical pharmacy services across all care settings: inpatients, outpatients and patients in the community.^{1,2}

They describe the activities delivered by pharmacists for patients to minimise the risks associated with the use of medicines and to optimise the use of medicines. Comprehensive and accountable clinical pharmacy services are an essential component of contemporary health care. Ideally, every health service organisation will have resources to provide all clinical pharmacy activities to every patient based on their needs.

Australian and overseas practice-based evidence confirms that the pharmacist activities described in these

standards support an individual patient's medication management plan (MMP) and reduce morbidity, mortality and the cost of care.³⁻⁵

Clinical pharmacy services for individual patients support the objectives of:

- Guiding Principles to Achieve Continuity in Medication Management⁶
- National Safety and Quality Health Service Standards⁷
- Australian Safety and Quality Goals for Health Care⁸
- National Safety and Quality Health Service Standards: Accreditation Workbook⁹
- National Strategy for Quality Use of Medicines¹⁰
- Medication Safety Self-Assessment: for Australian Hospitals¹¹
- Antimicrobial Stewardship in Australian Hospitals.¹²

In addition, clinical pharmacy services for individual patients enable the objectives of national strategies to improve patient safety and quality of care to be met, such as:

- Patient-Centred Care: Improving Quality and Safety through Partnerships with Patients and Consumers¹³
- Match Up Medicines: A Guide to Medication Reconciliation¹⁴
- National Inpatient Medication Chart (NIMC), Pharmaceutical Benefits Scheme hospital medication chart (PBS HMC), Paediatric Medication Chart, Private Hospital NIMC and Private Hospital Day Surgery NIMC¹⁵
- National Residential Medication Chart¹⁶
- National Medication Management Plan¹⁷
- Australian Charter of Healthcare Rights¹⁸
- OSSIE Guide to Clinical Handover Improvement.¹⁹

Other Society of Hospital Pharmacists of Australia (SHPA) standards of practice and guidelines in specialty areas should be read in conjunction with these standards including:

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This article publishes a new chapter in SHPA's Standards of Practice for Clinical Pharmacy Services: 'Chapter 16: My Health Record'. This chapter was approved by the SHPA Board of Directors in July 2021; it will be incorporated into the Standard the next time it is fully updated. The chapter is published here along with the Standard's 'Overview' section, to provide context on the purpose and scope of such chapters; further, references in the 'Overview' here have been updated to reflect current practice. Information about all of SHPA's Standards of Practice can be found at the SHPA website.

This Standard is for professional practice and is not prepared or endorsed by Standards Australia. It is not legally binding.

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- Standards of Practice for Medication Safety²⁰
- Medicines Use Evaluation Guideline²¹
- Standard of Practice in Oncology and Haematology for Pharmacy Services²²
- Standards of Practice for Mental Health Pharmacy²³
- Standards of Practice for the Community Liaison Pharmacist²⁴
- Guidelines for Self-Administration of Medication in Hospitals and Residential Care Facilities²⁵
- Standard of Practice in Emergency Medicine for Pharmacy Services²⁶
- Standards of Practice for the Provision of Consumer Medicines Information by Pharmacists in Hospitals²⁷
- Standard of Practice in Intensive Care for Pharmacy Services²⁸
- Standards of Practice for the Provision of Palliative Care Pharmacy Services²⁹
- Standard of Practice in Clinical Trials for Pharmacy Services³⁰
- Standards of Practice for Medicines Information Services.³¹

The professional conduct of pharmacists providing clinical services in all aspects of practice should be guided by the:

- Pharmacy Board of Australia and Australian Health Practitioner Regulation Agency codes and guidelines³²⁻⁴⁰
- SHPA Code of Ethics⁴¹
- National Competency Standards Framework for Pharmacists in Australia.⁴²

Familiarity with the medicines management pathway and how other non-clinical hospital pharmacy services support each step of the pathway is useful to understand the context of clinical pharmacy services (Figures 1, 2).

Objective and definition

Objective

The objectives of a clinical pharmacy service and clinical pharmacy activities are to minimise the inherent risks associated with the use of medicines, increase patient safety at all steps in the medicines management pathway and optimise health outcomes.

Definition

Pharmacists undertake clinical pharmacy activities for individual patients to minimise the inherent risk associated with the use of medicines. Clinical pharmacy

activities support a collaborative approach (with patients, carers, prescribers and other health professionals) to medicines management.

Clinical pharmacy activities described in these standards include:

- medication reconciliation
- assessment of current medication management
- clinical review, therapeutic drug monitoring and adverse drug reaction management
- contributing to the MMP
- providing medicines information
- facilitating continuity of medication management on discharge or transfer
- participating in interdisciplinary ward rounds and meetings
- training and education
- participating in research
- quality improvement activities and peer review.

A clinical pharmacy service describes a team of pharmacists (with support from pharmacy technicians and assistants) who are involved in the delivery of a combination of these activities to individual patients or groups of patients.

Extent and operation

These standards are comprised of 16 chapters that detail the clinical pharmacy activities listed above. They provide guidance on maximising clinical pharmacy services and activities, managing workloads, using pharmacy support staff and improving the quality of clinical pharmacy services. These chapters are:

- Chapter 1: Medication reconciliation
- Chapter 2: Assessment of current medication management
- Chapter 3: Clinical review, therapeutic drug monitoring and adverse drug reaction management
- Chapter 4: Medication management plan
- Chapter 5: Providing medicines information
- Chapter 6: Facilitating continuity of medication management on transition between care settings
- Chapter 7: Participating in interdisciplinary care planning
- Chapter 8: Prioritising clinical pharmacy services
- Chapter 9: Staffing levels and structure for the provision of clinical pharmacy services
- Chapter 10: Training and education
- Chapter 11: Participating in research
- Chapter 12: Standard of practice for pharmacy technicians to support clinical pharmacy services⁴³
- Chapter 13: Documenting clinical activities

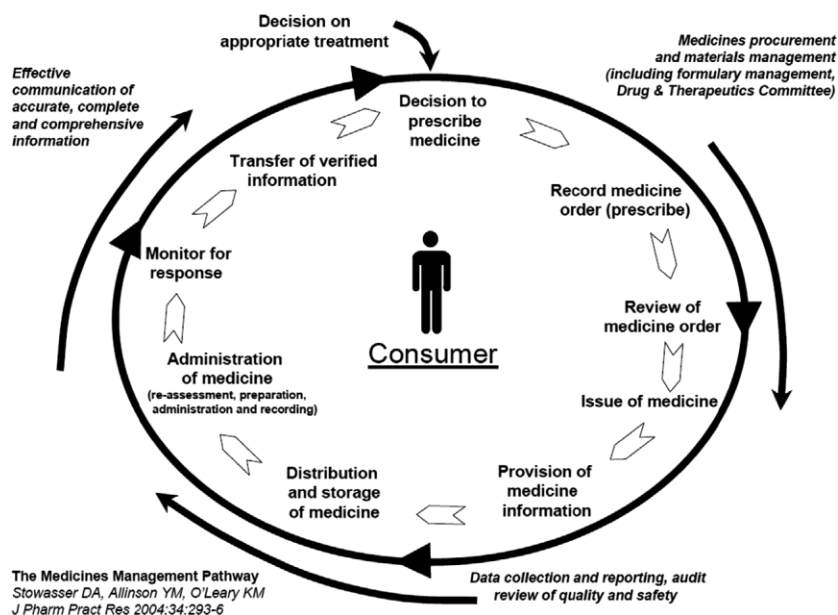


Figure 1 Overview of the medicines management pathway cycle.

- Chapter 14: Improving the quality of clinical pharmacy services
- Chapter 15: Clinical competency assessment tool
- Chapter 16: My Health Record

Each chapter is also linked to relevant competencies and accreditation frameworks.

Clinical pharmacy activities are not restricted to hospital practice; pharmacists in many settings deliver the activities described in these standards. However, the notion of a designated clinical pharmacy service is generally associated with hospital practice.

There should always be a separation of the functions of prescribing, dispensing and administering medicines in all practice settings, wherever possible. In some settings, for example, theatres, rural and remote areas, or in emergencies this may not always be possible, but the principle is supported as it provides the checks and balances necessary for safer prescribing and delivery of medicines.⁴⁴

Separating these functions ensures that another health professional takes an independent review of the next step in the medicines management pathway. Pharmacists proactively collaborate with prescribers, retrospectively review medicines ordered and intervene when errors or omissions have occurred or improvements can be made. The clinical pharmacy activities described in these standards focus on the optimum use of medicines for an individual patient, and are required irrespective of the number of prescribers or the profession of the prescriber. Medicines ordered by pharmacists authorised

to prescribe should be reviewed by the dispensing pharmacist or the clinical pharmacist responsible for the patient's care.

Decision support and therapeutic information offered through electronic prescribing systems can support prescribing within designated parameters, but they do not replace review of prescribed medicines by a pharmacist.

Communication and cooperation between acute, subacute, non-acute and primary care sectors is important for patients to receive uninterrupted care. For this reason, facilitating continuity of medication management on discharge or transfer is a core clinical pharmacy activity.

Where appropriate, pharmacists should contribute to a patient's electronic health record to facilitate the continuity of medication management. Pharmacy services should be available when patients require them, seven days per week and for extended hours. Limiting services to business hours and five days per week reduces the timeliness of service delivery and may impact on patient care.

Ideally, every health service organisation will have resources to provide a clinical pharmacy service to every patient based on their needs. However, limited funding and insufficient staffing levels to meet patient numbers and inpatient throughput mean that pharmacy services may not be provided to all patients. Pharmacy managers, in conjunction with the organisation's managers, need to plan for these circumstances by determining the groups of patients that will benefit the most from a clinical pharmacy service and which clinical pharmacy activities are prioritised in their organisation.

Overview of hospital pharmacy services

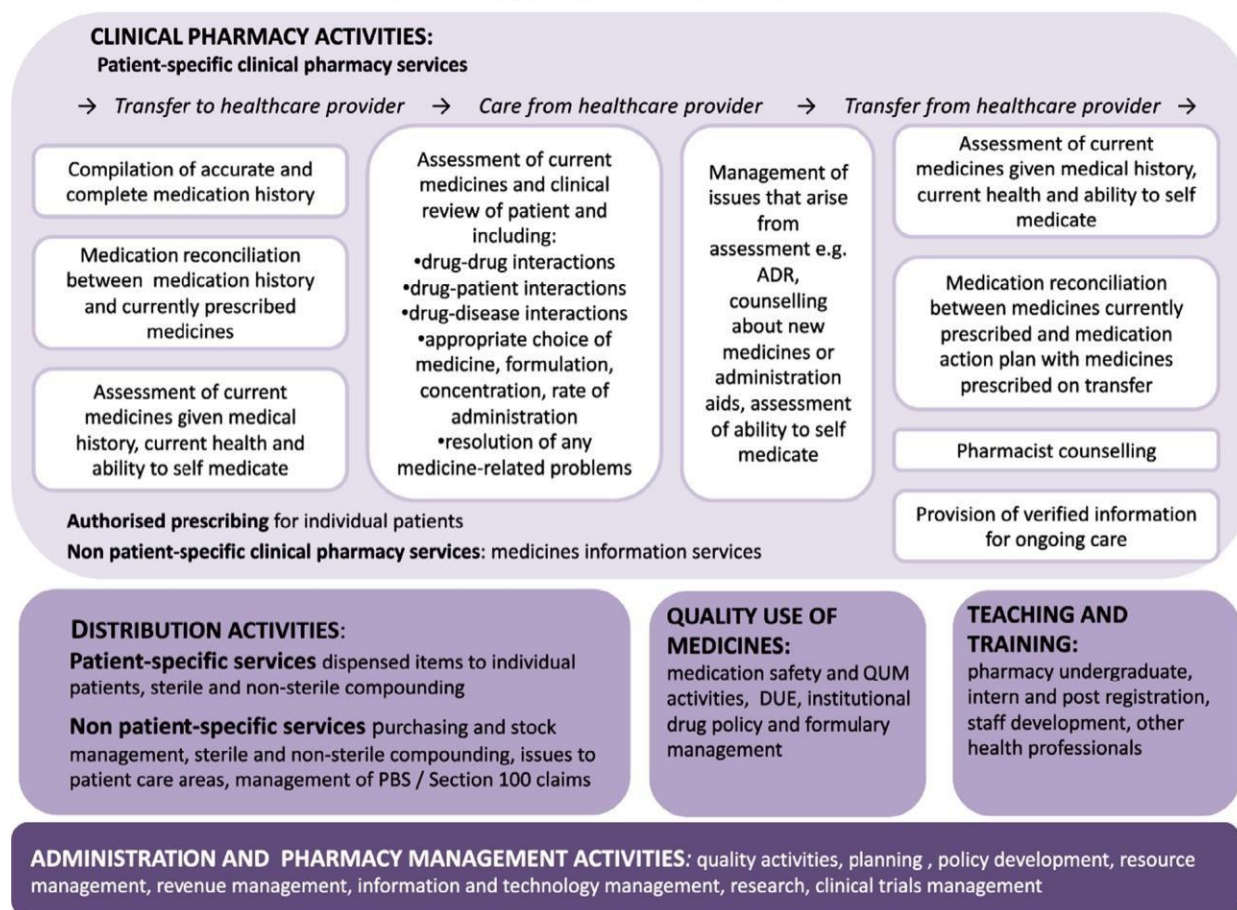


Figure 2 Hospital pharmacy services that support the medicines management pathway.

These decisions should be in line with the organisation's policies and need to be described in service agreements that detail the patients/service areas that will have access to clinical pharmacy services and which clinical pharmacy activities are priorities for each group of patients/service area. These decisions should also align with the National Safety and Quality Health Service Standards and their goals.^{7,8}

Pharmacists also need to prioritise the patients who will receive which clinical pharmacy activities on a day-to-day basis. Patients most at risk of medicine-related problems are likely to obtain the maximum benefit from clinical pharmacy activities. Patients most at risk of medicine-related problems include those who:^{1,15,17,45,46}

- have medication misadventure as the known or suspected reason for their presentation or admission to the health service organisation
- are aged 65 years or older
- take five or more medicines
- take more than 12 doses of medicines per day
- take a medicine that requires therapeutic monitoring or is a high-risk medicine
- have had clinically significant changes to their medicines or treatment plan within the last 3 months
- have suboptimal response to treatment with medicines
- have difficulty managing their medicines because of literacy or language difficulties, dexterity problems, impaired sight, confusion/dementia or other cognitive difficulties
- have impaired renal or hepatic function
- have problems using medication delivery devices or require an adherence aid
- are suspected or known to be non-adherent with their medicines
- have multiple prescribers for their medicines
- have been discharged within the last 4 weeks from or have had multiple admissions to a health service organisation.

In addition to meeting their continuing professional development requirements, pharmacists have a responsibility to contribute to the training and education of other pharmacists, pharmacy students and health professionals. This may involve experiential training of undergraduate and post-graduate students, or orientation and training of inexperienced pharmacists or those recently returning to the workplace. The shpaclinCAT competency framework for pharmacists provides a tool to support pharmacist development as part of an ongoing program of review and enhancement.⁴⁷

Pharmacists should be involved in presentations and education programs for colleagues and patient groups, for example, cardiac rehabilitation, participate in medication management-related nursing education and in public health education programs, for example, smoking cessation. Pharmacists should support, initiate and participate in research projects, whenever possible. Pharmacists involved in research activities must adhere to the principles and procedures outlined by key authoritative bodies and the organisation's research and ethics committees.^{29,48,49}

Participation in quality use of medicines activities within hospitals and research into optimal use of medicines and the practice of clinical pharmacy are essential components of a clinical pharmacy service. Quality use of medicines activities are inclusive of medication safety, medicines use evaluation and antimicrobial stewardship.^{12,20,21} Pharmacists can be involved in medicines use evaluation activities by identifying clinical areas requiring evaluation, data collection and the design and provision of education programs.

Each pharmacy service should have a clearly defined quality improvement governance system which outlines the goals for the quality of service delivery. This governance system should be in accordance with the larger framework of the organisation.^{7,8} A quality improvement governance system for a clinical pharmacy service should consider the range and day-to-day prioritisation of clinical pharmacy activities delivered and any service agreements.

REFERENCES

- 1 SHPA Committee of Speciality Practice in Clinical Pharmacy. Standards of Practice for Clinical Pharmacy Services. *J Pharm Pract Res* 2013; 43(2 suppl): S2–69.
- 2 The Society of Hospital Pharmacists of Australia. *Standards of practice [website]*. Collingwood: SHPA; 2021. Available from <www.shpa.org.au/standards-of-practice>. Accessed 18 August 2021.
- 3 Stowasser DA, Collins DM, Stowasser M. A randomized controlled trial of medication liaison services—patient outcomes. *J Pharm Pract Res* 2002; 32: 133–40.
- 4 Borja-Lopetegui A, Webb DG, Bates I, Sharrott P. Association between clinical medicines management services, pharmacy workforce and patient outcomes. *Pharm World Sci* 2008; 30: 418–20.
- 5 Bond CA, Raehl CL, Franke T. Clinical pharmacy services and hospital mortality rates. *Pharmacotherapy* 1999; 19: 556–64.
- 6 Australian Pharmaceutical Advisory Council. *Guiding principles to achieve continuity in medication management*. Canberra: APAC; 2005. Available from <[https://www1.health.gov.au/internet/main/publishing.nsf/Content/EEA5B39AA0A63F18CA257BF0001DAE08/\\$File/Guiding-principles-to-achieve-continuity-in-medication-management.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/EEA5B39AA0A63F18CA257BF0001DAE08/$File/Guiding-principles-to-achieve-continuity-in-medication-management.pdf)>.
- 7 Australian Commission on Safety and Quality in Health Care. *National safety and quality health service standards*, 2nd ed. Sydney: ACSQHC; 2021. Available from <https://www.safetyandquality.gov.au/sites/default/files/2021-05/national_safety_and_quality_health_service_nsqs_standards_second_edition_-_updated_may_2021.pdf>.
- 8 Australian Commission on Safety and Quality in Health Care. *Australian safety and quality goals for health care*. Sydney: ACSQHC; 2012. Available from <<https://www.safetyandquality.gov.au/sites/default/files/migrated/Goals-Overview.pdf>>.
- 9 Australian Commission on Safety and Quality in Health Care. *National Safety and Quality Health Service Standards: Accreditation Workbook*. Sydney: ACSQHC; 2017. Available from <<https://www.safetyandquality.gov.au/sites/default/files/migrated/National-Safety-and-Quality-Health-Service-Standards-Accreditation-Workbook.pdf>>.
- 10 Commonwealth Department of Health and Ageing. *The national strategy for quality use of medicines*. Canberra: The Department; 2002. Available from <[https://www1.health.gov.au/internet/main/publishing.nsf/Content/EEA5B39AA0A63F18CA257BF0001DAE08/\\$File/National-Strategy-for-Quality-Use-of-Medicines.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/EEA5B39AA0A63F18CA257BF0001DAE08/$File/National-Strategy-for-Quality-Use-of-Medicines.pdf)>.
- 11 Clinical Excellence Commission. *Medication safety self-assessment for Australian hospitals*. Sydney: CEC; 2015. Available from <https://www.cec.health.nsw.gov.au/_data/assets/pdf_file/0011/326909/MSSA-Complete-Workbook-2015.pdf>.
- 12 Australian Commission on Safety and Quality in Health Care. *Antimicrobial stewardship in Australian health care*. Sydney: ACSQHC; 2021. Available from <https://www.safetyandquality.gov.au/sites/default/files/2021-06/complete_ams_book_-_updated_inner_cover_acknowledgements_contents_and_chapter_16_-_june_2021.pdf>.
- 13 Australian Commission on Safety and Quality in Health Care. *Patient-centred care: improving quality and safety through partnerships with patients and consumers*. Sydney: ACSQHC; 2011. Available from <<https://www.safetyandquality.gov.au/publications-and-resources/resource-library/patient-centred-care-improving-quality-and-safety-through-partnerships-patients-and-consumers>>.
- 14 Australian Commission on Safety and Quality in Health Care. *Match up medicines: a guide to medication reconciliation*. Sydney: ACSQHC; 2010.
- 15 Australian Commission on Safety and Quality in Health Care. *National inpatient medication chart user guide*. Sydney: ACSQHC; 2019. Available from <https://www.safetyandquality.gov.au/sites/default/files/2019-08/nimc_user_guide_2019.pdf>.
- 16 Australian Commission on Safety and Quality in Health Care. *National Residential Medication Chart [website]*. Sydney: ACSQHC; 2021. Available from <<https://www.safetyandquality.gov.au/our-work/medication-safety/national-residential-medication-chart>>. Accessed 18 October 2021.
- 17 Australian Commission on Safety and Quality in Health Care. *National medication management plan user guide*. Sydney: ACSQHC; 2010. Available from <<https://www.safetyandquality.gov.au/sites/default/files/migrated/Medication-Management-Plan-User-Guide.pdf>>.
- 18 Australian Commission on Safety and Quality in Health Care. *Australian charter of healthcare rights*. Sydney: ACSQHC; 2020. Available from <<https://www.safetyandquality.gov.au/sites/default/files/2019-06/Charter%20of%20Healthcare%20Rights%20A4%20poster%20ACCESSIBLE%20pdf.pdf>>.
- 19 Australian Commission on Safety and Quality in Health Care. *OSSIE guide to clinical handover improvement*. Sydney: ACSQHC; 2010. Available from <https://www.safetyandquality.gov.au/sites/default/files/2019-12/ossie_guide_to_clinical_handover_improvement.pdf>.
- 20 Society of Hospital Pharmacists of Australia. Committee of Speciality Practice in Medication Safety. SHPA standards of practice for medication safety. *J Pharm Pract Res* 2012; 42: 300–4.
- 21 Graudins LV, Fitzsimons K, Manias E, Mirkov S, Nguyen N-A, Munro C. Medicines use evaluation guideline. *J Pharm Pract Res* 2020; 50: 166–79.
- 22 Coutsouvelis J, Adams J, Bortz H, Chau M, Chiang K, Foo J, *et al*. Standard of practice in oncology and haematology for pharmacy services. *J Pharm Pract Res* 2020; 50: 528–45.
- 23 Society of Hospital Pharmacists of Australia. Committee of Specialty Practice in Mental Health Pharmacy. SHPA standards of practice for mental health pharmacy. *J Pharm Pract Res* 2012; 42: 142–5.
- 24 Society of Hospital Pharmacists of Australia. Committee of Specialty Practice in Rehabilitation. Standards of practice for the community liaison pharmacist. *Aust J Hosp Pharm*. 1996; 26: 570–2.
- 25 Society of Hospital Pharmacists of Australia. Committee of Specialty Practice in Rehabilitation and Aged Care. SHPA guidelines for self-administration of medication in hospitals and residential care facilities. *J Pharm Pract Res* 2002; 32: 324–5.
- 26 Welch S, Currey E, Doran E, Harding A, Roman C, Taylor S, *et al*. Standard of practice in emergency medicine for pharmacy services. *J Pharm Pract Res* 2019; 49: 570–84.
- 27 Society of Hospital Pharmacists of Australia. SHPA standards of practice for the provision of consumer medicines information by pharmacists in hospitals. *J Pharm Pract Res* 2007; 37: 56–8.
- 28 Johnston K, Ankravs MJ, Badman B, Choo CL, Cree M, Fyfe R, *et al*. Standard of practice in intensive care for pharmacy services. *J Pharm Pract Res* 2021; 51: 165–83.
- 29 Society of Hospital Pharmacists of Australia. Committee of Specialty Practice in Cancer Services. SHPA standards of practice for the provision of palliative care pharmacy services. *J Pharm Pract Res* 2006; 36: 306–8.

- <https://doi.org/10.1002/j.2055-2335.2006.tb00636.x>.
- 30 Slobodian P, Challen J, Ching M, Hong E, Nikolajevic-Sarunac J, Shum B, et al. Standard of practice in clinical trials for pharmacy services. *J Pharm Pract Res* 2020; 50: 429–44.
- 31 Society of Hospital Pharmacists of Australia. Committee of Specialty Practice in Medicines Information. SHPA standards of practice for medicines information services. *J Pharm Pract Res* 2013; 43: 53–6.
- 32 Pharmacy Board of Australia. Guidelines for proprietor pharmacists. Melbourne: PBA; 2015. Available from <<https://www.pharmacyboard.gov.au/documents/default.aspx?record=WD15%2f17691&dbid=AP&chksum=38U9CgE45JL%2bBPCUEpSjWw%3d%3d>>.
- 33 >.
- 34 Pharmacy Board of Australia. Guidelines for dispensing of medicines. Melbourne: PBA; 2015. Available from <<https://www.pharmacyboard.gov.au/documents/default.aspx?record=WD15%2f17695&dbid=AP&chksum=cZm3mO8R6fTMDPPI3scPUw%3d%3d>>.
- 35 Pharmacy Board of Australia. Guidelines on practice-specific issues. Melbourne: PBA; 2015. Available from <<https://www.pharmacyboard.gov.au/documents/default.aspx?record=WD15%2f17693&dbid=AP&chksum=wRUYxmjLkeSpBGRiCUGJIQ%3d%3d>>.
- 36 Pharmacy Board of Australia. Guidelines on practice-specific issues: Guideline 1 (List of reference texts for pharmacists). Melbourne: PBA; 2015. Available from <<https://www.pharmacyboard.gov.au/documents/default.aspx?record=WD15%2f17703&dbid=AP&chksum=wn4rtbgCVdW6Y0d8eo3syA%3d%3d>>.
- 37 Pharmacy Board of Australia. Guidelines on dose administration aids and staged supply of dispensed medicines. Melbourne: PBA; 2015. Available from <<https://www.pharmacyboard.gov.au/documents/default.aspx?record=WD15%2f17697&dbid=AP&chksum=ZyxagimMxcu67B7Mo7smvw%3d%3d>>.
- 38 Pharmacy Board of Australia. Guidelines on continuing professional development. Melbourne: PBA; 2015. Available from <<https://www.pharmacyboard.gov.au/documents/default.aspx?record=WD15%2f18499&dbid=AP&chksum=H3IV5PqPKFCpuVIkijyUkA%3d%3d>>.
- 39 Australian Health Practitioner Regulation Agency. Guidelines: Mandatory notifications about registered health practitioners. Melbourne: AHPRA; 2020. Available from <<https://www.ahpra.gov.au/documents/default.aspx?record=WD20/29515&dbid=AP&chksum=YMVST2Py%2bC0erSWK0QAhg%3d%3d>>.
- 40 Australian Health Practitioner Regulation Agency. Guidelines for advertising of regulated health services. Melbourne: AHPRA; 2020. Available from <<https://www.ahpra.gov.au/documents/default.aspx?record=WD20/30461&dbid=AP&chksum=0sNkdBzefE4jEabpVY862A%3d%3d>>.
- 41 Pharmacy Board of Australia. Code of conduct for pharmacists. Melbourne: PBA; 2014. Available from <<https://www.pharmacyboard.gov.au/documents/default.aspx?record=WD14%2f13336&dbid=AP&chksum=Vkladtr%2byRSb4%2bDOM7fvQ%3d%3d>>.
- 42 Society of Hospital Pharmacists of Australia. *SHPA code of ethics*. Collingwood: SHPA; 2012. Available from <https://www.shpa.org.au/sites/default/files/uploaded-content/website-content/6_shpa_code_of_ethics.pdf>.
- 43 Pharmaceutical Society of Australia. *National competency standards framework for pharmacists in Australia*. Deakin: PSA; 2016. Available from <https://my.psa.org.au/servlet/fileField?entityId=ka10o00000QM4zAAG&field=PDF_File_Member_Content>.
- 44 Bekema C, Bruno-Tomé A, Butnoris M, Carter J, Diprose E, Hickman L, et al. *Standard of practice for pharmacy technicians to support clinical pharmacy services*. Collingwood: Society of Hospital Pharmacists of Australia; 2019.
- 45 Society of Hospital Pharmacists of Australia. *Position statement. National competencies for the prescribing of medicines*. Collingwood: SHPA; 2012.
- 46 Pharmaceutical Society of Australia. *Guidelines for comprehensive medication management reviews*. Deakin: PSA; 2020.
- 47 Australian Commission on Safety and Quality in Health Care. *Safety and quality improvement guide. Standard 4: medication safety*. Sydney: ACSQHC; 2012.
- 48 Society of Hospital Pharmacists of Australia. Clinical competency assessment tool (shpaclinCAT version 2). In: SHPA standards of practice for clinical pharmacy services. *J Pharm Pract Res* 2013; 43(2 suppl): S50–67.
- 49 Therapeutic Goods Administration. *Note for guidance on good clinical practice (CPMP/ICH/135/95): annotated with TGA comments*. Canberra: TGA; 2000. Available from <<https://www.tga.gov.au/sites/default/files/ich13595an.pdf>>.