Standard of Practice in General Medicine for Pharmacy Services

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Preface
This Standard references and relies upon the SHPA Standards of Practice for Clinical Services 1 as the foremost Standard. Owing to the nature of general medicine, this Standard may overlap with others and depending on the area of specialty practice it may be advisable to refer to additional Standards of Practice.

The use of the word ‘specialisation’ in this standard is in line with the National Competency Standards Framework for Pharmacists in Australia 2 where ‘specialisation’ refers to the scope of practice rather than the level of performance. ‘Specialisation’ of itself does not confer additional expertise.

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

Introduction
In Australia, everyone shares a fundamental right to safe and high-quality healthcare. This is enshrined in the Australian Charter of Healthcare Rights 3 by which all healthcare systems, including the provision of advanced pharmacy care, must abide. The Charter summarises the basic rights of patients and consumers when accessing healthcare services including access, safety, respect, communication, participation, privacy, and comment. The provision of pharmacy services must encompass the Charter to deliver effective, efficient, timely and equitable patient-centred care.
The National Competency Standards Framework for Pharmacists in Australia\(^2\) complements the underpinnings of the Charter across five domains of competency for the pharmacy profession, namely: (1) professionalism and ethics; (2) communication and collaboration; (3) medicines management and patient care; (4) leadership and management, and; (5) education and research.

The present Standard, produced by the Society of Hospital Pharmacists of Australia (SHPA), refers to both the role of the pharmacy service and the pharmacists’ practice in general medicine. It is intended for pharmacists involved in rotational general medicine roles and pharmacists whose specialisation is general medicine and, for consistency, refers to both as ‘general medicine pharmacists’. The Standard predominantly refers to pharmacists but does not intend to exclude suitably qualified pharmacy technicians where appropriate.\(^1\). The SHPA supports both pharmacists and pharmacy technicians to operate at their full scope of practice in order to achieve optimal patient and pharmacy outcomes.

This Standard is intended to be used across hospital pharmacy services in Australia, regardless of the service type (public or private) or location (metropolitan, regional or rural). Although this Standard is intended for hospital pharmacy services, the principles and aspects of patient management discussed herein can be applied to broader pharmacy services. It is acknowledged there are significant variations in pharmacy services that are dependent on organisational capacity, patient population, general medicine unit and pharmacy department priorities and the availability of general medicine pharmacists; all of these may influence the scope of services.

The Standard describes current best care for the provision of general medicine pharmacy services by general medicine pharmacists. Essential services relate to services that demonstrate the full scope of current pharmacy practice. Emerging services relate to services that are innovative and future-focused and are provided in addition to essential services. The SHPA encourages all pharmacy services to strive to provide emerging services wherever possible, in addition to essential services.

### General medicine units

Patients admitted to general medicine units (Box 1) or services are often complex with multiple comorbidities and polypharmacy and are at risk for medication-related problems (MRPs) associated with increased morbidity and mortality. Patients are frequently admitted to general medicine units with undifferentiated symptoms and multiple active problems relating to their acute hospital admission which precludes their admission under a specialty unit. Moreover, some regional and rural hospitals admit all medical patients under a general medicine unit.

The pharmacist’s role in the general medicine unit is both critical and unique. Models of care in general medicine units are commonly multidisciplinary and patient-centric. The skills required of a pharmacist working within general medicine are broad as the patients that are cared for in these units are diverse. This includes having the ability to optimise pharmacotherapy in the context of multi-organ involvement or undifferentiated presentation, detailed knowledge of the pathophysiology and therapeutics of a broad range of disease states and working across both acute hospital and ambulatory settings. Many pharmacy services to general medicine in Australia are now unit-based, with pharmacists embedded in the medical unit instead of being allocated to a ward location, allowing the pharmacist to be a crucial member of the multidisciplinary team (MDT).
Evidence of pharmacist impact in general medicine

General medicine pharmacists should be experienced in multiple specialities enabling them to manage medically diverse patients who often present with multiple simultaneous problems. Minimal literature exists around proactive models of care for clinical pharmacists working in general medicine. A study published in the European Journal of Internal Medicine evaluated the impact of a clinical pharmacist and pharmacologist on the identification of MRPs in a general medicine unit. The authors concluded that pharmacotherapy expertise during medical rounds was useful and well accepted by prescribers, however, the pharmacy service was limited to a clinical pharmacist attending medical ward rounds and did not include any extended roles for pharmacists.

The impact of pharmacists attending ward rounds on general medicine units has been previously described in a study published in the Archives of Internal Medicine. The investigators compared the number of preventable adverse drug events (ADEs) in patients receiving care from a rounding team including a pharmacist, to patients receiving standard care (no pharmacist on rounding team). The authors concluded that there was a significant reduction (78%) in preventable ADEs in patients receiving care from a team including a pharmacist who attended medical ward rounds.

More recently, local evidence in an Australian context supporting advanced practice roles for pharmacists in general medicine has emerged. This includes a collaborative admission medication charting model, pharmacist-led influenza vaccination, pharmacist completing the medication management plan (MMP) in the medical discharge summary to reduce the rate of errors in these summaries, and documentation of medication changes by a pharmacist-prepared discharge medication management summary (DMMS). The benefits of these advanced practice roles in general medicine include reduced medication errors and potential reductions in hospital length of stay and hospital readmissions. The collaborative admission medication charting model, or 'Partnered Pharmacist Medication Charting' involves a credentialled pharmacist working in close collaboration with the admitting medical officer to review, adjust and chart preadmission medicines as well as assessing and charting VTE prophylaxis.

Objectives of the Service

The objectives of the general medicine pharmacy service are to improve medicines related through the provision of comprehensive care within an MDT. General medicine pharmacists must deliver the service as part of interdisciplinary collaboration and within the framework of evidence-based and patient-centred healthcare, ensuring optimal medicines management.
Patients admitted to general medicine units are acutely unwell, often with undifferentiated illness and/or multi-organ involvement. These individuals are at high risk of polypharmacy and medicines misadventure. The general medicine pharmacist should possess the skills and knowledge for the medication management of patients with multiple simultaneous issues and/or comorbidities and consider the holistic needs of the individual in medication management, the prevention, and treatment of diseases and the identification of iatrogenic conditions.

Scope
This Standard applies to all pharmacists working in general medicine. The service provided by the general medicine pharmacist may be delivered across several settings including both public and private hospitals, in inpatient, outpatient or ambulatory care settings and in primary care. The scope of services provided by general medicine pharmacists will depend on a variety of factors including: the setting, patient population, the services that the hospital or health service provides, funding models, governance structures for general medicine services, general medicine and pharmacy department management priorities, organisational priorities and the scope of practice of the individual pharmacist. Although the range of services provided in general medicine is primarily delivered by pharmacists, it may be supported by pharmacy technicians in clinical and non-clinical roles.

The role of the general medicine pharmacist should include: delivery of pharmacy services that add value to healthcare systems and improve patient medicines outcomes; development of and input into policies, procedures, guidelines and resources; comments on medicines formulary decisions with relevance to general medicine units; provision of educational programs and training for healthcare professionals and students; quality improvement activities and research related to general medicine. The role may additionally include participation on hospital governance teams (e.g. medication safety, adverse drug reaction committee), patient experience committees and external committees. Furthermore, general medicine pharmacists should be involved in activities to enhance clinical skills, including health promotion, education, governance, auditing, networking, mentoring and research. The pharmacist should be a point of contact for other pharmacists and health professionals, and for the hospital or health service, for medicines enquiries related to general medicine.

Operation
The general medicine pharmacist should preferably be embedded within the general medicine MDT. This facilitates the multidisciplinary management of patients where the team can consider the holistic care of the individual. Ideally, this is a pharmacist whose area of specialisation is general medicine and who demonstrates competence (knowledge, skills and attributes) in general medicine. Provisional pharmacists and early career pharmacists, as well as those working in other specialties with an interest in general medicine, should have the opportunity to participate in the general medicine service under supervision, to strengthen the development of the pharmacy workforce. Components of the service may be delegated to other pharmacists and pharmacy technicians with appropriate skills and training.
For all patients, the pharmacist must facilitate the documentation of a best possible medication history (BPMH) as early as possible, ideally at the point of the patient’s admission to hospital, as this will form the foundation for other clinical activities (e.g. medicines reconciliation, assessment of medicines management and clinical review) and facilitate planning for either transition of care or the discharge process. Given the complexity of medicines management in many general medicine patients, it is imperative that information regarding adherence, dose aids, administration methods and duration of therapy (where appropriate) additionally be collected and documented.

The general medicine pharmacist must:

- Assess recent medicine changes which may have contributed to the admission
- Review and interpret drug-drug/patient/nutrient interactions and patient-specific clinical data when determining if pharmacotherapy is appropriate
- Consider patient-specific dosing regimens (e.g. choice of agent, route of administration, medicine formulation, dose and frequency of administration)
- Identification of inappropriate or unnecessary medication and development of a deprescribing plan e.g. PPI weaning to lowest effective dose or deprescribing
- Demonstrate activities that reduce the prescribing cascade e.g. using furosemide for amlodipine-induced peripheral oedema
- Identify and devise a plan for correcting medicine overuse and underuse, either prescribing or adherence
- Practice the provision of medicines information to both patients and healthcare providers
- Operate to ensure continuity of care through accurate reconciliation of the discharge prescription and provision of medicine and information to patients and their carers on discharge
- Appraise the patient’s ability to manage their medicines safely in the community and devise a plan to support medicines management. Consider:
  - Liaison with community care providers (e.g. general practitioner, local pharmacies, community nursing services)
  - Liaison with hospital-based providers (e.g. outpatient clinics, hospital admission risk program (HARP), hospital outreach pharmacist).

Patient Factors

The general medicine pharmacist should pay specific attention to patient factors and personalise care according to:

- Age, specifically older people who tend to have multiple co-morbidities and may be on many medicines
- Indigenous peoples of Australia aged 45 and over
- Health literacy or non-English speaking background
- Frailty or functional impairment
- Renal and/or hepatic function or level of impairment
- Neurological manifestations e.g. lethargy, confusion, agitation, delirium, dementia.
- Cardiac and respiratory conditions
- Response to treatment may take longer in the elderly population and increased susceptibility to adverse effects of medications
• Increased risk of infection, with minimal signs of sepsis manifestation (e.g. fever, white cell response), resulting in delayed detection

• End of life care.

Service Provision with regard to Practice Settings

Service provision will vary with regard to the practice setting, with the traditional inpatient model expanding to include care for patients in outpatient, ambulatory and clinic-based services. As detailed in the introduction, this Standard describes the best care for the provision of pharmacy services with essential services that relate to services that demonstrate the full scope of pharmacy practice and emerging services that are innovative and future-focused and are provided in addition to essential services. Table 1 lists examples of essential and emerging services provided by general medicine pharmacists.

Table 1 Examples of essential and emerging services provided by general medicine pharmacists

<table>
<thead>
<tr>
<th>Essential services</th>
<th>Emerging services</th>
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<tr>
<td>Medicines reconciliation as early as possible</td>
<td>Routine pharmacist attendance with medical emergency team to medical emergency team calls (MET)</td>
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<td>Routine presence on daily medical ward rounds with active engagement by the pharmacist</td>
<td>Partnered pharmacist medication charting</td>
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<td>Discharge medicines reconciliation and provision of appropriate medicines information for all patients and carers</td>
<td>Pharmacist involvement in the preparation of medical discharge summaries</td>
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<td>Develop and contribute to relevant research, including quality improvement projects and review of controversial prescribing trends as part of the general medicine MDT</td>
<td>Pharmacist-led warfarin dosing</td>
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<td>Pharmacist participation in general medicine MDT research committees</td>
<td>Pharmacist-led therapeutic drug monitoring (antibiotics, psychotropics, antiepileptics)</td>
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<tr>
<td>Pharmacist involvement in multidisciplinary education in general medicine, including pharmacy clinical education sessions, nursing in-services, medical education sessions and multidisciplinary teaching</td>
<td>Pharmacist review of patients in general medicine outpatient clinics</td>
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<td>Pharmacist membership on ward governance groups, general medicine leadership committees and leadership roles in accountable care units</td>
<td>Pharmacist initiation of nicotine replacement therapy (NRT) and management of nicotine withdrawal</td>
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<tr>
<td>Routine pharmacist attendance with medical emergency team to medical emergency team calls (MET)</td>
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Policies, Procedures and Governance

Pharmacists must have knowledge of the following:

- Australian Charter of Healthcare Rights 3
- National Safety and Quality Health Service Standards 10 including the National Model Clinical Governance Framework 11
- Pharmacy Board of Australia Code of Conduct 12
- SHPA Code of Ethics13
- National Competency Standards Framework for Pharmacists in Australia 2
- Professional Practice Standards 14
- Clinical Governance Principles for Pharmacy Services 15
- Legislation specifically State and Territory Acts and Regulations.

These documents provide a framework within which the pharmacist must practice.

Australian clinical guidelines exist for some of the common conditions that may be seen by general medicine pharmacists and are listed in Appendix 1: Resources. Additional policies, procedures, and guidelines that may be considered at the level of individual services include:

- Management of delirium
- Administration of antipsychotic medicines
- Management of patients with Parkinson’s disease (e.g. medication administration to patients who are nil by mouth)
- De-prescribing guidelines.

Recommended Staffing

As per the Clinical Pharmacy Standards 1 there are three major factors driving staffing levels for clinical pharmacy services: (1) range of clinical pharmacy services, (2) complexity of care required and (3) hospital throughput. Recommended general medicine pharmacist staffing levels for pharmacy services are presented in Tables 2 and Table 3 and should be interpreted with consideration of the health service, activities performed by the general medicine pharmacist and those that are undertaken by other pharmacists and pharmacy technicians (such as medicines supply and administrative tasks).

The roles of general medicine pharmacists are varied, dependent on the model of care and size of the health service and recommended staffing is, therefore, a reflection of these factors. Whereas the traditional model has been to have ward-based pharmacists are wholly responsible for an individual patient, pharmacists are increasingly practicing in team-based models and with specialisation, in consultant-type roles. As the models change and roles grow, provision of advanced pharmacy care for an individual patient may be shared between pharmacists.
Table 2 Recommended general medicine pharmacist staffing levels for provision of clinical pharmacy services based on ‘overnight beds’. Adapted from Table 9.1 Staffing Levels and Structure for the Provision of Clinical Pharmacy Services 1.

| Category | Service related group / bed type | Beds to 1 FTE pharmacist for clinical pharmacy services 5 days / week

| 2 | Medical bed type | General medical units | 20 |

Table 3 Recommended general medicine pharmacist staffing levels for provision of clinical pharmacy services. Adapted from Table 9.2 Staffing Levels and Structure for the Provision of Clinical Pharmacy Services 1.

| Category | Patient/service type | No. of patients to 1 FTE pharmacist for clinical pharmacy services per day

| 9 | Review advice on medicine usage – ambulatory | Pharmacists providing review and advice on medicine usage in Allied Health and/or Clinical Nurse Specialist Interventions clinics – Tier 2 Non-admitted Service 40.04 | 5 |

| 12 | Outpatient clinics | Pharmacists participating in Medical Consultation clinics (including all Tier 2 Non-admitted Service 20.1-20.51). Pharmacists providing services in Allied Health and/or Clinical Nurse Specialist Interventions clinics (including Tier 2 Non-admitting Service: 40.01, 40.02, 40.07, 40.13, 40.19, 40.20, 40.21, 40.26) | 22 |

The general medicine pharmacy service must include a lead general medicine pharmacist. Additional staffing or reduced pharmacist to patient ratios may be required to perform advanced roles (e.g. partnered pharmacist charting, warfarin dosing) and for pharmacy service provision to outpatient clinics. There should also be consideration of extended hours of pharmacy service to support to the general medicine unit including weekend clinical services and weekday extended hours. As part of a broader clinical service a 24-hour pharmacy service to general medicine to ensure pharmacist involvement in managing clinical deterioration of general medicine patients would be ideal.

\* FTE = full-time equivalent.
\* Service on a weekend (assuming few admissions and discharges and medication chart review only) would require an additional 2 to 2.5 hours per day.
\* Includes services on weekdays and weekends.
Training and Education

It is essential to develop the pharmacy workforce through training and education of pharmacists and technicians to enable delivery of advanced pharmacy care in general medicine. Pharmacists commencing practice in general medicine should undertake relevant orientation and training.

General medicine pharmacists should have a scope of practice competency profile with a Continuing Professional Development (CPD) plan that covers the five domains of professional performance as per the National Competency Standards Framework for Pharmacists in Australia 2016. Although the framework itself is not tied to any area of specialisation, for general medicine pharmacists there are qualifications, credentialing pathways, educational activities, knowledge and skills that are recommended in addition to those of a clinical pharmacist. These have been informed by the SHPA General Medicine Leadership Committee.

Credentialing and Qualifications

Desirable certification, credentialing and qualification for general medicine pharmacists include:

- A postgraduate qualification in pharmacy or other relevant postgraduate education relevant to health e.g.
  - Graduate Certificate in Clinical Pharmacy
  - Master of Clinical Pharmacy
- Credentialing as an Advancing or Advanced Practice Pharmacist is provided by Pharmacy Development Australia
- Accreditation to complete Medication Management Reviews (MMRs)
- Board Certified Pharmacotherapy Specialist (BCPS), Board Certified Geriatric Pharmacist (BCGP) and Board-Certified Ambulatory Care Pharmacist (BCACP)

Educational Activities

Recommended continuing education activities for general medicine pharmacists include the following:

- Domestic
  - SHPA Seminars and CPD activities
  - National Prescribing Service Medicinewise Learning Case Studies
  - Australian Journal of Pharmacy (AJP) CPD Activity.
- International
  - Board of Pharmacy Specialities specialty exams and recertification

Locally, general medicine pharmacists should be encouraged to attend the formalised medical education programmes within their units. This may include medical grand rounds, registrar advanced training sessions, morbidity and mortality meetings, unit journal clubs and unit audits.

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ix This is a limited list offered for general information and does not represent endorsement of any particular provider; new providers may emerge, and this is list is current as of January 2019.
Educational material and resources are also provided on the SHPA General Medicine stream page on the SHPA eCPD website. For general medicine pharmacists, joining and actively participating in the SHPA Specialty Practice General Medicine stream at the practice group level is strongly recommended.

Attendance at specialist conferences and educational meetings should be supported to maintain and update specialist knowledge in general medicine. Relevant domestic conferences include those organised by SHPA and the Internal Medicine Society of Australia and New Zealand (IMSANZ). International conferences in general medicine include the Mayo Clinic School of Continuous Professional Development Annual Selected Topics in Internal Medicine and the American Society of Health-System Pharmacists (ASHP) Midyear Clinical Meeting and Exhibition.

Knowledge, Skills and Experiential Learning

The role of a general medicine pharmacist, like any clinician with specialised expertise, is based on a high level of skill in clinical pharmacy with experience in multiple specialties. Pharmacists working in this area should have high levels of interpersonal skills, including confidence, empathy and effective patient communication skills, in order to provide personalised care. Underpinning knowledge related to key areas of pharmacy practice in general medicine are the skills and application of clinical pharmacy, which may be advanced by experiential learning (Table 4). This Standard does not list the competencies that the individual general medicine pharmacist should address as this will be dependent upon their scope of practice.

Table 4 Essential and desirable knowledge and skills and experiential learning for general medicine pharmacists.

<table>
<thead>
<tr>
<th>Knowledge and Skills</th>
<th>Essential</th>
<th>Desirable</th>
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<tbody>
<tr>
<td>Knowledge of pathophysiology, diagnostics and therapeutics in general medicine</td>
<td>Experience in clinical education and supervision of pharmacy students, provisional pharmacists and early-career (rotational) pharmacists</td>
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<tr>
<td>Education of other health professionals (medical, nursing, pharmacy and allied health staff) with regard to general medicine</td>
<td>Mentorship for early-career pharmacists, those newly working in general medicine and those caring for general medicine patients requiring specialist input</td>
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<tr>
<td>Expert problem-solving skills including the ability to sort and prioritise management and use a flexible and broad-minded way of thinking</td>
<td>Exercise independent clinical judgement and ability to be able to change practice relating to medicines management</td>
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</tr>
<tr>
<td>Strong communication skills both verbal and written and good public relation skills and the ability to be able to effectively communicate with a broad range of people</td>
<td>Involvement in other SHPA Speciality Practice streams</td>
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</tbody>
</table>
Ability to be able to work as part of an MDT with the capacity to win the trust, respect and confidence of staff at all levels

Quality improvement in general medicine

Engagement in national health and community policy

Experiential Learning (includes training)

Completion of an evaluation of clinical skills using the ClinCAT (version 2) ¹

Completion of a SHPA Foundation Residency Program

Training and education will predominately be work-based education and should follow adult learning principles. Further information can be found in Chapter 10 of the SHPA Standards of Practice for Clinical Pharmacy Services ¹.

Quality Improvement

Quality improvement activities should demonstrate improvements in patient care through advanced pharmacy care in general medicine by targeting and achieving best outcomes for all patient groups, including those at greatest risk for medicines misadventure. Examples of quality improvement activities which may be considered within a plan, do, study, act (PDSA) cycle for quality improvement activities are:

- Proportion of patients with appropriate vein thromboembolism (VTE) prophylaxis
- Proportion of patients with an international normalised ratio (INR) in range
- Proportion of patients who present with falls associated with discharge medicines
- Percentage of pharmacist’s attendance at multidisciplinary ward rounds
- Proportion of pharmacists’ reviews with positively followed recommendations for therapy changes
- Baseline and yearly reports of the number of staff education sessions provided, conference presentations and manuscripts published.

Further information on quality improvement can be found in Chapter 14 of the SHPA Standards of Practice for Clinical Pharmacy Services ¹ and from the ACSQHC National Quality Use of Medicines Indicators for Australian Hospitals ¹⁷.

Research

Research is vital for developing the pharmacy profession and may inform pharmacy services’ current level of, and future contributions to, advancing pharmacy and patient care. General medicine pharmacists should initiate, conduct and supervise research that contributes to the body of knowledge providing evidence of impact in support of optimal use of medicines and advanced pharmacy care in medicines management. Cross sector, inter-sectorial and multidisciplinary research is encouraged to ensure the input of key stakeholders and that research is relevant to the Australian community.
The research question and study design should be relevant, translational into practice and include patient care as priority. Topics of shared interest with the general medicine team allows for increased collaboration and greater potential for change in practice. This may relate to everyday practice and include identifying evidence gaps, implementing evidence-based practice in general medicine, and interventions directed at reducing admissions for general medicine patients.

Examples of general medicine pharmacist research have included:

- Reducing medicines errors in discharge summaries
- Identifying MRPs and preventing ADEs
- Improving influenza vaccination rates
- Outcomes of treatment with novel agents or for uncommon conditions.

External funding enables larger and possibly multi-centre studies to be conducted. The SHPA National Translational Research Collaborative (NTRC) funds research grants, practitioner grants and educational grants. Grants may also be available from other organisations such as the National Health and Medical Research Council (NHMRC) and therapeutic advisory groups e.g. Stroke Foundation. Presentation and publication of studies by Australian general medicine pharmacists are imperative to aid others in the implementation of general medicine services and illustrate how general medicine pharmacists are demonstrating improvements in patient care.

Presentation of research at relevant conferences and seminars as referenced Training and Education, such as those organised by SHPA and the Internal Medicine Society of Australia and New Zealand (IMSANZ) is highly recommended. The choice of journal for publication depends on the best audience for the study results. The Journal of Pharmacy Practice and Research (JPPR) has a readership of primarily Australian pharmacists. Journals specific to general medicine may be appropriate and are listed in Appendix 1: Resources. Presentation and publication of studies by Australian general medicine pharmacists are imperative to aid others in the implementation of general medicine pharmacy services and illustrate how general medicine pharmacists are demonstrating improvements in patient care.

Further information on research can be found in Chapter 11 of the SHPA Standards of Practice for Clinical Pharmacy Services 1.

**References**


### Appendix 1: Resources

**Recommended texts for general medicine**


**Key General Medicine Journals**

- *Internal Médecine Journal*
- *Medical Journal of Australia*
- *British Journal of Pharmacology*
- *Journal of Pharmacy Practice and Research*
- *BMJ Journals*
- *New England Journal of Medicine*
- *Nature Reviews: Drug Discovery*
- *The Lancet*

**Treatment Guidelines**

• Lung Foundation (2017) *Stepwise Management of Stable COPD.*
• Diabetes Australia (2009) *National Evidence Based Guidelines for the Management of Type 2 Diabetes.*
• The Heart Foundation (2011) *Guidelines for the prevention, detection and management of chronic heart failure in Australia.*
• *Kidney Disease Improving Global Outcomes (KDIGO) Guidelines.*
• Kidney Health Australia (2015) *Chronic Kidney Disease (CKD) Management in General Practice.*
• *Osteoporosis Australia (OA) Clinical Guidelines.*