Preface

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

This Standard references and relies upon the SHPA Standards of Practice for Clinical Services (1) as the foremost Standard. As pain management exists in almost all practice specialties 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.

Introduction

In Australia, everyone shares a fundamental right to basic healthcare. All healthcare systems in Australia must abide by the Australian Charter of Healthcare Rights (3) as it is essential to ensure that the care provided to patients is of high quality and safe. The Charter summarises the basic rights that patients and consumers are entitled to receive when accessing healthcare services including access, safety, respect, communication, participation, privacy and comment. Internationally the Declaration of Montreal is a declaration that access to pain management is a fundamental human right (4). The provision of pharmacy services must encompass the Charter and Declaration to deliver effective, efficient, timely, equitable and patient-centred pain management.

The National Competency Standards Framework for Pharmacists in Australia (5) complements the underpinnings of the Charter across five domains of competency for the pharmacy profession. These domains include professionalism and ethics, communication and collaboration, medicines management and patient care, leadership and management, and education and research.

This Standard refers to both the pharmacy service and the pharmacist in pain management. However, as pain management is a relatively new area of specialisation for pharmacy practice and is still in the early stages of adoption, it is acknowledged that services will predominately be delivered by a pharmacist with a lesser extent of services provided by a pharmacy technician at this time. The Standard therefore predominately refers to pharmacists but does not intend to exclude suitably qualified technicians where appropriate.

Pain management should be provided by interdisciplinary collaboration (also referred to interchangeably as the multi-disciplinary team or MDT) where the pharmacists’ skills can be
leverage to the benefit of patients, providers, and the operation of the health system to optimise
pain management by virtue of their unique skills in medication management and knowledge of
medicines. The practice of pain management includes the clinical care for patients with all types of
pain including acute or persistent pain in various settings. This should be conducted within the
framework of patient-centred healthcare acknowledging that patients may present with co-
comorbidities, some of which are frequently associated with pain. Pharmacists should consider that
the use of medicines is only one element of managing pain.

Pharmacists are an integral member of the pain team. Patients may require complex pain
management regimens, which makes them vulnerable to medication errors and as they transition
from one care setting to another. There is evidence to show that involvement of a pharmacist in the
pain management MDT, including pharmacist-led clinics for chronic pain, reduces adverse events,
improves patient satisfaction, reduces pain intensity, improves physical function and results in the
reduction of secondary health care resource use (6-8). Clinical pharmacists can provide patient
education, review the patient and identify risks associated with inadequate medication management
(9). In the UK and USA, there has been success in opioid risk management and de-escalation with the
extended scope of pharmacist prescribing (10, 11).

In the USA the PGY-2 Pain and Palliative Care Residency programs, pharmacy pain specialists have
been noted as highly effective additions to interdisciplinary pain management teams. Pharmacists
provide expertise in complex pain medication management, which remains the primary focus of
most chronic pain encounters. Clinical pharmacists are well trained in monitoring and assessing
medication adherence, making them ideal providers to evaluate progress toward treatment goals.
Pharmacists’ training is focused on the very aspect of pain treatment that remains frustrating to
providers and potentially dangerous to patients: the medications (12). Additionally, pharmacists
managing patients on patient-controlled analgesia (PCAs) have been shown to result in earlier
discharge and cost savings (13).

This Standard is intended to be used across hospital pharmacy in Australia where it is acknowledged
there is significant variation in what pharmacy services can and do provide. The Standard describes
two levels of service for the provision of pharmacy services and for the pharmacist working in the
speciality area of pain management:

- Essential services and skills apply to all pharmacists caring for people in pain and should be
  part of the clinical pharmacy service as outlined in the SHPA Standards of Practice for Clinical
  Services (1) and this Standard; irrespective of the service type (public or private) or location
  (metropolitan, regional or rural), and;

- Desirable services and skills demonstrate the highest level of practice, apply to pharmacists
  whose area of specialisation is pain management, and are in addition to essential services
  and skills. Desirable services may not be able to be provided by all hospitals or health
  services and will be dependent on the services the organisation provides, patient
  population, pain service and pharmacy department administrators, and availability of
  pharmacists whose area of specialisation is pain management. Large metropolitan teaching
  hospitals may have more capacity to deliver desirable services when compared to smaller
  sites.

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1 Persistent pain is also referred to as chronic pain, for consistency persistent pain is the term used throughout this document.
This Standard is for both pharmacists involved in pain management and pharmacists whose area of specialisation is pain management. For consistency, this Standard refers to pain management pharmacists.

Objectives of the Service

The objectives of the service provided by pain management pharmacists are to optimise analgesic selection (including route of administration, dosing, frequency, and duration of therapy), to optimise non-pharmacological therapy, and to improve a patient’s pain management and maximise function; while limiting unintended consequences such as adverse drug events, emergence of dependence, and cost. Pain management pharmacists should deliver the service as part of an interdisciplinary collaboration and within the framework of patient-centred care ensuring effective and safe pain management.

Scope

The scope of services provided by pain management pharmacists will be dependent on the setting, patient population, services the hospital or health service provides, funding models, pain management and pharmacy department administrators, the priorities of the organisation and the scope of practice of the individual pharmacist.

The service provided by the pharmacist in pain management may be delivered across several settings including both public and private hospitals, in an inpatient, outpatient or ambulatory care setting, and in primary care. The type of conditions that patients present with requiring pain management include acute pain, post-operative pain and persistent pain, with all occurring across the lifespan from paediatrics and adults. This Standard does not address considerations for pain management in oncology or palliative care as they are detailed in their respective Standards mentioned prior. There is limited discussion on diversion and dependence as addiction medicine is a unique specialty practice area and is largely beyond the scope of this Standard.

The pharmacist should be a point of contact for other pharmacists and health professionals, and for the hospital or health service for all pain management related enquiries. The role of the pharmacist in pain management should include involvement in operational activities, development and input into policies, procedures, guidelines and resources, comment on medication formulary for analgesia, provision of educational programs and training for healthcare professionals and students, as well as quality improvement activities and research related to pain management. It may additionally include involvement in an acute pain service (APS) and in an analgesic or opioid stewardship service.

Operation

The interdisciplinary management of pain, treatment with both pharmacological and non-pharmacological therapies, incidence of comorbidities in patients presenting with pain, and the outcomes and potential for individual and community harms regarding opioid analgesia, supports having pharmacists embedded within the pain management MDT. Ideally, this is a pharmacist whose area of specialisation is pain management and who demonstrates competence (knowledge, skills and attributes) in pain management. As with other consultancy-based services components may be
delegated to other pharmacists and support staff. Interns and early career pharmacists, as well as those working in other sub-specialties with an interest in pain, should have the opportunity to participate in the pain management service under supervision.

For all patients, the pharmacist should facilitate the documentation of a best possible medication history (BPMH) as early as possible during a presentation. In pain management, this should include assessment of any past or current opioid analgesia and determination as to if the patient is opioid naïve or tolerant. In taking a BPMH the pharmacist should additionally consider checking: prescription monitoring services for respective states and territories, indications for long-term medications, if the patient is managed by a specialist, use of when required (PRN) medications, use of non-prescribed drugs (e.g. complementary medicines, homeopathy, medicines shared by others, recreational or illicit drugs), and any medicines at home irrespective of if they have been brought to hospital.

To achieve the aforementioned objectives, pain management pharmacists need to consider both individual patient factors and service provision with regard to practice settings, as detailed below.

### Patient Factors

To meet the needs of the patient, the pharmacist in collaboration with the MDT should conduct a thorough assessment of pain including nature, onset or cause, severity, relieving and aggravating factors. There should be consideration of the following factors to provide personalised pain management with examples listed below.

1. **The patient’s culture, beliefs and preferences.**
   - Past pain experience.

2. **Treatment goals and outcomes.**
   - Dependent on type, and length of pain.
   - Enhanced Recovery After Surgery (ERAS) programs.

3. **Quality of life.**
   - Range and level of reported and directly assessed activity.
   - Social activities and social role performance.
   - Changes in healthcare use (e.g. medication, consultations and treatment visits) where possible.
   - Changes in work status, where relevant.

4. **Individual patient factors.**
   - Age extremes e.g. neonates, children and the older person.
   - Frailty.
   - Pregnancy, labour and breastfeeding.
   - Renal and/or hepatic impairment.
   - Weight extremes e.g. obesity, cachexia.
   - Comorbidities e.g. respiratory conditions or receiving respiratory support, cancer care.
   - Mental health conditions.
   - Palliative and end of life care.
   - Individuals with a history of substance use disorder, misuse, or addiction.

5. **Initial treatment factors.**
Patient-specific dosing regimens e.g. choice of agent, route of administration, dosage and frequency of administration.

Multi-modal analgesia.

Promote strategies to reduce the risk of analgesia induced side effects e.g. opioid-induced constipation.

Opioid naïve.

Opioid tolerant.

Risk factors for the development of long-term use (7, 8).

6. Regular evaluation of response.

- Peri-operative and immediate post-operative risk of opioid-related adverse events.
- Regular and timely re-evaluation of patient response to analgesia and to non-pharmacological strategies.
- Assess, recognise and address reasons for inadequate analgesia.
- Individuals who present with tolerance or dependence, but who have not necessarily misused medicines e.g. individuals who have developed tolerance or dependence on high doses of opioids for a prolonged duration, while taking at the prescribed dose.
- Promptly manage patients experiencing side effects e.g. opioid-induced constipation, respiratory depression.
- Participate in activities that advance a patient’s discharge readiness and support transitions of care including communication with primary care.

Service Provision with regard to Practice Settings

Service provision will vary with regard to the practice setting. In the community setting, pharmacists are often the first point of contact for patients who are experiencing pain and seeking analgesia and advice on pain management. In the hospital setting, pharmacists are increasingly focusing on the quality use of medicines to improve overall outcomes for patients with all types of pain. The traditional inpatient model is expanding to include care for patients in outpatient, ambulatory and clinic-based services which is reflected in Table 1 and Table 2 where outpatient and ambulatory care services are increasingly provided but not yet considered essential and part of mainstream practice. Irrespective of the setting, pharmacists have a critical role in ensuring safe and effective pain management.

Pain management pharmacists should be able to assess and manage pain including the benefits and risks of both pharmacological and non-pharmacological interventions and be able to refer or escalate to other health professionals and services (e.g. dieticians, occupational therapy, physiotherapy, psychology, pain services, palliative care, advanced practice pharmacists, and medical staff) if required.

Pharmacists should facilitate communication between the hospital and primary care and provide education to patients. In keeping with best practice for facilitating continuity of medication management on transition between care settings (1) and external guidelines (14), there should be robust communication systems. Details that should be communicated regarding analgesia (in
particular discharge analgesia) include education regarding the safe and optimal use of pain medicines, a clear plan of pain management and arrangements for review.

As detailed in the introduction this Standard describes two levels of service: essential which apply to all pharmacists involved in pain management and desirable that predominately apply to pharmacists whose area of specialisation is pain management. Table 1 lists examples of services with regard to practice setting and level of service:
**Table 1 Examples of services provided by pain management pharmacists with regard to practice setting and level of service (essential or desirable)**

<table>
<thead>
<tr>
<th>Practice Setting</th>
<th>Examples</th>
<th>Essential</th>
<th>Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>All services</td>
<td>Respond to pain management referrals or requests.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promote appropriate prescribing, duration and supply of medications for pain management individualised for the patient.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participate in the interdisciplinary provision of pain management.</td>
<td>X</td>
<td></td>
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<tr>
<td></td>
<td>Engage in strategies to detect and address patterns of misuse and abuse.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rationalise formulary(^2); respond to legislative requirements; medicines shortages and safety alerts/concerns.</td>
<td>X</td>
<td></td>
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<tr>
<td></td>
<td>Serve as a resource to nursing, and medical clinicians regarding pharmacological and non-pharmacological treatment modalities for pain.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide education to clinicians and patients on the management of pain.</td>
<td>X</td>
<td></td>
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<tr>
<td></td>
<td>Phone follow up with patients.</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

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\(^2\) Consideration that stocking multiple strengths of the same medication, the increased availability of combination therapies (e.g. Targin), and over cluttering of safe storage may contribute to selection errors.
<table>
<thead>
<tr>
<th>Practice Setting</th>
<th>Examples</th>
<th>Essential</th>
<th>Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Serve as a resource to pharmacy regarding pharmacological and non-pharmacological treatment modalities for pain.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop educational resources on pain.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participate in the development and implementation of pain management policies, procedures and guidelines³.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lead efforts to prevent inappropriate prescribing, dispensing and use of pain therapies.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Analgesic stewardship service role⁴.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Involvement in quality improvement activities.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Involvement in research related to pain management and analgesia.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review high risk or complex patients e.g. regional anaesthesia, patient-controlled analgesia, co-morbidities.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promote timely de-escalation of analgesia for acute pain.</td>
<td>X</td>
<td></td>
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<tr>
<td></td>
<td>Support discharge planning and transition to primary care with a pain management plan.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

³ E.g. Prescribing guidelines, switching from gabapentin to pregabalin, switching from tramadol to tapentadol, PCA policy and procedure, Operational including schedule 8 medicines transport, handling, discarding returns etc., opioid replacement therapy (ORT).

⁴ Also referred to in the literature as opioid stewardship service.
<table>
<thead>
<tr>
<th>Practice Setting</th>
<th>Examples</th>
<th>Essential</th>
<th>Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Conduct rounds of all patients with current consultations for pain management as part of the MDT.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Outpatient or Ambulatory services</strong></td>
<td>Active participation in patient case-conferences regarding pain management.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consultation to residential care facilities on pain management.</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Line of Reporting

In some instances, pharmacists are employed directly via the pain service and not the pharmacy department. This evidently changes the line of reporting and may also have implications for leave management (including backfill) and succession planning. It may at times present a conflict of interest, requires clear guidelines as to the scope of practice and duties, and may additionally influence and change the services provided.

Policies and Procedures

Pharmacists must have knowledge of the following:

- Australian Charter of Healthcare Rights (3)
- Pharmacy Board of Australia Code of Conduct (15)
- National Competency Standards Framework for Pharmacists in Australia (5)
- Professional Practice Standards (16)
- Legislation specifically State and Territory Acts and Regulations e.g. Drugs, Poisons and Controlled Substances Act and Regulations (VIC), Poisons and Therapeutic Goods Act (NSW)

These documents provide a framework within which the pharmacist must practice, with legislation addressing requirements for prescription, dispensing, administration, and legal and safe destruction of drugs of addiction and dependence to minimise individual and community harm.

Pharmacists can contribute to identifying and minimising diversion and misuse of analgesia. Tools to support pharmacists to do this include confirming the patients’ history with prescription monitoring services in states where available5 (e.g. SafeScript real-time prescription monitoring (VIC), Medicines Regulation Quality (MRQ) (QLD), Drugs and poisons information system Online Remote Access (DORA) (TAS)), working with addiction (alcohol and other drugs) or mental health colleagues, and where appropriate harm minimisation strategies including referral for staged supply.

Pharmacists should be aware that diversion (driven by uncontrolled pain, escalating medicines use, addiction, and financial gain) may put patients at risk of harm and inadequate pain relief. Any program for preventing diversion must still ensure that patients have timely access to care and effective pain management while ensuring compliance with legislation and local policies and procedures. Detailed guidance on preventing diversion of controlled substances is beyond the scope of this Standard.

Additional policies, procedures and guidelines that may be considered at the level of individual services include:

- Analgesic ladder and guidance on acute pain management.
- Analgesic stewardship programs. For more information see Appendix 3. Analgesic Stewardship Services
- Development and revision of order sets in electronic medicines management (EMM) systems for pain management.

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5 Opioid prescription monitoring in Western Australia is a manual system and available to doctors and not pharmacists as of 2018.
• Transition from intravenous to oral analgesia and appropriate dose conversion e.g. Faculty of Pain Medicine (FPM) ANZCA OPIOID Dose Equivalence and Opioid Calculator see Appendix 2. Resources.

• Opioid rotation including dose reduction due to incomplete cross-tolerance.

• PCA standardisation.

• De-escalation of opioids and other analgesia.

• Guidelines for opioid prescribing practices for acute pain on discharge (e.g. supplying based on pain scores and recent use and not solely on PBS pack size) to minimise the risk of long-term use.

• Guidelines for patient communication and counselling patients including simple analgesia, emphasis of indication for individual medicines, discussion of side effects, addressing the potential that opioids may be dependence forming, resources for pain management and advice on how to dispose of medicines when no longer required.

• Naloxone availability, including standing orders or nurse-initiated naloxone and co-prescribing for patients at high risk of overdose.

• Use of methadone and buprenorphine to treat pain. Acknowledging that both have a role in pain management and that the unique pharmacological properties of each require pharmacists input.

• Horizon scanning for new therapies where evidence supports use e.g. currently there is insufficient evidence to support the use of medicinal cannabis for pain management.

Recommended Staffing

The roles of pain management pharmacists are varied, dependent on the model of care and size of the health service and recommended staffing is, therefore, a reflection of this. Whereas the traditional model has been to have ward-based pharmacists wholly responsible for an individual patient, with pharmacists increasing practice in team-based models and with specialisation of the scope of practice in pain management, consultant-type pharmacist services are growing and care for an individual patient may be shared between pharmacists.

Examples of staffing ratios are provided in Table 2 and should be interpreted with consideration of the health service, activities performed by the pharmacist working in pain, and those that are undertaken by other pharmacists and support staff.
Table 2 Examples of pain management pharmacists including position descriptions, EFT and patients seen per day regarding activities performed and those that are outsourced.

<table>
<thead>
<tr>
<th>Position Description</th>
<th>Size and Description of Health Service</th>
<th>Pharmacists FTE&lt;sup&gt;6&lt;/sup&gt; Patients seen per day&lt;sup&gt;7&lt;/sup&gt;</th>
<th>Activities / Duties / Tasks performed</th>
<th>Activities outsourced to other pharmacists</th>
</tr>
</thead>
</table>
| **Opioid Stewardship - Working with Acute Pain Service and providing outpatient follow-up** | 250 bed outer metropolitan hospital with general orthopaedic and surgical wards | 1 FTE 15 to 20 patients/day as part of inpatient ward round, and provides phone or in-person follow-up to approx. 4 outpatients | • Acute Pain Rounds  
• Clinical review of analgesia and handover to ward pharmacist  
• Pain education  
• Outpatient follow-up of referred patients  
• Quality improvement  
• Specialist consult service for other pharmacists, staff and patients | • Clinical review of medicines other than analgesia  
• Discharge medicines lists  
• Dispensing |
| **Persistent Pain Management Service Pharmacist**         | 750 bed tertiary referral hospital, outpatient service                     | 0.2 FTE 1 to 5 patients/day                                    | • Case conference including with GP  
• Specialist consult service for other pharmacists, staff and patients  
• Consultation inpatient ward round with pain specialist  
• Develop patient information | • Dispensing |
<table>
<thead>
<tr>
<th>Role</th>
<th>Setting</th>
<th>Hours/Day</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Clinical Pharmacist Interdisciplinary Persistent Pain Centre</td>
<td>Ambulatory care, Large metropolitan city hospital, outpatient service</td>
<td>0.6 FTE</td>
<td>4 patients/day (45 min/patient)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Develop Policy, Procedures and Guidelines</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Pain education</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Quality improvement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Individual Medication Reviews</td>
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<td></td>
<td></td>
<td></td>
<td>• Pain Education</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Medication counselling</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>• Telehealth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Appointments followed by an individualised letter to patient’s GP</td>
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<td></td>
<td></td>
<td></td>
<td>• Dispensing</td>
</tr>
</tbody>
</table>

<p>| Senior Pharmacist Department of Anaesthesia and Acute Pain Service | 400 bed tertiary inner-city hospital | 0.3 FTE | 5 to 10 patients/day |
| | | | • Pain education |
| | | | • Formulary management |
| | | | • Governance |
| | | | • Develop Policy, Procedures and Guidelines |
| | | | • Quality improvement |
| | | | • Referral based clinical review (perioperative or as part of APS) |
| | | | • Research |
| | | | • Clinical review of medicines other than analgesia |
| | | | • Discharge medicines lists |
| | | | • Dispensing |
| | | | • Medicines reconciliation |</p>
<table>
<thead>
<tr>
<th>Advance Practice Pharmacist Pain Management Acute Pain Service</th>
<th>450 bed tertiary inner-city hospital with State Trauma Unit</th>
<th>0.1 FTE</th>
<th>30 to 40 patients/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Quality improvement</td>
<td>• Specialist consult service for other pharmacists, staff and patients</td>
<td></td>
<td></td>
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<tr>
<td>• Specialist consult service for other pharmacists, staff and patients</td>
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<tr>
<td>• Consultancy based service ward round</td>
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<tr>
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<td>• Pain Education</td>
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<td>• Pain Education</td>
<td>• Formulary management</td>
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<td>• Discharge medicines list</td>
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<tr>
<td>• Discharge medicines list</td>
<td>• Discharge script organisation</td>
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<tr>
<td>• Discharge script organisation</td>
<td>• Dispensing</td>
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<tr>
<td>• Dispensing</td>
<td>• Medication counselling</td>
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</table>
Training and Education

Training and education of pain management pharmacists will predominantly be work-based education, should follow adult learning principles, and is documented in Chapter 10. Training and Education of the SHPA Standards of Practice for Clinical Pharmacy Services (1). Pain management pharmacists should have an annual learning plan that supports their development and performance along the continuum of advanced practice from transition level (stage 1), to consolidation level (stage 2), and to advanced level (stage 3) (5). Credentialing of advanced practice pharmacists in Australia is provided by Pharmacy Development Australia (19).

The skills and qualifications for pain management pharmacists have to date not been published. The recommended skills and qualifications listed below have been informed by the SHPA Pain Management Leadership Committee. The interdisciplinary nature of pain management necessitates the development of skills particular to this area of specialty practice in addition to those of a clinical pharmacist.

Essential skills:

- Having undergone an evaluation of clinical skills using the SHPA Clinical Competency Assessment Tool (shpaclinCAT version 2).
- Ability to undertake a full medicines assessment with attention to analgesia.
- Pain assessment utilising appropriate tools for a patient cohort in collaboration with the MDT.
- Education of patients tailored for literacy, language and understanding, with respect to analgesia and pain management plans.

Desirable skills:

- Specialist knowledge of acute and persistent pain.
- Specialist knowledge of pharmacotherapeutics to support comprehensive medicines use e.g. nerve blocks, epidurals and regional anaesthesia.
- The use of motivational interviewing skills to support changes in medicines-taking behaviour for pain management.
- Interdisciplinary clinical decision-making skills at the point of care.
- Mentorship for early career pharmacists, those newly working in pain management and those caring for patients with pain requiring specialist input.
- Clinical teaching skills including training and education of healthcare professionals regarding pain management.
- Quality improvement in pain management.
- Research in pain management.

Desirable qualifications include:

- A postgraduate qualification in pain management e.g.
  - Master of Science in Medicine (Pain Management) offered by The University of Sydney, also available as a Graduate Certificate or Graduate Diploma in Pain Management.
MSc in the Clinical Management of Pain (Online Learning) offered by The University of Edinburgh.

Working towards or having achieved credentialing as an Advanced Practice Pharmacist.

Recommendations for education include the following:

**Domestic:**
- SHPA Seminars and CPD activities.
- Better Pain Management (Faculty of Pain Medicine Australian and New Zealand College of Anaesthetists (ANZCA)).
- Pain Refresh Pain Management Multidisciplinary Workshop (Pain Management Research Institute (PMIR), The University of Sydney).

**International:**
- IASP Education including Curricula, Pain Schools and Camps.
- ASHP Foundation Principles of Pain and Pain Management.
- Anesthesia Toolbox.

Educational material and resources are additionally provided on the SHPA Specialty Practice Pain Management stream page on the SHPA eCPD website. For pain management pharmacists joining and actively participating in the Pain Management stream at the Practice Group level part of SHPA Specialty Practice, is strongly recommended.

Attendance at specialist conferences and educational meetings should be supported to maintain and update specialist knowledge in pain management. Relevant domestic conferences include those organised by SHPA, The Australian Pain Society Scientific Meeting, and The Australian and New Zealand College of Anaesthetists (ANZCA) annual scientific meeting. International conferences in pain management include The International Association for the Study of Pain (IASP) World Congress on Pain, The American Pain Society (APS) Scientific Meeting, and The European Pain Federation (EFIC) Pain in Europe Meetings.

**Quality Improvement**

Further information on quality improvement can be found in Chapter 14 of the SHPA Standards of Practice for Clinical Pharmacy Services (1).

Quality improvement activities should demonstrate that the pharmacist in pain management is targeting and achieving optimal outcomes for all patient groups, including those at greatest risk for medicines misadventure in addition to advancing the practice of pain management. Quality improvement activities may include:

- Audits of time to analgesia.
- Review of defined daily doses (DDDs) for opioids to monitor local usage trends and enable site comparisons.
• Number of pharmacists’ reviews with positively followed recommendations for therapy changes.

• Number of acute surgical patients discharged with a clear pain management plan and or opioid de-escalation.

• Medicines use evaluation (formerly Drug Use Evaluation) for medicines commonly used in pain.

• Review of ADRs and incident reports, using ICD-10 coding.

• Review of MER calls associated with opioids or in patients prescribed opioids.

• Review of opioid prescribing and dispensing.

• Participation in the electronic Persistent Pain Outcomes Collaboration (ePPOC) program.

• Baseline and yearly reports of the number of staff education sessions provided, conference presentations and manuscripts published.

Research

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

Pharmacists research should contribute to the body of knowledge for pain management. It is advisable to have an interdisciplinary research team to ensure the input of key stakeholders and to improve the chance of project success. Data collection should be achievable in a timely manner. The research question and study design should be of interest to the pain management team and of benefit to patients. There should be clearly defined outcomes with objective measures. For persistent pain clinical trials, outcomes representing six core domains have been detailed in the IMMPACT recommendations and include pain, physical functioning, emotional functioning, participant ratings of improvement and satisfaction with treatment, symptoms and adverse events, and participant disposition (12).

This may include identifying evidence-practice gaps for pain management, evaluating novel treatments and ensuring patient safety, and studying the benefits of pharmacy service implementation. Examples of research in pain management have included:

• Audits to identify baseline and areas for improvement including point prevalence studies of prescribing trends.

• The number of patients with an analgesic weaning plan in the medical discharge summary.

• The number of opioid naïve patients still on opioids > three-months post-surgery.

Research in pain management often includes evaluation of analgesia and randomised controlled trials where placebo is compared to an active comparator, these studies should also consider the availability of rescue analgesia to ensure patients are not unnecessarily suffering from pain. Non-pain endpoints in research design are not uncommon and may include psychological and social functioning, quality of life indices, as well as costs and adverse events.

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 are also available from other organisations including ANZCA research awards. Presentation and publication of studies by Australian pain management pharmacists are imperative, to aid others in the implementation of pain management services (such as analgesic...
stewardship services) and illustrate where pain management pharmacists are involved in research
and how they are improving patient care.

The choice of journal to publish in depends on the consideration of the best audience for the
study results. The Journal of Pharmacy Practice and Research (JPPR) presents findings to
primarily an Australian pharmacy audience. Journals specific to pain that may be appropriate
are listed in Appendix 2. Resources.

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Specialty Practice, SHPA.

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### Appendix 1. Pain Management Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>Acute pain</td>
<td>A normal and time-limited response to trauma or other ‘noxious’ experience, including pain related to medical procedures and acute medical conditions.</td>
</tr>
<tr>
<td>Acute Pain Services (APS)</td>
<td>There is wide diversity in APS structures with no consensus as to the best model and definition of a service. Generally, includes a multidisciplinary team providing care for patients with acute pain. Important tasks include patient rounds, quality improvement of pain management, pain education and research. Implementation of an APS may improve pain relief and reduce the incidence of side effects (20).</td>
</tr>
<tr>
<td>Analgesic stewardship service</td>
<td>A program that ensures the best possible use of analgesia including opioids, across the health service, by monitoring use and coordinating interventions. For additional information see Appendix 3. Analgesic Stewardship Services.</td>
</tr>
<tr>
<td>Drug of Addiction (DA)</td>
<td>Refers to all Schedule 8 (S8) drugs. S8 drugs have strict legislative controls regarding their manufacture, supply, distribution, possession and use in order to reduce abuse, misuse, and physical and psychological dependence. Examples of S8 drugs include morphine, oxycodone, dexamphetamine, and alprazolam (21).</td>
</tr>
<tr>
<td>Drug of dependence</td>
<td>All S8 drugs plus specified Schedule 4 (S4) drugs that are subject to misuse, abuse and trafficking. All S4 drugs are restricted substances, but only some (e.g. benzodiazepines) can form dependence (21).</td>
</tr>
<tr>
<td>Enhanced Recovery After Surgery (ERAS)</td>
<td>Adherence to multimodal enhanced recovery after surgery protocols results in reduced length of hospital stay and complication rates. Provision of appropriate analgesia is one of several elements of enhanced recovery after surgery protocols. Analgesic techniques, which permit early mobilisation and early enteral feeding, in particular, those that are opioid-sparing, may contribute to early recovery after surgery protocols (20).</td>
</tr>
<tr>
<td>Interdisciplinary collaboration</td>
<td>Refers to the positive interaction of two or more health professionals, who bring their unique skills and knowledge, to assist patients/clients and families with their health decisions (5).</td>
</tr>
<tr>
<td>Multi-disciplinary team (MDT)</td>
<td>A multi-disciplinary team involves a range of healthcare professionals working together to deliver comprehensive patient care.</td>
</tr>
<tr>
<td>Multimodal analgesia</td>
<td>Multimodal analgesia in pain management includes the administration of two or more drugs that act by different mechanisms for providing analgesia (22). Combining medications with different mechanisms may: optimise analgesia, reduce the side effects of a single agent, be opioid sparing and improve recovery.</td>
</tr>
</tbody>
</table>
### Opioid rotation
Refers to a switch from one opioid to another in an effort to improve the response to analgesic therapy or reduce tolerance.

### Opioid tolerance
When the effect of an opioid decreases with repeated use and a higher dose is required to gain effect.

### Opioid dependence
**Physical dependence:** A physiological adaptation to a drug whereby abrupt discontinuation or reversal of that drug, or a sudden reduction in its dose, leads to a withdrawal (abstinence) syndrome. Withdrawal can be terminated by administration of the same or similar drug (20).

**Psychological dependence:** A disease or disorder with genetic, psychosocial and environmental factors, characterised by compulsive use of a substance and preoccupation with obtaining it, despite evidence that continued use results in physical, emotional or economic harm.

### Opioid-naive
Opioid naive patients are those who have not received opioids in the 30 days prior.

### Pain
An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage (23).

### Persistent pain
Also known as chronic pain. Long-term pain that persists beyond the normal healing time of approximately three months.

### Reducing dose plans also known as de-escalation
The gradual discontinuation or reduction of a therapeutic dose of a medicine required by a patient over a prolonged period of time. Also known as de-escalation.

### Tolerance (pharmacological)
A predictable physiological decrease in the effect of a drug over time so that a progressive increase in the amount of that drug is required to achieve the same effect. Tolerance develops to desired (e.g. analgesia) and undesired (e.g. euphoria, opioid-related sedation, nausea or constipation) effects at different rates (20).

## Appendix 2. Resources

### Recommended texts for pain management

### Discretionary texts

## Pain Management Journals

- Anaesthesiology and Pain Medicine
- British Journal of Pain
- Clinical Journal of Pain
- Journal of Pain & Palliative Care Pharmacotherapy
- Journal of Pain Research
- Journal of Pain and Symptom Management
- Pain Reports (IASP)
- Pain Medicine
- Pain and Therapy

## Useful websites

<table>
<thead>
<tr>
<th>International Association for the Study of Pain (IASP)</th>
<th><a href="https://www.iasp-pain.org/">https://www.iasp-pain.org/</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain tool kit</td>
<td><a href="https://www.paintoolkit.org/">https://www.paintoolkit.org/</a></td>
</tr>
</tbody>
</table>
Appendix 3. Analgesic Stewardship Services

Pharmacist-led analgesic stewardship services have been modelled and established using the framework for established services such as antimicrobial and anticoagulant services (24). The service should advocate for clinically appropriate use of medicines for pain management with attention to goals of therapy, optimising analgesia selection, dosing, route of administration, and duration to therapy to maximise pain management and function, while limiting the unintended consequences such as side effects, the emergence of dependence, and cost.

Pharmacist-led analgesic stewardship services engage in coordinated extraprofessional efforts to support quality and judicious use of medicines. An analgesic stewardship service may include but is not limited to, the following activities:

- Monitoring for adverse events for individual patients.
- Partaking in pharmacovigilance activities.
- Providing education and training to staff.
- Preparing guidelines, procedures and policies.
- Advising on electronic medical record (EMR) tools to support analgesic stewardship services.
- Undertaking quality improvement initiatives e.g. personalised quantities of opioids supplied on discharge, pharmacist-led opioid de-escalation in select patients.