[title] Standard of practice in palliative care for pharmacy services

Running heading: Standard of practice in palliative care

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[HEAD 1] ACKNOWLEDGEMENT OF COUNTRY
The authors acknowledge the Traditional Custodians of Country of the lands on which our members meet, work and live, including the Wurundjeri people of the Kulin Nation, Traditional Custodians of
Naarm where the Society of Hospital Pharmacists of Australia (SHPA) is based. We thank Elders past and present, and emerging leaders of these lands. We celebrate Aboriginal and Torres Strait Islander Peoples as the first pharmacists, bush medicine practitioners and doctors who practised on these lands.

[HEAD 1] PREFACE

In Australia, everyone shares a fundamental right to safe and high-quality healthcare. This is defined in the Australian Charter of Healthcare Rights,(1) which all healthcare systems must strive to uphold. The Charter summarises the basic rights of patients and consumers when accessing healthcare services including access, safety, respect, partnership, information, privacy and the ability to give feedback.

This Standard references and relies upon SHPA Standards of Practice for Clinical Pharmacy Services(2) as the foremost Standard. This Standard supersedes the previous SHPA Standards of Practice for the Provision of Palliative Care Pharmacy Services;(3) and may overlap with others. 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(4) 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.

[HEAD 1] INTRODUCTION

Palliative care has traditionally been equated to end-of-life care, however, it can be and is provided in conjunction with disease-modifying therapies aimed at prolonging life in many conditions.(5) Many people live with life-limiting conditions for many years.(6) Palliative care can therefore be equally beneficial for patients first diagnosed with a life-limiting condition and for patients with active, progressive, advanced disease with little to no prospect of cure.(7) Though not intended to prolong life, provision of palliative care has been associated with increased survival and less intensive care at end of life.(8, 9) The World Health Organization (WHO) recognises that access to palliative care, to relieve health-related suffering, is a human right.(10)

[HEAD 1] PURPOSE AND DEFINITIONS

The purpose of this Standard is to describe current best practice for the provision of palliative care pharmacy services (Box 1) by palliative care pharmacists (defined below). The authors acknowledge that definitions for palliative care (palliative care approach), end-of-life care and terminal-phase care

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may differ. For this Standard the following definitions apply, where palliative care encompasses end-of-life care and terminal-phase care (see Figure 1 and 2).

Palliative care is a person and family/carer-centred approach to treatment provided to patients with active, progressive, advanced disease with little to no prospect of cure, who are expected to die. The primary goal of palliative care is to alleviate physical, psychosocial or spiritual pain and suffering and optimise quality of life. Palliative care includes bereavement care for families/carers. Patients approaching end of life are likely to die within the next 12 months. Terminal-phase care refers to care provided during the hours, days and occasionally weeks leading up to death; it is a period of time when the patient is considered to be actively dying.

Box 1 – Palliative care pharmacy services

<table>
<thead>
<tr>
<th>Palliative care pharmacy services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide person-centred collaborative care that is culturally responsive and includes empathetic communication that aligns with the needs of CALD groups (e.g. Aboriginal and Torres Strait Islander Peoples)</td>
</tr>
<tr>
<td>• Optimise pharmacological therapy for symptom management</td>
</tr>
<tr>
<td>• Understand and utilise patient goals of care to direct medicines management plans</td>
</tr>
<tr>
<td>• Provide education and training to patients, carers and staff</td>
</tr>
<tr>
<td>• Participate in administrative and formulary management</td>
</tr>
<tr>
<td>• Assist in the transition of care, taking into consideration patients’ preferred place of death</td>
</tr>
</tbody>
</table>

Triggers for supportive and palliative care interventions in Australia:\nb:\n
• Diagnosis of life-limiting conditions
• Decline in the patient’s condition
• Active treatment (e.g. surgery, dialysis, intensive care) determined to be ineffective or futile
• Multiple recent admissions to hospital for exacerbation of a chronic condition, including unexpected or inappropriately prolonged stay in hospital
• Advanced age with increased frailty, reduced mobility and increased dependence on others for activities of daily living
• Condition-specific poor prognostic factors, including:
  o for hospital inpatients, repeated calls to the rapid response team, particularly if the patient has been admitted for more than one week
  o moderate to severe dementia
  o multisystem comorbidities (cardiovascular, pulmonary, endocrine)

CALD = culturally and linguistically diverse

\nbSee SPICT (Supportive and Palliative Care Indicators Tool)\n
Referral to services provided within a specialist palliative care setting should be considered where there is concern that end-of-life care needs might not be met, as indicated by family/carers or interdisciplinary team members.

References: Atayee et al,(15) AIHW,(6) PSA,(4) WHO,(11) ACSQHC,(12)
Figure 1 – Palliative care approach

Figure 2 – Provision of specialist palliative care pharmacy services based on level of need

Patient movement between pharmacy service requirements, including transitions between care settings

Adapted and reproduced with permission from Palliative Care Australia from Palliative Care Service Development Guidelines (2018)(16)

References: ACSQHC,(12) WHO,(11) GMC(13)
This Standard is intended for all pharmacists who provide palliative care pharmacy services and refers to both the role of the pharmacy service and the pharmacist’s practice in palliative care. Palliative care pharmacy services can be provided in non-specialist and specialist palliative care settings. In a non-specialist palliative care setting, general pharmacists and other specialty pharmacists can provide palliative care pharmacy services or adopt a palliative care approach without being embedded within the palliative care interdisciplinary team. In a specialist palliative care setting, specialist palliative care pharmacists should be embedded within the palliative care interdisciplinary team. For this Standard, all pharmacists who provide palliative care pharmacy services will be referred to as palliative care pharmacists. Further, the interdisciplinary team is not limited to specialist palliative care clinicians and may include community-based nursing and allied health staff, community pharmacists and general practitioners, with or without palliative care experience.

This Standard predominantly refers to pharmacists but does not intend to exclude suitably qualified pharmacy technicians where appropriate. SHPA supports both pharmacists and pharmacy technicians to operate at their full scope of practice to achieve optimal patient and pharmacy outcomes.

Those who receive palliative care services can be referred to as clients, consumers or patients. For this Standard, patients describe anyone who receives palliative care pharmacy services.

This Standard is intended to be used by pharmacy services in Australia, irrespective of the service type (public or private) or location (metropolitan, regional, rural or remote). The principles and aspects of patient management discussed herein can be applied to all settings.

This Standard describes essential and emerging services. Essential services demonstrate the full scope of current pharmacy practice. Emerging services relate to services that are innovative and future focused. SHPA encourages all pharmacy services to strive to provide emerging services in addition to essential services wherever possible.

The authors acknowledge that there are significant variations in pharmacy services that are dependent on organisational capacity, patient population, pharmacy department priorities and availability of palliative care pharmacists. All of these may influence the scope of pharmacy services provided.

[HEAD 1] PROVISION OF PALLIATIVE CARE SERVICES

There is an increasing demand for palliative care services in Australia. Each year, it is estimated that 50-90% of the 160,000 people who die in Australia, would benefit from palliative care, but many do not receive it. Globally, of the 40 million people each year who require palliative care, only 14% receive it.

In Australia, 72% of palliative care episodes in 2020 were for people with cancer. Of the people who received palliative care, 64% were born in Australia, 6.7% in England, 4.1% in Italy and 2.2% in Greece. Aboriginal and Torres Strait Islander people who received palliative care accounted for 1.8%. During this period, palliative care episodes increased with increasing socioeconomic advantage. The median age for patients across all episodes of palliative care (i.e. a period of contact between a patient and a service that provided palliative care) was 76 years. In patients who commenced palliative care with absent/mild pain, 90% achieved absent/mild pain at the end of the palliative care phase, and for moderate/severe pain, 60% achieved absent/mild pain.
An Exploratory Analysis of Barriers to Palliative Care,(5) commissioned by the Australian Government Department of Health, found that palliative care is poorly understood in the community and by many working in the healthcare sector, who did not realise that active treatment and palliative care can be complementary, rather than mutually exclusive.(5)

The need for palliative care will further expand as the population increasingly ages; and the associated disease burden of multimorbidity will need to be well managed to minimise suffering.(5)

[HEAD 1] EVIDENCE OF PHARMACIST IMPACT IN PALLIATIVE CARE

Pharmacists perform many roles within the palliative care service that contribute to the goals of palliative care.(15, 18-22) Effective interdisciplinary medication management can relieve suffering; mitigate risks or prevent harm; and bring comfort to patients and their family/carers.(23).

Multidisciplinary teams (i.e. including a pharmacist), compared to individual healthcare providers have been shown to provide more effective palliative care.(24)

In a prospective observational study of pharmacist interventions for patients (N = 27) in an outpatient setting, Yamada et al. found that continuous pharmacist intervention decreased pain intensity in patients with cancer, where approximately 90% of pharmacists’ recommendations (e.g. dose change, medication change, medication initiation and medication cessation) were accepted by physicians. Improved pain scores were achieved in 38.5% (p=0.019), 52.2% (p=0.001) and 46.2% (p=0.070) of patients after the first, second and third pharmacist intervention, respectively.(25)

One study investigated the impact of a pharmacist in a multidisciplinary palliative care team in cancer pain management. The pharmacist was responsible for reviewing analgesic use and recommending medication changes to the physicians on the team. Patient-reported pain scores (0 to 10 numerical rating scale) significantly improved from admission to day 7 (4.05±1.91 (SEM) vs 2.66±1.23(SEM), p<0.009) with significant improvement in appropriateness of analgesic. Where opioids were prescribed, there was a significant improvement in prescription prophylaxis against opioid-induced constipation.(26) Morgan et al., in a retrospective, multicentre case-note review of patients receiving end-of-life care (N=266), observed that 72% of patients had one or more potential drug-drug interaction(s) with a mean of 4.4 potential interactions per patient. Of the identified interactions, 63% were considered significant, and of these, 4.2% were considered life-threatening.(27)

In patients on palliative chemotherapy (N=301, Hong et al.), pharmacists identified clinically significant drug-drug interactions in 30.6% of patients. Additionally, polypharmacy was found to be associated with an increased risk of emergency department presentations or hospitalisations (hazard ratio (HR) = 1.73; 95% confidence interval (CI): 1.18-2.55, p<0.01).(28)

In the palliative care setting, through a retrospective analysis of clinical notes, Wilson et al. found that acceptance of pharmacists’ recommendations (n = 236 out of 264) were associated with better patient outcomes (odds ratio = 19.0; 95% CI: 7.10 – 50.93, p<0.001). Patient outcomes were measured by symptom improvement or resolution as annotated by nursing staff, patient-reported subjective improvement as annotated by nursing staff, objective measurement of symptom improvement (e.g. blood pressure measurement) and future absence of a reported event (e.g. symptoms of delirium).(29)

Further, pharmacists provide a positive return on investment.(30, 31)- A recent Palliative Care Australia report estimated that there is a 168% return on investment with earlier and more...
integrated palliative care services in hospitals. There is additional return on investment for improving and expanding palliative care services to the home, residential aged care and other community-based services.\(^\text{(31)}\)

**[HEAD 1] OBJECTIVES OF THE PHARMACY SERVICE**

Patients receiving palliative care services are at risk of adverse drug reactions (ADRs), medication-related problems and symptom exacerbation. They are often seen by multiple specialists, require frequent dose adjustments, and changes to medicines and formulations. Additionally, medicines, including parenterally administered medicines, may be administered by carers. Pharmacists are essential to addressing and managing medicines-related issues and educating and supporting patients and their carers.

The objective of the palliative care pharmacy service, in consultation with the interdisciplinary team, is to optimise medicines management in collaboration with patients and carers. Palliative care pharmacists must deliver the service with a framework of evidence-informed and patient-centred health care. This enables the optimisation of medication regimens that are safe, efficacious, cost-effective and encourages supported and shared decision making.

**[HEAD 1] SCOPE**

This Standard applies to palliative care pharmacists who provide palliative care pharmacy services to patients at any stage of their illness trajectory. The palliative care pharmacist may provide services to inpatients, outpatients, and patients in ambulatory and primary care, irrespective of service type or location. Smaller organisations and community pharmacies may not have the resources or requirement to provide full palliative care pharmacy services. They may choose to implement specific aspects of this Standard to facilitate best possible patient and clinical outcomes.

The scope of services provided by palliative care pharmacists will depend on the setting; patient population; funding models and governance structures; services provided by the hospital, health service or community pharmacy; organisational priorities; pharmacy department priorities; and the scope of practice of the individual pharmacist. Although the range of pharmacy services provided in palliative care is primarily delivered by pharmacists, it may be supported by pharmacy technicians and assistants in clinical and non-clinical roles.

Patients across all age groups, who require palliative care pharmacy services, present with various life-limiting malignant and non-malignant illnesses, often with multiple symptoms and comorbidities. Interdisciplinary integration of palliative care pharmacy services must ensure a collaborative approach to patient care that facilitates patient/carer supported decision making: self-determination is a fundamental human right.\(^\text{(32)}\) The role of the palliative care pharmacist includes, but is not limited to: delivery of pharmacy services that add value to healthcare systems and improve patient medication outcomes; the development of and input into policies, procedures, guidelines and resources; comments on medication formulary decisions with relevance to palliative care; the provision of educational programs and training for healthcare professionals and students, and patients and carers; as well as quality improvement activities and research related to palliative care.

The palliative care pharmacist is a point of contact for other pharmacists and health professionals,
within and external to the health service organisation, for medicines information enquiries related to palliative care.

The authors acknowledge the additional complexities (e.g. developmental, social, educational, communication, information, family/carers needs) of paediatric, child and adolescent palliative care services, in addition to the anguish that accompanies the prospect of a young person dying. (33)

Further, paediatric palliative care services may provide services to children with congenital, life-limiting illnesses and disability. These services may provide more intensive support than adult palliative care services, and transitioning into adult models of palliative care can be challenging. These complexities have not been individually addressed and are beyond the scope of this Standard.

Voluntary assisted dying is also beyond the scope of this Standard.

[HEAD 1] OPERATION

Palliative care pharmacists, ideally embedded within the palliative care interdisciplinary team, demonstrate competence in palliative care and the ability to integrate medicines expertise with holistic care. Palliative care pharmacists who do not work in an embedded role (non-specialist palliative care setting), can be supported by having the ability and access to obtain advice from palliative care pharmacists working in a specialist palliative care setting.

The provision of palliative care pharmacy services will depend on the practice setting. Specialist palliative care setting pharmacy services can be provided in palliative care units, hospices, ambulatory clinics (face to face or telehealth), community-based settings or by consultancy teams in hospitals and dialysis units. In a hospital ward setting, the palliative care pharmacist may care for patients who are under the primary care of various specialties, for example, oncology, general medicine, geriatrics, rehabilitation, surgery and medical specialties such as nephrology. In the rural hospital setting where Visiting Medical Officer workforce models are common, patients may be admitted under the primary care of their usual General Practitioner. Regardless of the practice setting, palliative care pharmacy services must be delivered in an effective, efficient, timely, equitable and patient-centred manner.

Palliative care pharmacists, intern pharmacists, early career pharmacists and pharmacists with an interest in palliative care should have the opportunity to participate in palliative care pharmacy services. Clinical pharmacy services in palliative care include core activities described in the SHPA Standards of Practice for Clinical Pharmacy Services, (2) in addition to essential and emerging services listed in Table 1.

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Table 1 - Essential and emerging palliative care pharmacy services

<table>
<thead>
<tr>
<th>Setting</th>
<th>Service details</th>
<th>Essential</th>
<th>Emerging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-specialist palliative care setting</td>
<td>- Provide education and information on medicines and symptom management consistent with patients’ cultural and social beliefs; literacy and health literacy; and in a form and quantity that is acceptable to patients and their family/carers</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
- Provide culturally responsive palliative care pharmacy services to Aboriginal and Torres Strait Islander Peoples

- Evaluate medication management plans to align with illness trajectory, patient/family/carers’ requirements and preferences, and facilitate shared decision making

- Facilitate continuity of medicines management at transitions of care within and between services

- When a need for bereavement care has been identified, discuss with the interdisciplinary team and refer to relevant professionals

- Facilitate a culture of patient and family/carer-centred palliative care

- Participate in quality assessment and quality improvement activities

- Undertake education and training to deliver optimal, culturally responsive palliative care

- Provide medication advice on subcutaneous injections and opioid rotation

- Work within the interdisciplinary team and attend weekly meetings OR ensure collaboration by participating in interdisciplinary discussions via robust communication channels

- Participate in advance care planning

- Prepare patients for terminal-phase care:
  - considerations for anticipatory prescribing, including identifying expected symptoms and management
  - identify and engage in discussions regarding deprescribing and deescalating invasive monitoring (e.g. TDM, LFTs, U+Es)
  - identify and engage in discussion regarding non-commencement of life-prolonging treatment (e.g. antibiotics, chemotherapy, VTE prophylaxis)

- Provide education to other allied health, medical, pharmacy and nursing professionals

- Participate in interdisciplinary analgesic, antimicrobial, anticoagulant and antipsychotic stewardship

- Promote appropriate:
  - prescribing and deprescribing
  - duration and supply of medicines for symptom management that is individualised to patients and ensure continuity of care
- Provide support and education to healthcare professionals and patients/carers about medication optimisation, including during changes in care trajectory (e.g. subcutaneous medicines, 'when required' medicines)

- Facilitate safe and appropriate use of and access to medicines (refer to CATAG’s Guiding Principles for the quality use of off-label medicines(34)), including off-label, SAS and non-PBS medicines

- Receive and safely dispose of unwanted medicines

- Advise on medication stability and compatibility and appropriate use of subcutaneous infusion devices

- Distinguish adverse effects from disease effects

- Provide palliative care pharmacy services in a systematic and timely manner (e.g. Gold Standards Framework,(35) Amber Care Bundle,(36) Supportive and Palliative Care Indicator Tools(14))

- Advise on the use of specialist medicines for infusion such as methadone, lidocaine and ketamine

- Respond and refer appropriately to patient request for Voluntary Assisted Dying information

- Establish a self-care plan to facilitate ‘a proactive and holistic approach to personal health and wellbeing to support professional care of others’(37)

### Specialist palliative care setting

- Advise on the intrathecal administration of medicines

- Work within the framework for the provision of palliative sedation, withdrawal of active treatment and non-invasive ventilation

- Provide advice and prescription management support for ambulatory clinics, including collaboration with primary care professionals

- Support service providers in the community – nursing programs, community pharmacy, GP and other non-palliative care prescribers

- Participate in morbidity and mortality reviews or interdisciplinary peer reviews as appropriate

- Facilitate community palliative care services

- Guide and consolidate interdisciplinary contribution to policies and clinical guidelines, and prepare for publication

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**CATAG** = Council of Australian Therapeutic Advisory Groups  
**LFTs** = liver function tests  
**PBS** = Pharmaceutical Benefits Scheme
[head 2] Providing culturally responsive palliative care

Individual preferences and cultural beliefs surrounding death and dying can influence how palliative care is given and received. Providing culturally responsive palliative care requires an understanding of the beliefs and preferences of patients and their family/carers. Seeking information from patients and their family/carers, via interpreters as required, government agencies, national organisations or faith-based community leaders may be beneficial.\(^{(39, 40)}\)

For the diverse and culturally different Aboriginal and Torres Strait Islander communities across Australia, the life-death-life continuum, connection to land or country, and the central place of family and kinship can be common values.\(^{(41)}\) The cyclical life-death-life concept may be attached to sacred practices before, during and after passing.\(^{(41, 42)}\) The belief is that ‘the spirit leaves the body to return to the Ancestor’s country [with the spirit being the] continuum that connects the living to the past, present and future.’\(^{(42)}\) Commonly, it is the family’s responsibility to enable the spirit’s journey to the ancestors.\(^{(42)}\)

Palliative care pharmacists adopt culturally responsive approaches to care that are respectful of individual choices and the intercultural variations of Aboriginal and Torres Strait Islander Peoples. Inadvertent miscommunication or misunderstandings are acknowledged and responsibility accepted to ensure patients and their family/carers feel safe in the palliative care service.\(^{(42)}\)

[HEAD 1] POLICIES, PROCEDURES, AND GOVERNANCE

Pharmacists must have knowledge of current versions of the following documents, as they provide a framework that pharmacists should practise within:

- Australian Charter of Healthcare Rights\(^{(1)}\)
- National Safety and Quality Health Service Standards\(^{(43)}\) including the National Model Clinical Governance Framework\(^{(44)}\)
- Australian Health Practitioner Regulation Agency and National Boards’ Shared Code of Conduct principles\(^{(45)}\)
- SHPA Code of Ethics\(^{(46)}\)
- National Competency Standards Framework for Pharmacists in Australia\(^{(47)}\)
- Professional Practice Standards\(^{(48)}\)
Palliative care pharmacists should regularly utilise current versions of the following Australian and international standards and guidelines:

- National Palliative Care Standards (for Specialist Palliative Care Services) (50)
- National Palliative Care Standards for All Health Professionals and Aged Care Services: for professionals not working in Specialist Palliative Care (33)
- Palliative Care Service Developmental Guidelines (51)
- National Palliative Care Strategy 2018 (52)
- National Consensus Statement: Essential elements for safe and high-quality end-of-life care (12)
- Therapeutic Guidelines – Palliative care (Australia) (53)
- CareSearch (Australia) (54)
- Palliative Care Formulary (UK) (55)
- Delirium Clinical Care Standard (56)

Palliative care pharmacists should also be familiar with relevant international clinical guidelines from the:

- European Association for Palliative Care (EAPC)
- European Society for Medical Oncology (ESMO)
- American Academy of Hospice and Palliative Care (aahpm)
- Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard (57)

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

- Guideline for the handling of palliative care medicines in the community services (58)
- Palliative Care Outcomes Collaboration Clinical Manual (59)
- Supportive & Palliative Care Indicators Tool (14)

[HEAD 1] RECOMMENDED STAFFING

As per the Clinical Pharmacy Standards, (2) the three major factors that determine staffing levels for palliative care clinical pharmacy services include the range of clinical pharmacy services, the complexity of care required and hospital throughput.
Recommended staffing levels for palliative care pharmacists (Table 2 and 3) are informed by the Clinical Pharmacy Standards(2) and should be interpreted with consideration for the health service, activities performed by the palliative care pharmacist and those that are undertaken by other pharmacists and pharmacy technicians (e.g. medicines supply, administrative tasks). Additionally, individual health service organisations will need to consider the following when determining staffing ratios:

- role of the palliative care pharmacist
- size of the health service
- mode of service delivery (e.g. telehealth, face to face)
- location of service provision (e.g. metropolitan, regional, rural and remote)
- model of care (i.e. team-based versus ward-based palliative care pharmacy services).

The traditional model of care has been ward-based pharmacists who are wholly responsible for an individual patient. Pharmacists, however, are now increasingly practising in team-based models with specialisation and consultant-type roles. As the model of care changes and the role of the pharmacist grows, the provision of advanced pharmacy care for an individual patient may be shared between pharmacists. The ratios outlined in Table 2 and 3 allow for best patient-centred care set in the Clinical Pharmacy Standards(2) and reflect the emerging requirements and complexity of palliative care patients.

There should be at least one senior/lead clinical pharmacist responsible for the coordination of all aspects of the palliative care pharmacy service. Components of this may be delegated to other pharmacists and support staff. Intern and early career pharmacists should be supported by a senior/lead pharmacist who is either based with the palliative care team or has established relationships with local palliative care service providers.
Table 2 - Recommended pharmacist staffing levels for the provision of clinical pharmacy services based on ‘overnight beds’

<table>
<thead>
<tr>
<th>Category</th>
<th>Service-related group/bed type</th>
<th>Patients to 1 FTE pharmacist for clinical pharmacy services 5 days/week&lt;sup&gt;b,c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Palliative care</td>
<td>20-25</td>
</tr>
</tbody>
</table>

<sup>FTE = Full Time Equivalent</sup>
<sup>a Category numbers are from SHPA Standards of Practice for Clinical Pharmacy Services (2)</sup>
<sup>b The proposed recommendations cover pharmacy services provided in an 8-hour day, 5 days per week. A weekend service or services provided outside of these hours will require increased pharmacist services; executive level discussions and consideration of required pharmacy resources is recommended</sup>
<sup>c Length of stay may also affect patients to pharmacist ratios</sup>

Table 3 - Recommended pharmacist staffing levels for provision of clinical pharmacy services based on the number of patients per day

<table>
<thead>
<tr>
<th>Category</th>
<th>Patient/service type</th>
<th>Patients to 1 FTE pharmacist for clinical pharmacy services&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Community-based services&lt;sup&gt;c&lt;/sup&gt;</td>
<td>Pharmacists providing review and advice on medicine usage in the home setting (including residential care) 3 per day Participation in interdisciplinary care – providing medication advice to patients/health professionals within formal review meetings and on request 10-20 per interdisciplinary team meeting (at 15 minutes per patient)</td>
</tr>
<tr>
<td>12</td>
<td>Outpatient clinics</td>
<td>Pharmacists participating in an interdisciplinary team clinic&lt;sup&gt;e&lt;/sup&gt; 4 per 4-hour session&lt;sup&gt;d&lt;/sup&gt; Pharmacist-only clinic 5 per 4-hour session&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>FTE = Full Time Equivalent</sup>
<sup>a Category numbers are from SHPA Standards of Practice for Clinical Pharmacy Services (2)</sup>
<sup>b Length of stay with the palliative care service may also affect patients to pharmacist ratios</sup>
<sup>c Current funding for community-based services may vary (e.g. Home Outreach Medicine Review (HOMR) in hospitals, Home Medicines Review (HMR) in hospitals and community pharmacy</sup>
<sup>d Maximum of two new patients</sup>
<sup>e To ensure best patient medication outcomes, the authors have determined that pharmacists should also be members of the community palliative care interdisciplinary team (e.g. palliative care nursing service)</sup>
[HEAD 1] TRAINING AND EDUCATION

It is essential to develop the pharmacy workforce through the training and education of pharmacists and technicians to enable the delivery of advanced palliative care pharmacy services. Pharmacists commencing practice in palliative care should undertake relevant orientation and training. Another avenue for specialisation is to develop a palliative care Advanced Training Residency Program by adapting SHPA’s Common Framework. Further, to facilitate equitable access to and palliative care for Aboriginal and Torres Strait Islander Peoples, training and education to ensure cultural responsiveness is required. Providing culturally responsive care is stipulated in the Australian Health Practitioner Regulation Agency’s Code of conduct (45) and the National Competency Standards Framework for Pharmacists in Australia. (4)

Palliative care pharmacists should have a scope of practice competency profile with a continuing professional development (CPD) plan that covers the five domains of professional performance in accordance with the National Competency Standards Framework for Pharmacists in Australia. (47) Although the framework itself is not tied to any area of specialisation, for palliative care pharmacists, there are qualifications, educational activities, knowledge, and skills that are recommended in addition to those of a general clinical pharmacist. These have been informed by the authors.

[head 2] Credentialing and qualifications

The following is a non-exhaustive list of desirable certification, credentialing and qualifications for palliative care pharmacists and does not represent endorsement of any provider:

- Credentialing as an Advancing or Advanced Practice Pharmacist provided by Pharmacy Development Australia (60)
- A postgraduate qualification in palliative care e.g.
  - Flinders University – Graduate Certificate, Diploma and Master of Palliative Care
  - University of Technology Sydney – Graduate Certificate, Diploma and Master of Palliative Care
  - University of Canterbury New Zealand – Postgraduate Certificate in Palliative Care
  - The University of Edinburgh – Master’s degree (MSc) in the Clinical Management of Pain
  - Monash University – Palliative care subject (single unit as part of the MClinPharm)

There is no palliative care specific certification/credentialing for pharmacists at the time of writing.

[head 2] Educational activities

Further to the Pharmacy Board of Australia Guidelines on Continuing Professional Development, (61) it is recommended that palliative care pharmacists have a significant proportion of their CPD per year focussed on palliative care services, relevant to their current practice.

Recommended continuing education activities for palliative care pharmacists include the following:

Attendance at local or national courses or online activities such as:
• SHPA Seminars and CPD activities
• Program of Experience in the Palliative Approach (PEPA)
• Palliative Care Education Directory
• Palliative Care Curriculum for Undergraduates (PCC4U)
• Australian Healthcare and Hospitals Association (AHHA)
• End of Life Directions for Aged Care (ELDAC)
• Gwandalan National Palliative Care Project
• Australian Pain Society Annual Scientific Meeting and webinars
• Society of Pain & Palliative Care Pharmacists activities
• PaCCSC & CTS Annual Research Forum
• Caresearch activities and SA Palliative Care Community Pharmacy Updates
• Centre for Palliative Care Research and Education (CPCRE)

Joining professional organisations:

• SHPA and the Palliative Care Interest Group, Practice Group or Leadership Committee
• Palliative Care Australia (PCA)
• Paediatric Palliative Care Australia and New Zealand (PaPCANZ)
• Society of Pain & Palliative Care Pharmacists (USA)
• Perinatal Palliative Care Special Interest Group
• State and Territory Clinical Networks
• Association of Supportive and Palliative Care Pharmacy (UK)

The Palliative Care Leadership Committee considers the ability to undertake preceptorships and/or site visits to health services in either geographically diverse areas or areas of diverse practice to be a useful way of expanding knowledge and skills, particularly for palliative care pharmacists practising alone, at smaller sites or in regional and rural settings.

Educational material and resources are provided to members on the SHPA palliative care stream home page. For palliative care pharmacists, joining and actively participating in the SHPA Specialty Practice Palliative Care stream at the Practice Group level is strongly recommended.

Attendance at specialist conferences and educational meetings should be encouraged to maintain and update specialist knowledge in palliative care. Relevant domestic conferences include those organised by SHPA, Palliative Care Australia, Australian and New Zealand Society of Palliative Medicine, Australian Pain Society, Palliative Care Clinical Studies Collaborative and Palliative Care Nurses Australia. International conferences in palliative care include conferences of the European Association for Palliative Care, Society of Pain and Palliative Care Pharmacists, McGill University and End-of-Life Care Research Group.
[head 2] Knowledge, skills and experiential learning

The role of a palliative care pharmacist is based on a high level of skill in general pharmacy with the later consolidation of palliative care experience. Pharmacists working in this area will routinely demonstrate advanced level competency in communication and collaboration (Domain 2, National Competency Standards Framework for Pharmacists in Australia(4)) when engaging with the interdisciplinary team and patients. Underpinning knowledge related to key areas of pharmacy practice in palliative care 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 palliative care pharmacist should address as this will depend on their scope of practice.

Table 4. Essential and desirable knowledge and skills and experiential learning for palliative care pharmacists

<table>
<thead>
<tr>
<th>Essential Knowledge and Skills</th>
<th>Desirable Knowledge and Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad knowledge of life-limiting conditions and their illness trajectory to enable assessment of medicines management and quality use of medicines</td>
<td>Specialist knowledge of medicines management and requirements from commencement of palliative care through to end-of-life care</td>
</tr>
<tr>
<td>Medicines use evaluation throughout illness trajectory</td>
<td>Specialist knowledge to facilitate prescribing and deprescribing relative to illness trajectory and goals of care</td>
</tr>
<tr>
<td>Ability to vary and deliver culturally responsive education commensurate with literacy and health literacy of patients, families/carers</td>
<td>Develop, deliver and evaluate clinical education and training programs to medical, nursing and allied health staff</td>
</tr>
<tr>
<td>Undertake quality improvement projects relevant to palliative care</td>
<td>Evaluate quality improvement projects to inform practice, guidelines, standards, policies and procedures, both locally and nationally</td>
</tr>
<tr>
<td>Mentorship for early-career pharmacists, those newly working in palliative care and those caring for patients with limited life expectancy requiring specialist input</td>
<td>Mentorship of other health professionals, including junior medical staff</td>
</tr>
<tr>
<td>Ability to further develop skills in palliative care</td>
<td>Ability to promote and support the skills development of palliative care pharmacists</td>
</tr>
<tr>
<td>Ability to work towards advanced pharmacy practice in palliative care</td>
<td>Leadership to support, promote and influence advanced pharmacy practice in palliative care</td>
</tr>
<tr>
<td>Identify learning opportunities to develop skills in pharmacy practice specific to palliative care</td>
<td>Teaching to increase advanced capability e.g. training and education of healthcare professionals regarding palliative care</td>
</tr>
<tr>
<td>Participate in and evaluate research specific to palliative care</td>
<td>Initiate or supervise research in palliative care</td>
</tr>
<tr>
<td>Follow national and local health network policies pertinent to palliative care</td>
<td>Engage and contribute to national health and local health network policies specific to palliative care</td>
</tr>
</tbody>
</table>
Experiential Learning (includes training)

<table>
<thead>
<tr>
<th>Local orientation (e.g. familiarisation with ward and clinical area staff)</th>
<th>Strong working relationship with members of the palliative care interdisciplinary team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of an evaluation of clinical skills using the current version of the Clinical Competency Achievement Tool(62)</td>
<td>Contribute to the development of, for example, Advanced Residency Programs for palliative care</td>
</tr>
<tr>
<td>Completion of a SHPA Foundation Residency Program</td>
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</table>

Training and education, predominantly work-based education follow adult learning principles. Further information can be found in Chapter 10 of the SHPA Standards of Practice for Clinical Pharmacy Services.(2)

[HEAD 1] QUALITY IMPROVEMENT

Quality improvement activities should be designed to demonstrate improvements in advanced pharmacy palliative care by targeting and achieving best outcomes for all patient groups, including those at greatest risk of medication misadventure. Examples of quality improvement activities that may be considered within a Plan–Do–Study–Act cycle are:

- Baseline and yearly reports on the number of staff education sessions, conference presentations and published manuscripts provided by palliative care pharmacists, including their impact on practice
- Number of interdisciplinary activities and protocols that palliative care pharmacists participated in
- Evaluation of service provision against essential palliative care services outlined in this Standard
- Quality improvement activities measured against national palliative care standards such as those set by Palliative Care Australia:
  - The proportion of patients, and their families/carers, who received appropriate medicines information and education
  - The proportion of patients whose medication management plans had been routinely evaluated to ensure alignment with their current illness trajectory, requirements and preferences in addition to those of their family/carer
  - The proportion of patients whose medicines management was uninterrupted at transitions of care within and between services (e.g. proportion of healthcare
providers who received adequate information to ensure a seamless transfer of medicines management)

- The proportion of identified families/carers who were referred to relevant healthcare professionals for bereavement care
- The proportion of clinical practice guidelines, policies, and procedures that explicitly include person and family/carer-centred care principles
- The proportion of reviews performed for clinical performance, outcomes and experience of care provision, including evaluation of improvement activities to facilitate access to language services for culturally and linguistically diverse cohorts, including Aboriginal and Torres Strait Islander Peoples
- The proportion of palliative care pharmacists who have received education and training on the provision of optimal, culturally safe palliative care (e.g. for Aboriginal and Torres Strait Islander Peoples)

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

[HEAD] RESEARCH

Research is vital for developing the pharmacy profession and may inform pharmacy services’ current level of and future contributions to advancing pharmacy practice and patient care. Palliative care pharmacists should participate in, initiate, conduct and supervise research that contributes to the body of knowledge that provides evidence in support of optimal use of medicines and advanced pharmacy practice in palliative care. Researchers should consider patients’ limited time and vulnerabilities, in addition to being mindful of not creating unnecessary barriers to research participation. Cross sector, inter-sectorial and interdisciplinary research is encouraged to ensure the input of key stakeholders, including persons with lived experience, and relevance of research in the Australian context. Collaborations with research institutes and groups are also encouraged, for example, the National Aboriginal Community Controlled Health Organisation, Rural Area Community Controlled Health Organisations, and palliative care services.

A research gap must be identified. The research question and study design must be of benefit to patients and of interest to the palliative care team. This may relate to everyday practice such as medicines use evaluation and medication safety and quality, interdisciplinary collaboration,(63) and impact of pharmacists on patients’ and carers’ quality of life.(64) Goal 6: Data and evidence, of the National Palliative Care Strategy(52) provides further information on the importance of robust national data and a strong research agenda.

Examples of palliative care pharmacy research have included:

- IMPACCT RAPID program(65)
Future pharmacy palliative care research could include:

- Patient and family/carers understanding of the role of medicines at end of life
- Inappropriate polypharmacy
- Working with the Palliative Care Clinical Studies Collaborative

Data collection for any research should be achievable within a reasonable timeframe. There should be clearly defined outcomes with objective measures where possible. Data integrity, management, and governance must align with protocol requirements, health service guidelines and human research and ethics committee approval.

External funding enables larger multicentre studies to be conducted. Grants are available from organisations such as the National Health and Medical Research Council (NHMRC).

Presentation of translational research at relevant conferences and seminars 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 palliative care that may be appropriate include: BMJ Supportive and palliative care, Current opinion in supportive and palliative care, Palliative and supportive care, BMC Palliative care. Presentation and publication of studies by Australian palliative care pharmacists are imperative to aid others in the implementation of palliative care pharmacy services and illustrate how palliative care pharmacists are demonstrating improvements in patient care.

Further information on research can be found in Chapter 11 of SHPA Standards of Practice for Clinical Pharmacy Services. (2)

ACKNOWLEDGEMENTS

SHPA would like to acknowledge the former SHPA Committee of Specialty Practice in Cancer Services for their work on the previous Standard: SHPA Standards of Practice for the Provision of Palliative Care Pharmacy Services.

CONFLICTS OF INTEREST STATEMENT

To be added later by SHPA
AUTHORSHIP STATEMENT

To be added later by SHPA

REFERENCES


31. Palliative Care Australia and KPMG. Investing to save - The economics of increased investment in palliative care in Australia. Griffith: Palliative Care Australia; 2020.


33. Palliative Care Australia. National Palliative Care Standards for All Health Professionals and Aged Care Services. Griffith: Palliative Care Australia Ltd; 2022.


38. Palliative Care Australia. Aboriginal and Torres Strait Islander Peoples Palliative Care Resources Fyshwick: Palliative Care Australia; [Available from:


APPENDICES

Appendix 1. Glossary

<table>
<thead>
<tr>
<th>Bereavement</th>
<th>Experiencing the death of a person with whom there has been an enduring relationship</th>
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<tbody>
<tr>
<td>Carers</td>
<td>People who provide personal care, support and assistance to people with a disability, medical condition (including terminal or chronic illness) mental illness, or frailty due to age. Carers include family members, friends, relatives, siblings or neighbours. Grandparents or foster carers providing care to a child with disability, medical condition (including terminal or chronic illness) or mental illness are included as carers.</td>
</tr>
<tr>
<td>End-of-life care</td>
<td>Includes physical, spiritual and psychosocial assessment, and care and treatment delivered by health professionals and ancillary staff. It also includes support of families/carers, and care of the patient’s body after their death. People are ‘approaching the end-of-life’ when they are likely to die within the next 12 months. This includes people whose death is imminent (expected within a few hours or days) and those with: advanced, progressive, incurable conditions; general frailty and co-existing conditions that means that they are expected to die within 12 months; existing conditions, if they are at risk of dying from a sudden acute crisis in</td>
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</table>
their condition; or life-threatening acute conditions caused by sudden catastrophic events.

**Goals of care**
The aims for a patient’s medical treatment, as agreed between the patient, family/carers and healthcare team. Goals of care will change over time, particularly as the patient enters the terminal-phase. Medical goals of care may include attempted cure of a reversible condition, a trial of treatment to assess reversibility of a condition, treatment of the patient’s deteriorating condition or the primary aim or ensuring comfort for a dying patient. The patient’s goals of care may also include nonmedical goals – for example, returning home or reaching a particular milestone, such as participating in a family/carer’s event.

**Life-limiting illness**
A person with life-limiting illness may die prematurely. This term is often used for people living with a chronic condition that may seem life-threatening but can continue for many years or even decades.

**Palliative care or palliative approach**
An approach that improves the quality of life of patients and their families/carers facing the problems associated with life-limiting illness, through the prevention and relief of suffering by means of early identification, and impeccable assessment and treatment of pain and other problems (physical, psychosocial and spiritual).

**Specialist palliative care**
Services provided by clinicians who have advanced training in palliative care. The role of specialist palliative care services includes providing direct care to patients with complex palliative care needs, and providing consultation services to support, advise and educate non-specialist clinicians who are providing palliative care.

**Terminal-phase**
The stage of an illness when death is likely within days.

**Torres Strait Islander**
A person of Torres Strait Islander descent who identifies as a Torres Strait Islander and is accepted as such by the community in which they live (the original inhabitants of the Torres Strait Islands).

### Appendix 2. Resources

**Recommended texts for palliative care**
- Therapeutic Guidelines – Palliative Care
- Palliative Care Formulary (UK)
- The Syringe Driver: Continuous subcutaneous infusions in palliative care
- Oxford Textbook of Palliative Medicine
- Oxford Handbook of Palliative Care
- Evidence-Based Practice of Palliative Medicine (2nd edition due in April 2023)

**Discretionary texts**
- [A practical guide to palliative care in paediatrics (The Green Book)]
- Emergencies in Palliative and Supportive Care

**Key journals specific to palliative care**
• American Journal of Hospice and Palliative Care
• BMJ Supportive & Palliative Care
• European Journal of Palliative Care
• Journal of Pain & Palliative Care Pharmacotherapy
• Journal of Pain and Symptom Management
• Journal of Palliative Medicine
• Palliative Medicine
• Supportive Care in Cancer

### Treatment Guidelines or Clinical Guidelines

- WA Cancer and Palliative Care Network Evidence based clinical guidelines for adults in the terminal phase
- Prescribing Guidelines for the Pharmacological Management of Symptoms for Adults in the last days of life (SA)
- Guidelines for the handling of palliative care medicines in community services
- Safer Care Victoria Guidelines – Palliative Care
- RACGP aged care clinical guide (Silver Book) - Palliative and end-of-life care
- ESMO Clinical Practice Guidelines: Supportive and Palliative Care
- Scottish Palliative Care Guidelines

### Useful websites

<table>
<thead>
<tr>
<th>Website</th>
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<tbody>
<tr>
<td>Caresearch.com.au</td>
<td>PalliAGED.com.au</td>
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<tr>
<td>Palliativedrugs.com</td>
<td>SPICT</td>
</tr>
<tr>
<td>End of Life Essentials</td>
<td>Palliative Care Outcomes Collaboration</td>
</tr>
<tr>
<td>End of Life Law in Australia</td>
<td>Palliative Care Clinical Studies Collaborative</td>
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<tr>
<td>Caring@home</td>
<td>Canadian Virtual Hospice</td>
</tr>
<tr>
<td>CPCRE – Centre for Palliative Care Research and Education</td>
<td>Cochrane Pain, Palliative and Supportive Care</td>
</tr>
<tr>
<td>Research Centre for Palliative Care, Death and Dying (RePaDD)</td>
<td>ELDAC – End of life directions for Aged Care</td>
</tr>
<tr>
<td>Pallimed – A Hospital &amp; Palliative Medicine blog</td>
<td>Australian Indigenous HealthInfoNet – Palliative Care and End-of-Life Care</td>
</tr>
</tbody>
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### Societies

- Palliative Care Australia (& state branches)
- Paediatric Palliative Care Australia and New Zealand (PaPCANZ)
- The Association of Supportive & Palliative Care Pharmacy (UK)
- Society of Pain & Palliative Care Pharmacists (US)
- European Association for Palliative Care

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<tr>
<th>Useful Apps</th>
<th>Podcasts</th>
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<tbody>
<tr>
<td>FPM ANZCA opioid calculator</td>
<td>The Waiting Room Revolution</td>
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<tr>
<td>eviQ opioid conversion calculator</td>
<td>Room 64 – A Palliative Care Podcast</td>
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<tr>
<td>PalliMEDS</td>
<td>GeriPal</td>
</tr>
<tr>
<td>PalliAGEDgp</td>
<td>JAMAevidence Care at the Close of Life</td>
</tr>
<tr>
<td>Caring@home</td>
<td>SAGE Palliative Medicine &amp; Chronic Care</td>
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<td>GP Pain Help</td>
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Palliative Care Education (PaCE) Directory
Palliative Medicine Pocketbook – [App Store](#) OR [Google Play](#)
VitalTalk Tips