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Queensland Government

Community-based Palliative Care Anticipatory Medicines:

Guidance for Queensland

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This document was developed with input from the Chief Medical Officer and Healthcare Regulation Branch Prevention Division Queensland Health, members of the Queensland Specialist Palliative Care Directors' Group, Specialist Palliative Rural Telehealth Services (SPaRTa) and PallConsult, and has been adapted from the Safer Care Victoria Anticipatory medicines *Statewide guidance for Victoria*.[1] Content includes resources from existing local[2, 3], Australian and international sources[4, 5], adjusted for the Queensland context and compliant with *Queensland Medicines and Poisons (Medicines) Regulation 2021*.[6]

Medicines and doses recommended within this document are derived from the palliMEDS app developed by the National Prescribing Service (NPS) Medicine Wise for the National Palliative Care Strategy project *caring@home*.

This document supports the existing *caring@home* resources, designed for use by carers and can be accessed via www.caringathomeproject.com.au.

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Suggested Reference

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Disclaimer

The Community-based Palliative Care Anticipatory Medicines: *Guidance for Queensland* document is intended to help inform health professionals regarding prescribing, supplying and management of anticipatory medicines for community-based palliative care patients.

While Brisbane South Palliative Care Collaborative has exercised due care in ensuring the accuracy of material (at the time of publication) contained in this document, it is only a guide and remains subservient to clinical practice decisions. Its implementation is subject to the clinician's judgement as well as local context, policies and procedures. Brisbane South Palliative Care Collaborative does not accept any liability for any injury, loss, or damage incurred by use of, or reliance upon, the information provided within this document. The information contained in this document cannot be relied upon as legal advice.

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Abbreviations

ACP	Advance Care Planning
ARP	Acute Resuscitation Plan
B/T	Breakthrough
CSCI	Continuous Subcutaneous Infusions
EN	Enrolled Nurse
GP	General Practitioner
HHS	Hospital and Health Service
MASS PCEP	Medical Aids Subsidy Scheme Palliative Care Equipment Program
MO	Medical Officer
NP	Nurse Practitioner
PRN	when required
QAS	Queensland Ambulance Service
SC	subcutaneous
SL	sublingual
SPACE	Specialist Palliative Care in Aged Care project
SPaRTa	Specialist Palliative Rural Telehealth Services

About this document

Introduction

Community-based palliative care is holistic care involving complex physical, psychosocial and spiritual elements. This document is limited to one aspect of palliative care - the management of medicines in the last phase of life. Quality palliative care requires quality use of medicines to achieve optimal symptom control for community-based palliative care patients.

Purpose of this document

This document aims to provide clinicians with information about the management of palliative care anticipatory medicines (hereinafter referred to as "anticipatory medicines") for adults. Prescribing of anticipatory medicines enables effective palliation for people receiving palliative care in the community.

This document guides health professionals to proactively prescribe, obtain and coordinate the supply of anticipatory medicines, and provides reference to supporting resources. It also supports health professionals to assist family/carers to manage terminal care symptoms using subcutaneous and/or sublingual medicines.

This document is intended to augment prescribers' palliative care clinical practice. It is not intended to replace generalist clinicians' clinical judgement or specialist palliative care advice. Generalist clinicians are advised to seek specialist palliative care advice where appropriate.

What are anticipatory medicines?

Anticipatory medicines are injectable or sublingual medicines prescribed to a community-based palliative care patient in the last phase of their life. These medicines are proactively prescribed and dispensed in preparation for a time when a person may need them. They are used to help manage distressing symptoms with the goal of providing rapid relief and to avoid unplanned or unwanted admissions to inpatient facilities.

Terminology

- Patient, in this context, refers to an adult person who is receiving a palliative approach to care.
- Family, in this context, refers to a relative or friend of the patient.
- Carers, in this context, refers to family who are willing to provide care and support to a patient. It excludes paid carers (care workers).
- A substitute decision maker, in this context, refers to a person permitted under law to make decisions on behalf of a patient when they are no longer able to make their own decisions.

Specialist palliative care services in Queensland

In Queensland, most community palliative care is provided by general practitioners (GPs). GPs can provide palliative care as a single practitioner; though more commonly, care is delivered in partnership with other providers including pharmacists, nurses and allied health professionals and, for more complex patients, with input from specialist palliative care services.

Specialist palliative care services in Queensland are comprised of community (both home-based and in-reach to residential aged care facilities), inpatient palliative care, consultancy and outpatient services.

In the Queensland community there are four main types of specialist palliative care services (the extent and availability of each service usually depends on where the person receiving palliative care resides):

1. Community specialist palliative care services

- May be Queensland Health or privately funded
- Mostly available in metropolitan and larger regional areas within Queensland
- May provide direct care for patients, shared-care with GPs or consultatory services for the patient's GP

2. Specialist Palliative Rural Telehealth Services (SPaRTa)

- A Queensland Health initiative
- Provides telehealth consultations for persons residing in regional, rural and remote areas, where a local specialist palliative care service is not available
- Provides clinical care for patients and advice for health professionals after referral from a GP
- Adopts a hub and spoke model of care

3. Specialist Palliative Care in Aged Care (SPACE) Project

- Jointly funded Australian Department of Health and Queensland Health initiative, until July 1st, 2024
- Enhances access to specialist palliative care for older Queenslanders in residential aged care facilities (RACFs) by increasing the capacity and capability of primary care providers and aged care staff to deliver care at end of life
- Each Queensland Hospital and Health Service (HHS) (with the exception of Children's Health Queensland) developed a model of service delivery that is appropriate for local context, considering factors such as resourcing and geography
- Models variously include palliative care needs rounds, mobile in-reach teams, telehealth consults, telephone support, interprofessional education and case-based learning.

4. PallConsult

- A Queensland Health initiative
- Delivers clinical advice to healthcare providers across all of Queensland
- Provides:
  - › immediate 24/7 telephone access to a palliative care specialist for clinical advice, where a local specialist palliative care service is not available
  - › an extensive range of capacity-building resources and educational opportunities for community-based and primary healthcare providers
- PallConsult provides advice directly to GPs and other community-based health professionals, it does not provide any direct patient care

KEY

Patient-facing clinical service

Clinician-facing clinical service

GPs and other health professionals, especially nurses and pharmacists, requiring guidance or encountering difficulties with prescribing, obtaining or managing anticipatory medicines can access advice from any of the specialist palliative care services listed above.

Appendix 1: Contact Information for Queensland Community Specialist Palliative Care Services

Community pharmacies and palliative care

Community pharmacists play an important role in community palliative care. Their major responsibility is to dispense and supply regular and anticipatory medicines in a timely fashion to facilitate optimal palliative care symptom management. The role of community pharmacy in palliative care is expanding – Refer to Appendix 2 for more information on community pharmacies that provide palliative care support in Queensland.

Who is this document for?

This document is intended for all generalist clinicians who support adult Queenslanders receiving palliative care at home, inclusive of patients residing in care facilities where on-site care can be provided by trained health professionals. These clinicians may include but are not limited to:

- GPs
- after-hours visiting medical services
- inpatient medical officers (MOs) discharging or transferring a patient home for end-of-life care
- nurse practitioners (NPs)
- nurses
- pharmacists
- paramedics.

What does this document cover?

This document covers the management of palliative care anticipatory medicines prescribed by:

- GPs or NPs within community settings
- MOs or NPs upon discharge or transfer from inpatient facilities

There are some exceptions:

- **Children with palliative care needs**

  This guidance does not cover the use of palliative care anticipatory medicines in children.

  For anticipatory prescribing for children with palliative care needs, consult with the **Queensland Paediatric Palliative Care Service**. Phone: 07 3068 1111 (hospital switchboard) or 1800 249 648 (toll free 24/7 palliative care support and advice hotline).

- **Catastrophic events**

  Detailed management of catastrophic events (such as a massive haemorrhage from a head and neck cancer causing complete airway obstruction) are not covered in this document. It is recommended that clinicians consult with a specialist palliative care service if it is considered that the patient is at risk of a catastrophic event.

How to use this document

1. Follow the steps

For convenience this document has been divided into five steps. **Clinicians are advised to follow through each of the steps to enable best possible outcomes for their community-based patients.**

FIVE steps for optimal palliative care anticipatory medicine management:

- **STEP 1:** Identify the need for anticipatory medicines in a timely manner
- **STEP 2:** Prescribe and document appropriate orders for anticipatory medicines
- **STEP 3:** Provide family information and support
- **STEP 4:** Coordinate community services and supplies
- **STEP 5:** Regularly review and reassess the patient's and family's needs

2. Refer to guidance relevant to the patient's home situation

Resources available for home-based palliative care differ depending upon whether the person is being cared for in a ***private residence*** or in a ***care facility***. In this document, differences are highlighted using colour coding and icons as outlined below.

Patients residing in a private residence	Patients residing in a care facility
Management of anticipatory medicines for patients residing in a private residence usually requires the availability of suitable community services to either directly administer or support a carer to administer subcutaneous medicines. In this document, a private residence may include: • The patient's privately owned or rented home • A home that is privately owned or rented by the carer who wishes to support the patient	Management of anticipatory medicines for patients in a care facility, requires the availability of on-site trained health professionals to administer subcutaneous medicines. In this document, care facilities may include: • Residential Aged Care Facilities (RACFs) • Hospices

3. Use the Icons

Icons are used throughout this document to direct clinicians to additional information.

Within document link

External link

Discharge or transfer of care from an inpatient facility

Mobile/tablet application

Background

The majority of Australians nominate home as their preferred place of care and eventual death[7]. However, if symptoms such as pain, breathlessness, nausea, fear, confusion, delirium and/or agitation, or the emotional and physical burden of care imposed by those symptoms are not optimally managed, unwanted transfers to inpatient settings can result[8].

Evidence shows anticipatory prescribing provides reassurance, controls symptoms effectively and prevents unplanned hospital admissions[9, 10]. However, some health professionals have expressed concern about the lack of evidence-based guidance for anticipatory prescribing[5]. This document attempts to meet that clinical need.

Anticipatory prescribing has been shown to help improve a person's ability to achieve their preferred place of death, positively impacting family and carers[9, 11-13]. Carer burden can develop, however, when carers have not had a sufficient level of information and education relating to anticipating and managing end-of-life palliative care symptoms[14].

Timely access to anticipatory medicines can be challenging in some Queensland communities simply because of geographical and distance constraints that impact medicine supply chains. Further, in rural and remote areas, access to local GPs/NPs and palliative care physicians can be limited, so district nursing services commonly assess people at their homes without the benefit of a face-to-face medical/NP consultation[9,15]. Nursing staff working in these areas may lack the confidence, knowledge and/or experience to discuss the need for anticipatory prescribing with GPs or NPs [9,11,14]. Finally, rural and remote pharmacies may not be aware that a person is likely to be in need of anticipatory medicines.

Providing clinicians working in all communities with clear guidance for managing and prescribing anticipatory medicines can significantly improve the overall quality of life for Queenslanders receiving palliative care[11, 14].

Guiding principles for anticipatory medicine management

1	People have a right to be supported, to be cared for and die in the place of their choice[1].
2	The goals and preferences of persons nearing the end of life should be recognised and respected, their comfort maximised, and their dignity preserved[16].
3	All Australians receiving palliative care must be able to access necessary medicines, including opioids, to manage and prevent suffering from uncontrolled symptoms[16].
4	A good quality of life and death may require proactive pharmacological management of distressing symptoms by the most effective route possible[16].
5	The role of the person's family and carers in providing physical, emotional, social and spiritual support and care is appreciated and respected[1].
6	The voluntary nature of the role for the carer must be acknowledged. The carer can be involved in or withdraw at any time from managing 'breakthrough' symptoms using anticipatory medicines[2].
7	The role of anticipatory medicines is discussed with the person (if appropriate) and the family or carers in the context of death and dying, respecting the person's specific spiritual, religious and cultural needs[1].
8	Willing and able carers can be supported to manage breakthrough symptoms using anticipatory medicines within a safe environment and with appropriate training and support[1].
9	All members of the multidisciplinary team support carers who are willing and able to give subcutaneous medicines to help manage breakthrough symptoms[1].
10	Medicines are prescribed, obtained, charted and administered according to the Australian National Medicines Policy and in accordance with regional jurisdictional requirements and local policies and procedures[17-19].

Operational steps involved with anticipatory medicine management

FIVE steps for optimal palliative care anticipatory medicine management:

- **STEP 1:** Identify the need for anticipatory medicines in a timely manner
- **STEP 2:** Prescribe and document appropriate orders for anticipatory medicines
- **STEP 3:** Provide family information and support
- **STEP 4:** Coordinate community services and supplies
- **STEP 5:** Regularly review and reassess the patient's and family's needs

Step 1: Identify the need for anticipatory medicines in a timely manner

Best use of anticipatory medicines requires timely identification of the patient's changing needs as death becomes imminent. This includes anticipating likely emergent, end-of-life symptoms for each individual palliative care patient.

1.1 Assessment

Certain clinical criteria may indicate it is appropriate to organise anticipatory medicines. Clinical criteria may include: [1, 20]

- The patient's condition is rapidly deteriorating
- There are increasing levels of symptom distress and the patient's current doses of symptom management medicines are proving less effective
- There are known problems with gastrointestinal absorption
- The patient is expected to lose the ability to swallow in the near future
- The patient presents to their healthcare provider for improved symptom management
- The patient chooses to cease treatments that are curative or restorative in intent

NB: The above clinical criteria is intended as a guide only. Clinicians are advised to use their own clinical judgement when determining when it may be suitable to prescribe anticipatory medicines for their particular patient.

1.2 End-of-life symptoms

Signs and symptoms commonly occurring at end of life and which may benefit from pharmacological interventions include, but are not limited to:

- Agitation
- Distressing breathlessness
- Nausea and vomiting
- Pain
- Refractory distress
- Respiratory tract secretions
- Seizure

A combination of symptoms may be experienced by a patient at end of life. However, not all signs and symptoms are experienced by every palliative patient. Choice of which anticipatory medicines to prescribe will depend on the patient's needs and situation.

Symptoms can be both breakthrough or incident. Anticipatory prescribing is important in both situations.

End-of-life symptoms can be new in onset and/or a worsening of existing symptoms. Regardless, it is important for the clinician to consider the potential for symptoms to escalate and ensure adequate anticipatory medicines are prescribed to cater for this. Refer to Step 2: Prescribe and order anticipatory medicines.

1.3 Safety considerations

Anticipatory medicines should be tailored to the individual person, their needs and social situation, taking into consideration barriers, safety and regulatory issues prior to prescription. Therefore, when organising anticipatory medicines, it is important to consider if the person has:

Patients residing in a private residence	Patients residing in a care facility
• Support from appropriate services and/or health professionals to prescribe and dispense anticipatory medicines.* • Carer and/or appropriate health professional support to administer anticipatory medicines. *The absence of a carer who is willing and able to administer anticipatory medicines is not a contraindication to having anticipatory medicines at home.* • Any barriers (see below) associated with the provision of anticipatory medicines.	• Support of appropriate healthcare services and/or practitioners to prescribe, dispense and administer anticipatory medicines.* • Any local barriers (see below) associated with the provision of anticipatory medicines.

**Anticipatory medicines cannot be managed safely in the community without adequate support from appropriate community healthcare services and/or practitioners. Step 4: Coordinating local community services and supplies of this guide provides further information on the minimum supports required to safely manage anticipatory medicines in the home.*

Barriers may include:

Patients residing in a private residence	Patients residing in a care facility
• The patient or carer are unwilling to have anticipatory medicines prescribed, administered or stored in the home • Medicines are unable to be safely stored in the home • There is reasonable suspicion of medicine diversion • QScript alerts may impact prescribers' and dispensers' willingness to prescribe and dispense monitored medicines, respectively.[§] The alerts and monitored medicines information in QScript can support prescribers and dispensers in providing appropriate treatment.	• Restrictions with medicine access, especially after-hours • Appropriate storage of medicines within the care facility • Limited or no access to registered or enrolled nurses (ENs) for appropriate escalation* • Regulations regarding use of psychotropic medicines in aged care facilities[†] • QScript alerts may impact prescribers' and dispensers' willingness to prescribe and dispense monitored medicines, respectively.[§] The alerts and monitored medicines information in QScript can support prescribers and dispensers in providing appropriate treatment.

**Employers and ENs should ensure that the EN is familiar with Queensland legislation, relevant health department and health service policy requirements as well as relevant workplace policies, procedures and protocols regarding administration of medicines.*
[†]Psychotropic medicines used for end-of-life purposes are not considered chemical restraint. As such, a dying person should not be denied appropriate pharmacological treatment to preserve comfort and dignity, and provide effective symptom management.
[§]QScript is intended to be used by prescribers and dispensers as a clinical tool to guide prescribing and dispensing practices. It is not intended to restrict the supply of monitored medicines that will clinically benefit an individual patient.

The presence of barriers should not restrict the provision of end-of-life care in the home and access to anticipatory medicines. Thus, it is recommended that all barriers be carefully managed to ensure best outcomes for the dying person.

Any incidents or near misses concerning use of anticipatory medicines must be reported to the prescribing practitioner and follow standard jurisdictional incident reporting protocols. Where necessary, remedial action may need to be undertaken. It is recommended that learnings from incidents or near misses be shared with relevant colleagues to reduce the likelihood of future occurrences.

1.4 Consent

Prior to prescribing anticipatory medicines, the prescribing practitioner must obtain consent from the patient or their substitute decision maker for use of the medicines[21]. It is necessary to consider whether communication needs to be aided by the use of other support resources e.g. interpreter services[21]. In cases where a patient does not have the capacity to consent, attention must be given as to whether this is in the individual's best interest[21]. This could include discussion with the substitute decision maker, and/or relatives, carers or friends[21].

Step 2: Prescribe anticipatory medicines and document appropriate orders

Anticipatory medicines should be available in a timely fashion. These medicines are usually administered subcutaneously and/or sublingually because patients are often unable to swallow, absorb or tolerate oral medicines as their condition deteriorates. Anticipatory medicines may be ordered as a continuous subcutaneous infusion (CSCI), regular bolus doses or as breakthrough PRN doses.

2.1 Medicine information

2.1.1 Choice of medicine

The ***Core Palliative Care Medicines List for Queensland Community Patients*** (see Appendix 2, Table 4) includes medicines suitable for anticipatory prescribing for most non-complex terminal phase persons living in community settings. Prescribers are encouraged, where appropriate, to prescribe medicines from this list as they are more likely to be readily available in the community for rapid supply.

Nonetheless, there are many other medicines, which can be appropriately prescribed as anticipatory medicines. Regardless of which anticipatory medicines are prescribed, it is important for the clinician to ensure there are no issues with ongoing supply in the community and that an adequate range is prescribed.

It is recommended that the person is prescribed at least one agent from each of the 5 medicine categories listed in Box 1.

Box 1: Five Medicine Categories for Anticipatory Medicines

1. Analgesic (opioid)
2. Anxiolytic
3. Anticholinergic
4. Antipsychotic
5. Antiemetic

Selecting suitable anticipatory medicines requires attention to individual-specific factors such as:

- Allergies and adverse drug reactions
- Current medicines prescribed
- Current symptoms
- Frailty and comorbidities
- Personal needs and preferences
- Potential drug interactions
- The living arrangements of the person

There are many resources to assist prescribers with choosing anticipatory medicines, including the:

- Therapeutic Guidelines: Palliative Care[22] (requires subscription)
- palliMEDS app[23]
- Palliative Medicine Pocketbook app[24]

For convenience, this document primarily refers to the **palliMEDS app** developed by the National Prescribing Service (NPS) MedicineWise, and includes tables and algorithms that have been developed using information derived from the aforementioned resources.

Box 2: palliMEDS app[23]

- developed by NPS MedicineWise for *caring@home*, palliMEDS familiarises primary care prescribers with the medicines included in the *Core Palliative Care Medicines List for Queensland Community Patients*
- free for download from the App Store or Google Play
- features an opioid calculator tool
- includes suggested prescribing doses
- contains comprehensive information about each of the Core Palliative Care Medicines
- covers detailed evidence on each of the common terminal symptoms


palliMEDS app

Prior to completing anticipatory medicine prescriptions, prescribers may wish to refer to the following sections of this document:

- 
Section 2.3 – Anticipatory prescribing considerations
- 
palliMEDS app
- 
Appendix 3: Recommended anticipatory prescribing doses for the Core Palliative Care Medicines for Queensland Community Patients
- 
Appendix 4: Symptom Control Algorithms

If further guidance is required, prescribers are encouraged to seek specialist palliative care advice.

2.1.2 Medicine dosing

Consideration of how each anticipatory medicine will be administered and suitable starting doses depends on whether the person is already using a particular regular medicine from one of the *Five Medicine Categories for Anticipatory Medicines* (Box 1). Table 1 includes relevant resources that prescribers can refer to for dosing guidance.

Table 1: Resources to support dosing of anticipatory medicines

	For patients **NOT ALREADY** using a regular medicine from one of the *Five Medicine Categories for Anticipatory Medicines*	For patients **ALREADY** using a regular medicine from one of the *Five Medicine Categories for Anticipatory Medicines*
Resources	For PRN breakthrough doses: • palliMEDS app – within the app refer to the 'Anticipatory Prescribing' section under the 'Doses' tab for each of the core palliative care medicines • Appendix 3: Recommended anticipatory prescribing doses for the Core Palliative Care Medicines for Queensland Community Patients • Appendix 4: Symptom Control Algorithms If a symptom is ongoing or more than THREE (3) as-required doses are needed in a 24-hour period, clinicians can consult: • palliMEDS app – within the app refer to the 'Regular Prescribing' section under the 'Doses' tab for each of the core palliative care medicines • Appendix 4: Symptom Control Algorithms	• Appendix 4: Symptom Control Algorithms • Specialist palliative care physician, NP or pharmacist

Opioids are commonly used for controlling common terminal phase symptoms. Opioid dosing can be complex and depends on whether the patient is already taking a regular opioid. In addition to the resources mentioned in Table 1, prescribers may wish to consult Box 3.

Box 3: Dosing considerations for opioids

Patient's opioid status	Dosing considerations
Persons NOT USING regular opioid(s)	• Refer to Table 1 for resources that will provide guidance on suitable starting doses for opioid naive patients. • The rule of thumb is to start low and escalate doses as required.
Persons USING regular opioid(s)	• Choice of the breakthrough PRN opioid can be the same or different to the regular opioid and is based on availability and accessibility of subcutaneous formulations. • The anticipatory prescribing dose for the breakthrough PRN opioid is calculated as a proportion of the total 24-hour opioid dose. Depending on symptom severity, this dose may need to be escalated. • To calculate the breakthrough PRN opioid: 1. Use the palliMEDS Opioid Calculator Tool to convert the regular opioid doses used in the previous 24-hour period to its injectable subcutaneous equivalent. 2. Calculate the breakthrough PRN dose as 1/12th to 1/6th of the 24-hour subcutaneous opioid dose. In palliative care, a dose of 1/10th is often used for convenience. 3. Consider the frequency of PRN breakthrough doses. Breakthrough opioids can be prescribed hourly if required[22, 25].

2.2 Continuous subcutaneous infusions

Palliative care medicines can be administered via continuous subcutaneous infusion (CSCI) using a subcutaneous infusion device.

Administration of medicines via CSCI is a common and accepted practice that assists with pain and symptom management when other routes of administration are inappropriate or ineffective[26]. The use of a subcutaneous infusion device, particularly in the last days of life, can make a significant contribution to ensuring a dying person's comfort[27, 28].

A subcutaneous infusion device is a device that delivers medicine at a constant rate over an extended period (usually 24 hours) to maintain a steady blood level of the medicine.

There are various types of subcutaneous infusion devices available including, but not limited to:

1. **NIKI T34™, T34™ and BodyGuard™ T** pumps
2. **Surefuser™ + infusion** Devices
3. **CADD®** (Continuous Ambulatory Delivery Device) pumps

To find out more about syringe pumps/devices, refer to:

- Appendix 5: PallConsult Subcutaneous Infusion Device Resources
- Local policy and procedures for subcutaneous infusion devices used in your clinical area

Clinicians may consider commencing a CSCI in the following circumstances:

- The patient is unable to swallow their regular oral medicines.
- The patient's ability to swallow is expected to deteriorate (Box 1).
- Symptoms are escalating and are unlikely to be adequately managed with medicines administered at PRN intervals and/or regular opioids administered via non-subcutaneous routes.

If the person is to be commenced on a CSCI:

- use the palliMEDS app Opioid Calculator tool to calculate a suitable 24-hour opioid dose to be administered via CSCI, **OR**
- seek advice from a specialist palliative care service regarding a suitable starting CSCI dose.

Recommended starting doses for CSCI are included in the palliMEDS app and Appendix 4: Symptom Control Algorithms. Box 4 provides tips on changing from oral and transdermal opioid formulations to CSCI.

If further advice is required on aspects of CSCIs, consult a Specialist Palliative Care Service.

How to obtain a subcutaneous infusion device:

- Medical Aids Subsidy Scheme Palliative Care Equipment Program (MASS PCEP)
- Follow local policies and procedures

2.2.1 Transdermal opioid patches

Some community-based palliative care patients may be using transdermal opioid patches. Although effective for pain relief, transdermal patches are not suitable for acute pain management or terminal phase rapid dose adjustments[22]. This is because patches have a slow onset of action and it can take up to 72 hours to reach peak effect[22].

For patients who are deteriorating and experiencing increasing symptoms, it may be effective to leave the regular transdermal opioid patch in-situ and add other opioid formulations to manage the increasing symptoms, usually by commencing a CSCI.

It is important that the plan for the transdermal patch is clearly documented in relevant medications orders and relayed to care facility staff and/or the patient's family/carer.

To calculate a suitable breakthrough PRN opioid dose:

- Apply the same principles as outlined in Box 3 for patients USING regular opioid(s).

When commencing a CSCI in addition to a transdermal opioid patch:

- Use clinical judgement to determine appropriate starting doses or consult a specialist palliative care service. The palliMEDS app and Appendix 4: Symptom Control Algorithms provides example starting doses only. Box 4 provides tips on changing from oral and transdermal opioid formulations to CSCI.

Box 4: Tips on changing opioid formulations

Changing from MODIFIED-RELEASE ORAL OPIOID(S) to CSCI (over 24-hours using a subcutaneous infusion device):

1 Convert the total oral opioid dose (24-hour dose) to an equivalent subcutaneous opioid dose (use the palliMEDS app opioid calculator) **AND** Cease current regular oral opioid(s)

2 Consider the below options

a If pain is well controlled, start CSCI 2 to 4 hours before next modified-release oral opioid dose would have been given

OR

b If pain uncontrolled, CSCI may need to be started earlier. Seek specialist palliative care advice

Changing from TRANSDERMAL OPIOID PATCH to CSCI (over 24-hours using a subcutaneous infusion device):

1 Consider the below options:[NB1]

a Leave patch on at same dose **AND** commence CSCI using a suitable subcutaneous opioid to manage any escalating pain

OR

b Remove patch **AND** convert patch dose to an equivalent subcutaneous opioid dose (Use palliMEDS app)

PLUS consider the need to add extra opioid to manage any escalating pain

2 Consider the following timings if removing transdermal patches:[NB2]

Patch Type	Timing advice
Transdermal buprenorphine	Start CSCI 12 to 18 hours after removing patch
Transdermal fentanyl	Start CSCI 6 to 8 hours after removing patch

Note:

[NB1] *To avoid potential loss of analgesic effects for patients in the terminal phase, continue patch treatment and add extra analgesia by infusion.*

[NB2] *This is a guide only – individuals vary markedly in their response to different opioids administered by different routes. Frequent review is necessary.*

2.3 Anticipatory prescribing considerations

Table 2: Considerations when prescribing anticipatory medicines

Considerations	Recommendation	Reasoning
1. Treatment regimen	• Ideally, one medicine from each of the five medicine categories should be prescribed: 1. Analgesic (opioid) 2. Anxiolytic 3. Anticholinergic 4. Antipsychotic 5. Antiemetic	• A dying person is physiologically unstable and it is difficult to predict which symptoms may emerge at end of life. Prescribing one medicine from each of the five medicine categories may ensure that all common end-of-life symptoms can be adequately managed in a timely manner.
2. Cost of medicines	• Prescribe medicines subsidised by the Australian Government Pharmaceutical Benefits Scheme (PBS) if cost is a consideration for the patient. • Complete PBS authority prescriptions (online or phone approval) for increased quantities. • Appendix 3 indicates which core palliative care medicines are available on PBS. Alternatively, visit www.pbs.gov.au to search for medicines subsidised on the PBS.	• PBS listed medicines are more affordable. • Most core palliative care medicines are subsidised on the PBS through the Palliative Schedule. • For PBS authority prescriptions, only the PBS co-payment is charged to the person.
3. Availability and timely access	• Prescribers should confirm if medicines intended to be prescribed are readily available at the pharmacy or care facility. • Pharmacist and/or nurse to organise timely supply of medicine. • If medicines unable to be supplied in a timely manner consult specialist palliative care service for alternative suggestions/arrangements.	• PBS listed medicines are more likely to be readily available in the community. • Terminal symptoms often escalate at end of life. New, distressing symptoms can emerge at any time. Ensuring anticipatory medicines are readily available for rapid supply and/or administration will prevent unnecessary suffering to the patient, and limit carer/staff distress.
4. Medicine strength selection	• Select the most appropriate pre-packaged strength available that will be easy to prepare, but will also minimise wastage, cost and reduce the volume to be administered. **Example** Morphine ampoules come pre-packaged as › 30mg/mL (PBS) › 20mg/mL (PBS) › 15mg/mL (PBS) › 10mg/1mL (PBS) › 5mg/mL (non-PBS) *Dose prescribed:* 30mg morphine via CSCI and morphine 2.5mg to 5mg Q2H PRN *Most appropriate prescription:* Morphine 30mg/mL amps for CSCI dose and 10mg/1mL for PRN doses	• The risk of a measuring error occurring is increased when small volumes (i.e. small doses) are extracted from concentrated products. • Injecting large volumes subcutaneously is less well-tolerated and may cause pain at the injection site.

Considerations	Recommendation	Reasoning
5. Medicine quantities and sufficient supply	• Consider prescribing the following quantities: › A one-week supply of medicines for persons residing in **urban/metropolitan** areas › A two-week supply of medicines for persons residing in **rural/remote** areas. • For persons who are not currently requiring breakthrough PRN doses, CSCI or regular subcutaneous bolus doses, prescribe a minimum of: › 20 ampoules of each subcutaneous anticipatory medicine **and/or** › one bottle of oral liquid (standard size). • Complete PBS authority prescriptions for increased quantities of each medicine to meet the above quantities.	• Adequate medicines and quantities are required to effectively manage distressing symptoms. • Medicine requirements can escalate rapidly at end of life. • Depending on the geographical location of the person, it can take up to 2 weeks for some pharmacies to dispense and deliver medicines. • Unexpected issues often arise that can delay supply of anticipatory medicines to the person. Ensuring adequate quantities are always available in the home or care facility, allows enough time for the clinician to troubleshoot before medicine supplies completely run out.
6. QScript	• Check QScript before prescribing any monitored medicine. • Use clinical judgement when a red alert is triggered on QScript. • Prescribers and dispensers are encouraged to not withhold supply of monitored medicines for end-of-life purposes. Instead, they should comply with the *Queensland Health Departmental Standard - Monitored Medicines*.	• It is a legislative requirement under the *Medicines and Poisons Act 2019* to check QScript prior to prescribing or dispensing a monitored medicine. • QScript is intended to be used as a clinical tool to best inform the clinician when it is safe to prescribe or dispense a monitored medicine. Supply of monitored medicines should not be restricted when those medicines are clinically appropriate.

Discharge or transfer of care from an inpatient facility

For patients being discharged or transferring from an inpatient facility, prescribers should ensure sufficient prescriptions and/or quantities of medicines are issued upon discharge or transfer. This will reduce the risk of a readmission.

Patients residing in a private residence

Once a patient discharges or transfers from an inpatient facility to their private residence, it can take some time to effectively coordinate services that will provide ongoing prescriptions and medicine supplies in the community. Therefore, facility prescribers are encouraged to complete PBS authority prescriptions for increased quantities of anticipatory medicines to ensure the minimum quantities specified in Section 2.3 are met.

Often, patients returning to their private residence may elect to have discharge prescriptions dispensed by the pharmacy that services the inpatient facility. This is because many community pharmacies may not have an adequate range of anticipatory medicines or the required quantities available on-site. Dispensers are encouraged to check that written prescriptions meet the requirements as specified in Section 2.3.

Patients residing in a care facility

Most inpatient facilities have an agreement with local care facilities about the quantity of medicines that should be supplied by the inpatient facility upon discharge or transfer of care. This agreed amount may not be sufficient to cover the time it takes to effectively coordinate ongoing prescriptions and medicines supplies in the community.

Therefore, prescribers and dispensers are encouraged to prescribe and supply the minimum quantities as specified in Section 2.3.

2.4 Documentation and supplies

To ensure anticipatory medicines are prescribed, managed and administered safely, accompanying documentation and supplies should be provided and available in the home.

The prescriber should complete relevant **documentation**, including:

1. **Paper or electronic prescriptions**
   - › A prescription cover letter to pharmacy may be attached to any anticipatory medicine prescriptions to outline the importance to the pharmacist of rapid dispensing and supply of these medicine and QScript compliance.
   - › Appendix 6: Example Anticipatory Medicines Cover Letter to Pharmacy

2. **Medication Orders**
   - › Medication orders provide clear instructions regarding preparation and administration of each anticipatory medicine.
   - › The medication order may include an administration record which can help guide titration of medicines based on use.

Patients residing in a private residence	Patients residing in a care facility
A medication order that may be utilised is the: Community Subcutaneous Medication Infusion Order (over 24 hours) | Queensland Health	Care facilities may use the paper or electronic medication order/chart which documents all the patient's prescribed medicines.

3. **Escalation plan**

- Prescribers should complete relevant documentation detailing the escalation plan if symptoms are not being controlled with current pharmacological management.
- An escalation plan should:
  - › Be provided in written format to the care facility or family/carer managing anticipatory medicines in the home
  - › Include suggestions on how to appropriately manage each symptom with pharmacological and non-pharmacological interventions
  - › Provide guidance to care facility staff or family/carers should initial interventions fail to adequately control symptoms
  - › Include a 24-hour on-call phone number for facility staff or a family/carer to contact for further advice.

Necessary **supplies** that should be provided to the person include:

Patients residing in a private residence	Patients residing in a care facility
1. Any dispensed anticipatory medicines – especially upon discharge or transfer from an inpatient facility 2. Clinical consumables › Refer to Section 4.2 for more information on regular supply of clinical consumables › Appendix 7: Clinical Consumables for administration of subcutaneous medicines 3. Equipment › May include a subcutaneous infusion device for persons on a continuous subcutaneous infusion › Refer to Section 2.2 – Continuous subcutaneous infusions 4. *caring@home* resources › Refer to Section 3.4 for more information on *caring@home* education › Appendix 8: caring@home resources	1. Any dispensed anticipatory medicines – especially upon discharge or transfer from an inpatient facility 2. Clinical consumables that may not be available in the care facility › Refer to Section 4.2 for more information on coordinating and sources of supplies › Appendix 7: Clinical Consumables for administration of subcutaneous medicines 3. Equipment that may not be available in the care facility › May include a subcutaneous infusion device for persons on a continuous subcutaneous infusion › Refer to Section 2.2 – Continuous subcutaneous infusions

2.5 Preparing and administering medicines

Preparation of subcutaneous anticipatory medicines involves drawing up the required dose of an injectable medicine into a syringe for administration to the person.

Patients residing in a private residence

- Subcutaneous anticipatory medicines can be prepared and labelled ahead of time for administration at another time by a family member or carer.
- This proactive approach allows for faster symptom relief. It also minimises the risk of the wrong medicine or dose being drawn up and administered at a time of heightened distress.
- Subcutaneous medicines for later administration by a family/carer must only be prepared using a patient's own medicine and not stock medicine.
- Preparation and labelling of subcutaneous medicines are usually performed by a:
  - Nurse
  - Doctor
  - Family member/carer who has completed relevant training using the *caring@home* resources (see Section 3.5)

Patients residing in a care facility

- Health professionals working in a care facility should be aware of their professional capacities to prepare and administer subcutaneous anticipatory medicines. This may include abiding to relevant:
  - Legislation
  - Local policies and procedures
- Health professionals should also consider whether it is permissible to use patient's own medicines versus stock medicines when preparing and administering subcutaneous medicines.

Discharge or transfer of care from an inpatient facility

Patients residing in a private residence

For a person being discharged or transferred from an inpatient facility, a nurse or a doctor can prepare subcutaneous anticipatory medicines for the person using their **discharge medicines**.

To assist with this process and ensure there are no delays to a patient's discharge/transfer:

- Prescribers should complete discharge prescriptions as early as practicable (at least 24 to 48 hours before discharge)
- Pharmacies that service inpatient facilities should have discharge medicines ready the day before discharge

For more comprehensive information on preparing and administering medicines clinicians should refer to:

- Relevant Queensland legislation such as the Medicines and Poisons Act 2019 and the Medicines and Poisons (Medicines) Regulation 2021[6, 29]
- Local policies and procedures within each HHS and inpatient facility
- *caring@home* Guidelines for the handling of palliative care medicines in community services

Step 3: Provide family/carer education and support

Informing and educating family/carers about anticipatory medicines provides an opportunity to dispel myths regarding use of medicines at end of life and encouraging the role of medicine use in promoting comfort. It also gives patients and family/carers confidence that the treating clinicians have anticipated all potential and expected symptoms at end of life and have a plan to effectively manage them.

3.1 Family/carer – basic education on anticipatory medicines and palliative care

Clinicians involved in a person's care are responsible for the provision of appropriate information to family/carers about the function, acceptability and management of anticipatory medicines, where appropriate. Topics that may be discussed with family/carers include:

Patients residing in a private residence	Patients residing in a care facility
• The use of anticipatory medicines relieves symptoms, it does not hasten death • Symptoms that will be managed by each prescribed anticipatory medicine • Potential adverse effects of each medicine • How medicines are administered • Cost of medicines • Importance of timely coordination of prescriptions and supplies (medicines, clinical consumables and/or equipment) • How to obtain and who will provide ongoing: › Prescriptions › Medicines › Clinical consumables › Equipment • Safe storage of medicines within the home, including reconstituted injectable medicines • Safe disposal of medicines (including schedule 8 medicines) and sharps • Situations that may trigger an urgent clinical review refer to Section 5.2	• The use of anticipatory medicines relieves symptoms, it does not hasten death • Symptoms that will be managed by each prescribed anticipatory medicine • Potential adverse effects of each medicine • How medicines are administered • Cost of medicines • Importance of timely coordination of prescriptions and medicine supplies* **Only applicable to persons that utilise community pharmacies that do not deliver to the care facility and/or where family are responsible for organising medicine supplies as per agreement with care facility.*

For links to useful resources that can be provided to family/carers to support this education refer to:

- Appendix 9: Resources for anticipatory medicines education

3.2 Family/carer – involvement

There are varying degrees of involvement of family/carers when supporting the management of anticipatory medicines in the patient's home. This is dependent on the care environment, availability of community support services, and family/carer confidence and capability.

Clinicians should allow the family/carer to select the tasks and responsibilities they feel comfortable with managing in the home environment and respect their decision.

Patients residing in a private residence

Family/carer tasks and responsibilities may include:

- Providing updates to other family members and/or friends on the patient's symptom control and use of anticipatory medicines
- Monitoring anticipatory medicine supplies available in the home
- Requesting for more prescriptions where necessary
- Organising the dispensing and delivery of medicines
- Ensuring medicines are stored safely within the home
- Ensuring medicines no longer required are disposed of safely
- Preparing subcutaneous anticipatory medicines as per training*
- Administering subcutaneous anticipatory medicines as per training*

**Refer to* Section 3.3 and 3.4

Patients residing in a care facility

Family/carer tasks and responsibilities may include:

- Providing updates to other family members and/or friends on the patient's symptom control and use of anticipatory medicines
- Transporting anticipatory medicines and/or prescriptions from the community pharmacy to the care facility.†

†Only applicable to persons that utilise community pharmacies that do not deliver to the care facility and/or where family are responsible for organising medicine supplies as per agreement with care facility.

Sections 3.3 & 3.4 Only apply to patients residing in a private residence

3.3 Carer identification

It is the clinician's responsibility to identify if there is a suitable carer who will volunteer to manage and/or administer anticipatory medicines in the home. This includes an assessment of the carer's level of involvement.

When identifying a suitable carer, the clinician should:

- Use clinical judgement
- Speak with the carer to understand how they are prepared to help
- Adopt the procedures as outlined in the

  caring@home Example policy and procedures: *Supporting carers to help manage breakthrough symptoms safely using subcutaneous medicines in the home* Specifically Section 2a: Identify the carer.

3.4 *caring@home* education

The *caring@home* resources are a suite of resources to support families and/or carers to help manage breakthrough symptoms safely using subcutaneous medicines for a person at home. These national resources have been designed for health professionals to ensure a standardised approach when teaching family/carers to manage anticipatory medicines.

Appendix 8: caring@home resources – lists the resources available to be downloaded and ordered from the caring@home website (www.caringathomeproject.com.au).

If there is a willing and able volunteer carer who can manage anticipatory medicines in the home, the clinician may adopt the procedures as outlined in the *caring@home* Example policy and procedures: *Supporting carers to help manage breakthrough symptoms safely using subcutaneous medicines in the home* Specifically, PART TWO: PROCEDURES. It involves:

- Ensuring the carer has the necessary prescriptions (and/or dispensed medicines), documentation and supplies (clinical consumables and equipment) to administer medicines
- Educating the carer on how to prepare and/or administer medicines using the *caring@home* package for carers*
- Advising the carer on methods to obtain ongoing prescriptions, medicines and supplies
- Providing the carer with contact details for a 24-hour clinical support service
- Encouraging the carer to document the medicines given and monitor for effects using the *caring@home* Medicines Diary

*NB: *The **caring@home package** for carers contains resources specifically for carers, including a practice demonstration kit. The items available in the **caring@home package for carers** are intended for training purposes only. It does not include the medicines, equipment or extensive range of clinical consumables required to safely administer subcutaneous medicines.*
*NB: More information regarding the correct storage of PRN medicines in drawn-up syringes can be found in the **Guidelines for the handling of palliative care medicines in community services** at caringathomeproject.com.au*

3.5 Family/carer – support and resources

The palliative phase of life can be difficult for families and carers to navigate. Clinicians can assist where necessary by alerting family of appropriate resources available within the community. Additionally, specialist palliative care services can provide social and bereavement support, refer as necessary.

Appendix 10: End-of-Life and Palliative Care Resources and Support Services in Queensland

Step 4: Coordinate community services and supplies

After a patient has been identified as requiring anticipatory medicines in the home, clinicians should coordinate support from relevant community healthcare services and/or practitioners to ensure safe and quality care.

4.1 Minimum Practitioner Involvement

To effectively coordinate and manage anticipatory medicines in the community, it is recommended that a practitioner from each of the following fields is involved in the person's care (see Table 3):

- Medical (MO or NP)
- Pharmacy
- Nursing

Table 3: Responsibilities of practitioners concerning anticipatory medicines

Practitioner Field	Individual Responsibilities	Shared responsibilities
Medical	• Provide medical to medical handover as applicable • Prescribe anticipatory medicines • Provide ongoing prescriptions and orders • Monitor symptoms and adjust doses as needed • If needed, conduct home visits, telehealth consultations and/or provide 24-hour telephone support • Provide medical update to patient's family/carer, when needed • Refer to specialist palliative care service as necessary*	• Review prescriptions to ensure compliance with the recommendations outlined in Step 2: Prescribe anticipatory medicines and document appropriate orders • Coordinate relevant community services and/or practitioners • Coordinate initial and ongoing medicine supplies and/or prescriptions › confirm medicines are in stock at the community pharmacy and ready to be dispensed • Monitor patient and carer well-being • Monitor medicine supplies in the home, and prompt family/carers to obtain further prescriptions and/or supplies when needed • Provide details of community services that will offer the following support: › 24-hour clinical support › Regular clinical reviews › Ongoing prescriptions and medication orders › Ongoing supply of medicines • Provide reassurance and support to family on the use of anticipatory medicines • Provide basic education on anticipatory medicines to family (see Section 3.1) • Provide support to the persons and their family/carers with decision-making regarding appropriate timing of administration of anticipatory medicines
Pharmacy	• Dispense and deliver anticipatory medicines in a timely manner • Provide pharmacy to pharmacy handover as applicable • Provide counselling and education to the person and their family/carers about anticipatory medicines, where needed • Review anticipatory prescribing (including medicine choice, dose and quantities) – advise prescriber, where appropriate • Monitor deprescribing	
Nursing	• Provide nursing to nursing handover as applicable • Insert TWO (2) subcutaneous cannulas, monitor site and change cannulas when appropriate › PallConsult – Inserting a subcutaneous intima – step by step guide • Coordinate and/or provide initial and ongoing supplies (clinical consumables and equipment) • Monitor changes in the person's condition and symptoms – refer to MO, NP where appropriate • Assist the family/carer with preparation of anticipatory subcutaneous medicines • Provide updates to family regarding person's clinical status • Refer to specialist palliative care service as necessary*	

** NB: As per instructions indicated on the referral criteria for the relevant specialist palliative care service*

4.1.1 Patient handover

Appropriate 'patient handover' should occur as early as possible whenever a change of care environment occurs.

Suitable 'patient handover' can be verbal or written and may include discussing:

- common symptoms that may arise at the end of life for that patient
- the patient's anticipatory medicines requirements
- contact details and responsibilities of relevant community providers involved in the patient's care
- details regarding plans for, or completed, carer training and support
- the patient's preferences for place of death

Discharge or transfer of care from an inpatient facility

To ensure appropriate 'patient handover' to relevant community practitioners, inpatient facility clinicians are encouraged to ensure important documentation is completed prior to being discharged or transferred.

Patients residing in a private residence

Important 'patient handover' documentation includes:

- Discharge summary or discharge letter
- Discharge medicine list

Patients residing in a care facility

Important 'patient handover' documentation includes:

- Discharge summary or discharge letter
- Discharge medicine list
- Medication Administration Record

4.2 Community Providers

To ensure safe management of anticipatory medicines in the community, the patient's treating practitioner should identify and coordinate community providers that will deliver the following services:

1. 24-hour clinical support

For safety reasons and to ensure confidence and provide reassurance, family/carers and care facility staff require 24-hour clinical support from a nurse and/or MO/NP. It is up to the treating practitioner to determine if this support will be provided in person, via video telehealth or via telephone (24-hour on-call number).

Patients residing in a private residence	Patients residing in a care facility
Examples of community providers that can provide 24-hour clinical support include the: • patient's GP or NP • local hospital service • local multi-purpose health centre • domiciliary nursing service with processes established to escalate to a medical officer, if required • specialist palliative care service (if the patient has been referred)	Examples of community providers that can provide 24-hour clinical support include the: • care facility nursing staff with processes established to escalate to a MO or NP, if required • patient's GP or NP • after hours GP or NP • local hospital service • local multi-purpose health centre • specialist palliative care service (if the patient has been referred) • PallConsult – clinician to clinician advice only

2. Regular clinical reviews

Toward the end of life, regular clinical reviews are required to reassess the patient and/or their family/carer to identify the need for medicine changes and/or additional supportive interventions. These reviews can be delivered in person (home visit) or via telehealth consultations.

Patients residing in a private residence	Patients residing in a care facility
Examples of community providers that can provide clinical reviews include: • domiciliary nursing services with processes established to escalate to a MO or NP, if required • the patient's GP or NP • community health services (public or private) • specialist palliative care service (if the patient has been referred) During these regular clinical reviews, the family/carer's ongoing ability to manage subcutaneous medicines should also be assessed.	Examples of community providers that can provide regular clinical reviews include: • care facility nursing staff with processes established to escalate to a MO or NP, if required • the patient's GP or NP • specialist palliative care service (if the patient has been referred)

3. Regular prescriptions and medication orders

Medicine requirements can change as death approaches. As pharmacological management changes, medication orders require updating. Additionally, as medicine supplies run out, valid prescriptions are legally required to authorise a pharmacist to dispense the necessary medicines.

Patients residing in a private residence	Patients residing in a care facility
Examples of community providers that can provide regular prescriptions and medication orders include: • the person's GP or NP • specialist palliative care service (if the person has been referred)	Examples of community providers that can provide regular prescriptions and medication orders include the: • person's GP or NP • facility NP

4. Regular supply of medicines

Many community pharmacies do not routinely stock subcutaneous medicines and organising medicines from pharmacy wholesalers can take up to two weeks, depending on the pharmacy location. Regular pharmacy engagement should occur to ensure there are no gaps in supply of anticipatory medicines.

Patients residing in a private residence	Patients residing in a care facility
Examples of community providers that can provide regular supply of medicines include: • the patient's nominated community pharmacy • Palliative Care Support Pharmacy (see Appendix 2 for more details)	Examples of community providers* that can provide regular supply of medicines include: • a community pharmacy that is located close to or near the care facility • the patient's nominated community pharmacy • the community pharmacy servicing the care facility • a Palliative Care Support Pharmacy (see Appendix 2 for more details) ** Care facilities should follow their local policy and procedures for accessing medicines when urgent supply is required*

Discharge or transfer of care from an inpatient facility

Clinicians should ensure discharge prescriptions meet the anticipated needs of the patient. Refer to Section 2.3 for further guidance on prescription requirements.

Prior to discharge, arrangements should also be made with the nominated community prescriber to ensure ongoing prescriptions are provided well before the discharge medicine supplies run out. This allows family/carers and/or the community providers sufficient time to access and/or coordinate supply of anticipatory medicines in the community.

5. Regular supply of clinical consumables and equipment

Clinical consumables and equipment (e.g. subcutaneous infusion device) required for administration of subcutaneous anticipatory medicines may not be readily available in the community. A list of essential clinical consumables can be found in:

- Appendix 10: List of Clinical Consumables for safe administration of subcutaneous medicines

Patients residing in a private residence

Examples of community providers that can provide regular supply of clinical consumables and equipment include:

- domiciliary nursing services
- Medical Aids Subsidy Scheme Palliative Care Equipment Program (MASS PCEP)

Patients residing in a care facility

Care facilities should follow their local policy and procedures when obtaining clinical consumable supplies and equipment for their palliative care patients.

Discharge or transfer of care from an inpatient facility

For patients discharging or transferring from an inpatient facility, clinicians should aim to supply a minimum of 10 days' supply of clinical consumables to allow community providers or care facility staff time to access and/or coordinate supply of the necessary clinical consumables.

Details of the community provider(s) that will be providing the above services should be documented in the person's medical records and provided to the family/carer or care facility staff. This information can be included in a letter to the family/carer such as:

- Appendix 11: Palliative Care Medicines Management Information Letter

4.3 Role of Queensland Ambulance Service

Queensland Ambulance Service (QAS) may be contacted in relation to a palliative care patient if:

- The patient's condition unexpectantly changes
- The patient requires urgent assistance following an incident or accident such as a fall or injury
- The patient requires transportation to an alternative environment of care for the ongoing provision of palliative care; or
- The patient dies

If required, QAS can contact PallConsult to speak directly to a Specialist Palliative Care Medical Consultant for advice.

Patients residing in a private residence

If a palliative care patient dies at home, family/carers may become distressed and call QAS. To prevent unnecessary police involvement, it is essential that when an expected death occurs in the community appropriate documentation is available in the home to guide decision making for QAS officers. Such documents include:

- Acute Resuscitation Plan (ARP)
- Advance care planning (ACP) documents
- Doctor's letter stating this was an expected death including name and contact details of who will complete the cause of death certificate.

  Appendix 12: Expected death letter (example only)

  › Life Extinct Form – QAS can be asked to complete a Life Extinct Form (MR 41 Life Extinct Form, Queensland Health staff access only), if one is available in the home.

Step 5: Reassessment and Review

All patients prescribed anticipatory medicines should be reassessed and reviewed regularly for new and ongoing care needs.

5.1 Reassessment

Regular review of a patient's prescribed anticipatory medicines involves monitoring for:

- Effectiveness of anticipatory medicines
- Adverse effects caused by anticipatory medicines
- New, worsening or unresponsive symptoms
  - This may signal a change in underlying condition or an additional problem directly or indirectly related to the underlying disease.
  - Additional interventions, including non-pharmacological, may be required.
- Availability of prescriptions and supplies (medicines, clinical consumables and equipment)
  - Prescribers should write more prescriptions if supplies are running low
  - Pharmacists should dispense more medicines if supplies are running low
  - Community nursing providers or care facility staff should order more clinical consumables if supplies are running low
  - Community nursing providers or care facility staff may need to order equipment through standard supply channels including MASS PCEP
- Family/carer concerns or burden
  - Reassurance may need to be provided to address any family/carer concerns
  - For family/carers who are managing and/or administering subcutaneous medicines, clinicians should assess for carer burden and consider exploring alternative mechanisms to safely manage subcutaneous medicines in the home

It is important to seek specialist palliative care advice where necessary.

5.1.1 Documentation

After reviewing the patient, relevant documentation should be updated. This is especially the case if changes are made to medicines.

Patients residing in a private residence	Patients residing in a care facility
Relevant documentation includes: • Medication order • Escalation plan • Prescriptions	Relevant documentation includes: • Medication order/chart • Clinical notes • Prescriptions

5.1.2 Communication

After reviewing the patient, the clinician should provide an update and/or communicate changes to other relevant parties involved in the patient's care:

Patients residing in a private residence	Patients residing in a care facility
Relevant parties may include the patient's: • Substitute decision maker and/or family/carer • GP and/or NP • Domicillary nursing service • Community pharmacy • Specialist team	Relevant parties may include the patient's: • Substitute decision maker and/or family/carer • GP and/or NP • Care facility nursing staff • Community pharmacy • Specialist team

5.2 Urgent clinical review

In the last days of life, a patient's symptom burden can change rapidly requiring urgent clinical review and adjustments to their anticipatory medicines to maintain comfort. Situations that may trigger an urgent clinical review include:

- Excessive breakthrough requirements.
  - › Implementing or adjusting the background regimen (e.g. continuous subcutaneous infusions) will achieve better symptom management and reduce carer buden.
- Distressing symptoms refractory to management
  - › Alternative anticipatory medicines or additional interventions may be required.
- Unacceptable adverse effects from medicines (e.g. hallucinations or toxicity from opioids)
  - › Alternative anticipatory medicines or additional interventions may be required.

Patients residing in a private residence	Patients residing in a care facility
When providing education to carers, they should be made aware of situations that would trigger an urgent clinical review and advised to contact the 24-hour clinical support service immediately.	Care facility nursing staff may need to escalate situations to a MO or NP, especially if dose adjustments or changes to the medicine regime is considered necessary.

5.3 Referral to specialist palliative care services

If non-specialist palliative care providers are unable to manage end-of-life symptoms, it is recommended that they refer to an appropriate specialist palliative care service for advice and/or review.

Appendix 1: Contact Information for Queensland Community Specialist Palliative Care Services

Glossary

A

Administer

Administer means to personally introduce a medication to a person's body or give a dose of the medicine to a person to be taken immediately.[29]

Anticipatory medicine

Anticipatory medicine is an injectable or sublingual medicine prescribed to manage symptoms in a person with a life limiting illness who is unable to swallow, absorb or tolerate oral medications, to manage symptoms in the home with the goal of preventing an avoidable admission to an inpatient facility.

Anticipatory prescribing

Anticipatory prescribing can be defined as the proactive prescribing of medicines that are commonly required to control symptoms in palliative care. These medications may be used to control symptoms at any time, including the last days of life.

Anticipatory prescribing is based on the premise that although each person is different, many symptoms and changes can be predicted, and management measures can be put in place in advance.

B

Breakthrough symptoms

Even with regular medicines, sometimes symptoms can unexpectedly get worse. When this occurs, it is called a breakthrough symptom and may require an extra dose of medicine[13].

C

Care Facility

A care facility refers to a facility where on-site care can be provided by trained health professionals, including administration of subcutaneous medicines.

Carer

The term carer used in this document refers to an unpaid person (usually a family member or friend) who provides care to a person (usually at home). The carer may or may not live with the person, and the carer may be aged or have their own health issues[12].

Care worker

Care worker refers to a paid carer who provides personal care, support and assistance to another person who has a disability, medical condition or mental illness, or who is frail and aged[13].

caring@home

caring@home is a national project funded by the Australian Government which aims to improve the quality of palliative care service delivery across Australia by developing resources that support people to be cared for, and die at home, if this is their choice. https://www.caringathomeproject.com.au

D

Dispense

Dispense means to sell the medicine to a person **on prescription**[29].The term 'dispense' is **not interchangeable** with 'supply'. For example, a pharmacist might dispense a prescription with the intention of supplying the medication but the supply might not occur until a later time.

E

End of life

Two definitions of end of life exist. One refers to the period of time a person lives with an advanced progressive illness. The other refers to the end stage of weeks or days prior to death[12].

Endorsed enrolled nurse

Endorsed enrolled nurses can administer medicines if they have completed medication administration education.

I

Incident symptoms

Incident symptoms are symptoms occurring as a direct consequence of movement or activity.

L

Life limiting illness

A person with a 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[12]. For the purpose of this guideline, chronic conditions which may have life threatening exacerbations are included in this definition.

Life threatening illness

A person with life limiting illness who is likely to die prematurely. Often used when referring to children or adults who have an illness with a poor prognosis and their life span may be considered shortened[12].

M

Monitored medicine

Monitored medicines are medicines identified by Queensland Health as potentially presenting a high risk of harm to patients as a result of misuse, abuse, diversion substance use and/or overdose[30]. The list of monitored medicines is prescribed in Schedule 2, part 4 of the Medicines and Poisons (Medicines) Regulation 2021 (Medicines Regulation)[6].

P

Palliative approach

The palliative approach is based on the tenets of palliative care. It aims to improve the quality of life for individuals with life limiting illness and their families through early identification, assessment and management of pain and other physical, psychological, social, cultural and spiritual needs. The palliative approach tailors care to the needs and priorities of the individuals and their families[12].

Palliative care

Palliative care is defined as care that improves the quality of life of people and their families facing the problems associated with lifethreatening or 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[12].

Patients' own medicines

Patients' own medicines are prescribed by a medical or nurse practitioner and dispensed to a specific person.

Prescribe

The term prescribe means to direct a person either orally or in writing to administer, dispense or give a treatment dose of a medicine for the treatment of a person[29].

Prescriber

A prescriber refers to a health professional authorised to write prescriptions and medication orders and give directions (verbal or written) about administration and supply of prescription-only medicines.

Private residence

A private residence refers to a person's privately owned or rented home or a home that is privately owned or rented by their family/carer.

Q

QScript

QScript is a read-only real-time prescription monitoring system that notifies health practitioners to review a patient's monitored medicine prescription history at the point of care.

R

Resident

A resident refers to a person living in a care facility.

S

Stock medicines

Stock medicines are medicines that have been purchased by an institution or facility, and stored appropriately within that institution or facility. These medicines have not been dispensed or supplied on prescription to a specific person.

Subcutaneous cannula

A subcutaneous cannula is a thin plastic tube that is inserted under the person's skin to aid the appropriate administration of subcutaneous medications.

Subcutaneous medicine

A subcutaneous medicine is a medicine that is injected under the skin[13].

Supply

The term supply means to sell or give the medicine to a person[29]. The term 'supply' does not include to 'administer'.

Supplying pharmacy

The supplying pharmacy is the pharmacy that a care facility uses for any pharmaceutical services including supplying medicines to all/majority of the persons residing in the facility.

Treating practitioner

The treating practitioner refers to a healthcare practitioner that is responsible for ensuring safe management of anticipatory medicines in the community for a patient. This may include the coordination of relevant community healthcare services and/or practitioners.

Appendix 1: Contact Information for Queensland Community Specialist Palliative Care Services

Community Specialist Palliative Care Services

Referring to your local community Specialist Palliative Care Service will depend on the care setting you are in:

Referring in the community

Primary Health Networks (PHNs) have established HealthPathways which include information on how to refer to specialist services. Contact your local PHN to gain access to the HealthPathways relevant to your region.

Referring from an inpatient setting

Follow your local Hospital and Health Service (HHS) guidelines for details on the community palliative care referral pathway within your institution.

PallConsult

To find out more about PallConsult visit www.pallconsult.com.au

Clinical advice hotlines

- Operating: 24 hours a day, 7 days a week, 365 days a year
  - **24/7 statewide hotline** *for doctors, nurse practitioners, paramedics and pharmacists to speak directly with a specialist palliative care consultant* 1300 PALLDR (1300 725 537)
  - **24/7 statewide hotline** *for nurses, allied health and residential aged care staff to speak directly with a specialist palliative care nurse* 1300 PALLCR (1300 725 527)

Capacity building education

Email: pallconsult@health.qld.gov.au

Specialist Palliative Rural Telehealth service (SPaRTa)*

To find out more about the referral process and criteria for SPaRTa, visit the SPaRTa Website.

Cairns hub

Supporting Tully in the South, North through Cape York and the Torres Strait and westward to Croydon

Operational hours: Monday to Friday – 8am to 4pm
Ph: 07 4226 6475
Email: CHHHS_CaRS_SpaRTa@health.qld.gov.au

Sunshine Coast hub

Supporting Maryborough extending North to Gladstone and westward from Boulia down to Birdsville

Operational hours: Monday to Friday – 8am to 4pm
Ph: 1300 184 432
Email: scruralpallcare@health.qld.gov.au

Gold Coast hub

Supporting Darling Downs (South Burnett, Western Downs and Southern Downs) and South West Queensland

Operational hours: Monday to Friday – 8am to 4pm
Ph: 1300 618 486
Email: gcruralpallcare@health.qld.gov.au

Townsville hub

Supporting North West Queensland and the Townsville and Mackay Regions

Operational hours: Monday to Friday – 8am to 4pm
Ph: 07 4433 7423
Email: tsvruralpallcare@health.qld.gov.au

**SPaRTa is available during business hours. For after-hours palliative care advice, contact PallConsult*

Specialist Palliative Care in Aged Care (SPACE) Project

To find out more about the SPACE project, visit the SPACE website. Currently, this project is funded until June 2024.

Contact your local Hospital and Health Service to find out what supports the SPACE project can offer. *(Operational hours unavailable)*

Cairns and Hinterland
Ph: 07 4043 3100
Email: cns_pallcare@health.qld.gov.au

Central Queensland
Ph: 07 4920 6211
Email: CQSPACE@health.qld.gov.au

Central West
Ph: 07 4650 4082 / 0439 137 162
Email: cw-palliativecare@health.qld.gov.au

Darling Downs
Ph: 0437 150 604 / 0436 465 254
Email: SPACEDarlingDowns@health.qld.gov.au

Gold Coast
Ph: 0476 824 877
Email: GCHHS_SPACE@health.qld.gov.au

Mackay
Ph: TBA
Email: MHHS-SPACE@health.qld.gov.au

Metro North
Ph: 1300 072 327
Email: MetroNorthSpace@health.qld.gov.au

Metro South
Ph: 1800 772 722
Email: mspcsracf@health.qld.gov.au

North West
Ph: TBA
Email: TBA

South West
Ph: 0429 664 631
Email: anna.ferrier@health.qld.gov.au

Sunshine Coast
Ph: 07 5436 8800
Email: SC-SPACE@health.qld.gov.au

Townsville
Ph: 07 4433 75 73
Email: THHS-SPACE@health.qld.gov.au

Torres and Cape
Ph: 0448 619 431
Email: tchhs-pall-care@health.qld.gov.au

West Moreton
Ph: 0438 664 115
Email: WMSPACE@health.qld.gov.au

Wide Bay

Bundaberg
Ph: TBA
Email: WBHHS-Bundaberg-RaSS@health.qld.gov.au

Fraser Coast
Ph: TBA
Email: WBHHS-FraserCoast-RaSS@health.qld.gov.au

Appendix 2: Community pharmacies that provide palliative care support

Timely access to anticipatory medicines is often a challenge in the community. Pharmacies usually only stock a small range of subcutaneous medicines.

Prescribers are encouraged to discuss with their local pharmacists which medicines on the Core Palliative Care Medicines List for Queensland Community Patients (Table 4) should be stocked and readily available for rapid supply by the pharmacy.

This list does not restrict which medicines can be prescribed for individual palliative patients, but is one approach which will allow community pharmacies to anticipate medicines most likely to be prescribed, and allow prescribers to anticipate medicines most likely to be readily available for rapid supply in Queensland pharmacies and RACFs.

To find out more, read the Core Palliative Care Medicines for Queensland Community Patients factsheet.

Table 4: Core Palliative Care Medicines List for Queensland Community Patients

Medicine Category	Medicines		Minimum recommended stock	Indication/(s) for use in terminal phase patients
	First Line	Second Line		
Analgesic ***(High potency opioid)***	Morphine (sulfate or hydrochloride) 10mg/mL and/or 30mg/mL Injection	Fentanyl citrate 100µg/2mL Injection Hydromorphone 2mg/mL Injection	5 ampoules	Dyspnoea Pain
Anticholinergic	Hyoscine butylbromide 20mg/mL Injection	—	5 ampoules	Respiratory tract secretions
Antiemetic	Metoclopramide 10mg/2mL Injection	Haloperidol 5mg/mL Injection	10 ampoules	Nausea, vomiting
Antipsychotic	Haloperidol 5mg/mL Injection	—	10 ampoules	Agitation Nausea, vomiting Refractory distress
Anxiolytic	Clonazepam 1mg/mL Injection Clonazepam 2.5mg/mL (0.1mg/drop) Oral Liquid	Midazolam 5mg/mL Injection	5 or 10 ampoules 10mL bottle	Agitation Dyspnoea Refractory distress Seizure

Palliative Care Support Pharmacies

Community pharmacies that stock core palliative care anticipatory medicines can be found on QFinder 2.0 or Queensland Primary Health Network (PHN) HealthPathways websites.

QFinder 2.0

To find a pharmacy on QFinder 2.0:

1. Visit: qfinder2.health.qld.gov.au
2. Enter "pharmacy" in the **Search For** field
3. Enter the relevant postcode or suburb name in the **Location** field
4. Click on the **Search** button
5. Look for results which have **"Palliative Care Support"** in the services offered or description
6. Click on the most appropriate result
7. Call the pharmacy to confirm availability of prescribed medicines

For more detail on how to use QFinder 2.0 to search for a pharmacy – see the QFinder user guide.

PHN HealthPathways

Some HealthPathways website have opted to map pharmacy services within the PHN or Hospital and Health Service (HHS) region.

Talk to your local PHN about whether this information is included in HealthPathways and how to search for a pharmacy that stocks core palliative care medicines using HealthPathways.

Appendix 3: Recommended anticipatory prescribing doses for the Core Palliative Care Medicines for Queensland Community Patients

The table below includes basic prescribing and medicines information for the *Core Palliative Care Medicines for Queensland Community Patients.*
For comprehensive prescribing, medicines and symptom information for the *Core Palliative Care Medicines*, clinicians should refer to the palliMEDS app.

Medicine category	Palliative care indication	Medication	Concentration available	Dose[NB1]	Route	Frequency	PBS listing[NB2]	Standard pack size[NB3]	Practice Points
Analgesic (opioid)	Dyspnoea Pain	Morphine	10mg/mL **OR** 30mg/mL ampoules	Pain = 2.5mg to 5mg Dyspnoea = 1mg to 2.5mg	Subcutaneous	1-hourly as required	PBS – Palliative Care[NB4] *(Streamlined Authority Required)*	1 box (5 ampoules)	• Doses listed are for opioid naïve patients. Careful upward titration minimises the risk of toxicity. [19, 20] • Where opioids are already prescribed, refer to Section 2.1.2. • Systemic opioids administered in appropriate doses are safe and effective in managing dyspnoea[31]. • Morphine should be avoided in persons with severe renal failure (eGFR<30mL/min/1.73m2) due to accumulation of toxic metabolites. • In cases of true morphine allergy, fentanyl is preferred. • Hydromorphone is approximately FIVE times more potent than morphine.
		If the person has a contraindication to morphine, for example: • Known or suspected renal impairment • Allergy, adverse reaction or intolerance to morphine **Then give either:**							
		Fentanyl	100microg/ 2mL ampoules	25 microg to 50 microg	Subcutaneous	1-hourly as required	Non-PBS *(private prescription)*	1 box (5 ampoules)	
		OR							
		Hydro-morphone	2mg/mL ampoules	Pain = 0.5mg to 1mg Dyspnoea = 0.25mg to 0.5mg	Subcutaneous	1-hourly as required	PBS – Palliative Care[NB4] *(Streamlined Authority Required)*	1 box (5 ampoules)	
Anticholinergic	Respiratory tract secretions	Hyoscine butyl-bromide	20mg/mL ampoules	20mg	Subcutaneous	2-hourly as required	PBS – Palliative Care *(Streamlined Authority Required)*	1 box (5 ampoules)	• Excessive respiratory secretions can be very distressing for the person and their family. Hyoscine butylbromide (Buscopan) reduces respiratory secretions. It does not cross the blood-brain barrier and therefore does not contribute to drowsiness or delirium[32]. • Start early and evaluate response. Cease therapy if ineffective after 3 consecutive doses and contact specialist palliative care for advice.

Medicine category	Palliative care indication	Medication	Concentration available	Dose[NB1]	Route	Frequency	PBS listing[NB2]	Standard pack size[NB3]	Practice Points
Antiemetic	Nausea Vomiting	Metoclo-pramide	10mg/2mL ampoules	10mg	Subcutaneous	8-hourly as required	PBS – Palliative Care *(Streamlined Authority Required)*	8 boxes (40 ampoules)	• Avoid using metoclopramide and haloperidol in Parkinson's Disease or if extrapyramidal side effects (EPSEs) are distressing; seek specialist palliative care clinician advice for suitable alternatives. • Metoclopramide is contraindicated in suspected bowel obstruction • Haloperidol can be trialled to manage nausea and vomiting if metoclopramide is ineffective[33, 34]. • EPSEs such as dystonia and akathisia, occur more commonly in doses of haloperidol above 4.5mg per day[35]. • Low dose haloperidol is effective in managing restlessness and agitation associated with delirium[35]. • Reserve antipsychotics for patients with distressing refractory symptoms using the lowest clinical dose appropriate.
		OR							
Antipsychotic	Agitation Nausea, vomiting Refractory distress	Haloperidol	5mg/mL ampoules	0.5mg to 1mg	Subcutaneous	4-hourly as required	PBS – Palliative Care *(Restricted benefit)*	1 box (10 ampoules)	
Anxiolytic	Agitation Dyspnoea Refractory distress	Midazolam	5mg/mL ampoules	2.5mg	Subcutaneous	1-hourly as required	Non-PBS *(Private prescription)*	1 box (10 ampoules)	• Anxiety is often associated with shortness of breath and benzodiazepines are effective in managing this symptom[36]. • Midazolam has a rapid onset but short duration of action. It is preferred if amnesia and sedation are required. A subcutaneous infusion is required to achieve sustained effect. • Clonazepam has a long duration of action making it prone to accumulation which may lead to over-sedation. • When administering clonazepam drops (clear, blue solution), place at the back of the mouth to avoid an unaesthetic appearance. **NOTE** for seizure management: • Clonazepam can be given intermittently, whether subcutaneously or sublingually, to manage seizures when person can no longer tolerate oral medicines. • Refer to the palliMEDS app for suitable doses or seek specialist palliative care advice .
		OR							
		Clonazepam	1mg/mL ampoules 2.5mg/mL liquid (1 drop = 0.1mg)	0.2mg to 0.5mg	Sublingual OR Subcutaneous	2-hourly as required	PBS – Palliative Care *(Restricted benefit)*	1 box (5 ampoules) 10mL bottle	

[NB1] *Providing a dose range allows for nursing staff and/or family/carers to respond to the severity of the clinical situation. In general, it is good practice to err on the side of generosity when it comes to prescribing medicines for end-of-life purposes[25].*

[NB2] *Refer to PBS website www.pbs.gov.au for more information on the PBS listings of each medicine and to obtain Streamlined Authority codes.*

[NB3] *Refer to the PBS website www.pbs.gov.au to review the standard PBS quantities.*

[NB4] *Only listed on the PBS Palliative Care schedule for severe pain.*

Symptoms should be reassessed frequently and the clinician should use clinical judgement to readjust doses. For advice on medicines or symptom control that exceeds the scope of the palliMEDS app or Appendix 3, consult your local specialist palliative care service or PallConsult

Appendix 4: Symptom Control Algorithms for Patients in the Terminal Phase

Algorithm 1: Pharmacological Management of *Nausea and Vomiting*

Is the patient currently taking regular antiemetics?

YES

1. Review current antiemetic dose and formulation

- **If nausea and vomiting symptoms are ongoing OR if the patient is unable to swallow their oral antiemetic, consider:**
  - › Converting the regular oral antiemetic to a suitable metoclopramide dose to be administered S/C_{ut} regularly three times a day e.g. metoclopramide 10mg S/C_{ut} three times a day

  OR
  - › Converting the regular oral antiemetic to a suitable metoclopramide dose to be administered via CSCI using a subcutaneous infusion device over 24 hours e.g. metoclopramide 30mg/24hours via CSCI

PLUS
- › Prescribe metoclopramide 10mg S/C_{ut}, 4-hourly PRN

NB: The maximum recommended dose for metoclopramide is 30mg per day. However, in the terminal phase the risk-benefit ratio may shift, where the risk of adverse effects with doses >30mg becomes less of a concern.

2. Assess effectiveness and review doses

- **If nausea and vomiting persists despite regular metoclopramide, consider adding:**
  - › Haloperidol 0.5mg to 1mg S/C_{ut}, 4-hourly PRN
- **If haloperidol appears to be more effective than metoclopramide, consider:**
  - › Converting metoclopramide to a suitable haloperidol dose to be administered S/C_{ut} regularly twice a day e.g. haloperidol 0.5mg to 1mg S/C_{ut}, regularly twice a day

  OR
  - › Converting metoclopramide to a suitable haloperidol dose to be administered via CSCI using a subcutaneous infusion device over 24 hours e.g. haloperidol 1 to 2.5mg/24hours via CSCI

PLUS
- › Haloperidol 0.5mg to 1mg S/C_{ut}, 4-hourly PRN

NB: The maximum recommended dose for haloperidol is 5mg per day.

NO

1. Prescribe antiemetic

- **Consider:**
  - › Metoclopramide 10 mg S/C_{ut}, 8-hourly PRN

  OR
  - › Haloperidol 0.5mg to 1mg S/C_{ut}, 4-hourly PRN

2. Assess effectiveness and review doses

- **If nausea and vomiting symptoms are ongoing or more than three B/T antiemetic doses used in the last 24-hours, consider:**
  - › Metoclopramide 10mg S/C_{ut}, regularly three times a day

  OR
  - › Metoclopramide 30mg/24hours via CSCI

  OR
  - › Haloperidol 0.5mg to 1mg S/C_{ut}, regularly twice a day

  OR
  - › Haloperidol 1 to 2.5mg/24hours via CSCI

PLUS
- › Metoclopramide 10mg S/C_{ut}, 4-hourly PRN

OR
- › Haloperidol 0.5mg to 1mg S/C_{ut}, 4-hourly PRN

NB: The maximum recommended dose for metoclopramide is 30mg per day. However, in the terminal phase the risk-benefit ratio may shift, where the risk of adverse effects with doses >30mg becomes less of a concern. The maximum recommended dose for haloperidol is 5mg per day.

3. Observe closely for extrapyramidal side effects (EPSEs)

- **EPSEs include acute dyskinesia and dystonic reactions, akinesia or akathisia**
- **Review other medicines that may also cause EPSEs**

If EPSEs are observed:
- **› Seek specialist palliative care advice**

4. Regularly assess effectiveness and review doses

- **Use clinical judgement to guide dose titration**
- **If required, seek specialist palliative care advice**

Key:
- B/T – Breakthrough
- CSCI – Continuous subcutaneous infusion
- PRN – when required
- S/C_{ut} – Subcutaneously
- S/L_{ing} – Sublingually

Summary of clinical evidence

- Factors contributing to nausea and vomiting in a patient with a life-limiting illness may include but are not limited to: drug toxicity, urinary tract infection, constipation, diseases of the gastrointestinal tract, metabolic and biochemical disturbance and organ failure. Cause(s) of nausea and vomiting in the last days of life may be unidentifiable and multi-factorial.[33]
- Nausea is often under recognised and under treated.[34]
- There is limited evidence to guide the use of antiemetic therapy in the elderly.[33]
- Opioids commonly cause nausea and vomiting. Metoclopramide has been shown to be effective in the management of nausea and vomiting in patients with cancer who are on opioid therapy.[33, 34, 45]
- Haloperidol can be trialled to manage nausea and vomiting if metoclopramide is ineffective.[33, 34]
- Metoclopramide or haloperidol can cause extrapyramidal side effects. These drugs need to be avoided or used with caution in patients with neurodegenerative disorders such as Parkinson's disease.[22, 46]

Algorithm 2: Pharmacological Management of *Pain*

Is the patient currently taking regular opioids?

YES

1. Review current opioid dose and formulation

- **Consider adding a suitable S/C$_{ut}$ B/T opioid, options are as follows:**

Medicine name	Dose	Route	Frequency
Morphine	½th to ⅛th (⅒th for convenience) of the total 24-hour opioid dose	S/C$_{ut}$	1-hourly PRN
OR			
Fentanyl	½th to ⅛th (⅒th for convenience) of the total 24-hour opioid dose	S/C$_{ut}$	1-hourly PRN
OR			
Hydromorphone	½th to ⅛th (⅒th for convenience) of the total 24-hour opioid dose	S/C$_{ut}$	1-hourly PRN

- **Review background opioid dose and consider increasing the dose if the patient's pain is uncontrolled**
- **Consider changing the current opioid formulation to the S/C$_{ut}$ route (administered either at regular intervals or via CSCI using a subcutaneous infusion device over 24 hours) if the patient is using:**
  - › regular oral opioid(s) and expected to lose their ability to swallow
  - › transdermal opioid patch(es) and rapid terminal phase dose adjustments are likely to be required
- **Refer to** Section 2.2 – Box 4 **for tips on changing opioid formulations**
- **If unsure of opioid dose, or how to change the opioid and/or route of administration – seek specialist palliative care advice.**

2. Regularly assess effectiveness and review doses

- **As a rule of thumb, increase baseline opioid if pain is increasing or more than three B/T opioid doses are used in the last 24-hours.**
  - › B/T dose is usually calculated as ½th to ⅛th (⅒th for convenience) of the total 24-hour dose given S/C$_{ut}$, 1-hourly PRN.
- **Use clinical judgement to guide dose titration**
- **If required, seek specialist palliative care advice**

NO

1. Prescribe opioid

- **Consider:**
  - › Morphine 2.5mg to 5mg S/C$_{ut}$, 1-hourly PRN
  - **OR**
  - › Fentanyl 25microg to 50microg S/C$_{ut}$, 1-hourly PRN
  - **OR**
  - › Hydromorphone 0.5mg to 1mg S/C$_{ut}$, 1-hourly PRN
- **If pain is ongoing or more than three B/T opioid doses used in the last 24-hours, consider:**
  - › Morphine 2.5mg to 5mg S/C$_{ut}$, regularly 4-hourly
  - **OR**
  - › Morphine 10 to 15mg/24 hours via CSCI
  - **OR**
  - › Fentanyl 150 to 225microg/24hours via CSCI
  - **OR**
  - › Hydromorphone 0.5mg to 1mg S/C$_{ut}$, regularly 4-hourly
  - **OR**
  - › Hydromorphone 2 to 3mg/24 hours via CSCI

PLUS

- › Morphine 2.5mg to 5mg S/C$_{ut}$, 1-hourly PRN
- **OR**
- › Fentanyl 25microg to 50microg S/C$_{ut}$, 1-hourly PRN
- **OR**
- › Hydromorphone 0.5mg to 1 mg S/C$_{ut}$, 1-hourly PRN

- **If further input required, seek specialist palliative care advice**

Summary of clinical evidence

- Opioids provide effective pain relief and are generally well tolerated in the elderly.[37]
- Opioid naïve patients requiring opioids to manage pain or dyspnoea should be commenced on the lowest clinically appropriate dose. Careful upward titration minimises the risk of toxictiy.[37, 38]
- Morphine should be avoided in patients with severe renal failure (eGFR<30) due to the build up of toxic metabolites. Fentanyl has no active metabolites of relevance and has been identified as the opioid that is least likely to cause harm in patients with severe renal impairment when used appropriately.[39] If cost is a consideration, consider hydromorphone.
- To optimise pain relief, opioids should be administered on an 'around-the-clock' basis according to the duration of action of the prescribed opioid.[22]
- Breakthrough pain occurs commonly in people who are receiving opioids for ongoing pain.[40] In addition to the regular opioid dose, a PRN breakthrough opioid dose should be prescribed.[22]
- Transdermal opioid patches (buprenorphine and fentanyl) are not suitable to commence in the last days of life. Transdermal opioid patches have prolonged onset time and therefore rapid and safe dose titration is not possible.[22]
- When initiating opioids in the last days of life or when the oral route is no longer possible, a CSCI using a subcutaneous infusion device is the preferred route of administration.[22, 25]

Key:

- B/T – Breakthrough
- CSCI – Continuous subcutaneous infusion
- PRN – when required
- S/C$_{ut}$ – Subcutaneously
- S/L$_{ing}$ – Sublingually

Algorithm 3: Pharmacological Management of *Respiratory Distress*

Flowchart 3A: Respiratory Distress due to *Dyspnoea*

Is the patient taking regular opioid(s)?

YES

1. Review current opioid dose and formulation

- **Consider adding a suitable S/Cut B/T opioid, options are as follows:**

Medicine name	Dose	Route	Frequency
Morphine	½th to ⅙th (⅒th for convenience) of the total 24-hour opioid dose	S/C_{ut}	1-hourly PRN
OR			
Fentanyl	½th to ⅙th (⅒th for convenience) of the total 24-hour opioid dose	S/C_{ut}	1-hourly PRN
OR			
Hydromorphone	½th to ⅙th (⅒th for convenience) of the total 24-hour opioid dose	S/C_{ut}	1-hourly PRN

- **Review background opioid dose and consider increasing the dose if the patient's dyspnoea is uncontrolled**
- **Consider changing the current opioid formulation to the S/C_{ut} route (administered either at regular intervals or via CSCI using a subcutaneous infusion device over 24 hours) if the patient is using:**
  - regular oral opioid(s) and expected to lose their ability to swallow
  - transdermal opioid patch(es) and rapid terminal phase dose adjustments are likely to be required
- **Refer to** Section 2.2 – Box 4 **for tips on changing opioid formulations**
- **If unsure of opioid dose, or how to change the opioid and/or route of administration – seek specialist palliative care advice.**

2. Regularly assess effectiveness and review doses

- **As a rule of thumb, increase baseline opioid if dyspnoea is increasing or more than three B/T opioid doses are used in the last 24-hours.**
  - B/T dose is usually calculated as ½th to ⅙th (⅒th for convenience) of the total 24-hour dose given S/C_{ut}, 1-hourly PRN.
- **Use clinical judgement to guide dose titration**
- **If required, seek specialist palliative care advice**

NO

1. Prescribe opioid

- **Consider:**
  - Morphine 1mg to 2.5mg S/C_{ut}, 1-hourly PRN
  - **OR**
  - Fentanyl 25microg to 50microg S/C_{ut}, 1-hourly PRN
  - **OR**
  - Hydromorphone 0.25mg to 0.5mg S/C_{ut}, 1-hourly PRN
- **If dyspnoea is ongoing or more than three B/T opioid doses used in the last 24-hours, consider:**
  - Morphine 1mg to 2.5mg S/C_{ut}, regularly 4-hourly
  - **OR**
  - Morphine 5 to 10mg/24 hours via CSCI
  - **OR**
  - Fentanyl 75 to 150microg/24hours via CSCI
  - **OR**
  - Hydromorphone 0.25mg to 0.5mg S/C_{ut}, regularly 4-hourly
  - **OR**
  - Hydromorphone 1 to 2mg/24 hours via CSCI

PLUS

- Morphine 1mg to 2.5mg S/C_{ut}, 1-hourly PRN
- **OR**
- Fentanyl 25microg to 50microg S/C_{ut}, 1-hourly PRN
- **OR**
- Hydromorphone 0.25mg to 0.5 mg S/C_{ut}, 1-hourly PRN

- **If further input required, seek specialist palliative care advice**

Flowchart 3B: Respiratory distress due to *Associated Anxiety*

Is the patient taking regular benzodiazepine(s)?

YES

1. Review current benzodiazepine dose and formulation

- **If the patient unable to swallow oral benzodiazepine(s), consider:**
  - Converting the regular oral benzodiazepine(s) dose to an equivalent clonazepam dose to be administered S/L_{ing} or S/C_{ut}, regularly twice a day
  - **OR**
  - Converting the regular oral benzodiazepine(s) dose to an equivalent clonazepam dose to be administered via CSCI over 24 hours
  - **OR**
  - Converting the regular oral benzodiazepine(s) dose to an equivalent midazolam dose to be administered via CSCI over 24 hours

PLUS

- Prescribe an appropriate clonazepam dose to be given S/L_{ing} or S/C_{ut}, 2-hourly PRN
- **OR**
- Prescribe an appropriate midazolam dose to be given S/C_{ut}, 1-hourly PRN

NB: The maximum recommended dose for clonazepam is 4mg in 24 hours and for midazolam is 60mg in 24 hours.

- **If unsure of how to change the benzodiazepine and/or route of administration, seek specialist palliative care advice.**

2. Regularly assess effectiveness and review doses

- **Use clinical judgement to guide dose titration**
- **If required, seek specialist palliative care advice**

NO

1. Prescribe benzodiazepine

- **Consider anticipatory prescribing doses:**
  - Midazolam 2.5 mg S/C_{ut}, 1-hourly PRN
  - **OR**
  - Clonazepam 0.2mg to 0.5 mg S/L_{ing} or S/C_{ut}, 2-hourly PRN
- **If Dyspnoea is ongoing or more than three B/T benzodiazepine doses used in the last 24-hour period, consider regular prescribing:**
  - Midazolam 10 to 20mg/24 hours via CSCI
  - **OR**
  - Clonazepam 0.2mg to 0.5mg S/L_{ing} or S/C_{ut}, regularly twice a day
  - **OR**
  - Clonazepam 0.5 to 1 mg/24hours via CSCI

PLUS

- Midazolam 2.5mg S/C_{ut}, 1-hourly PRN
- **OR**
- Clonazepam 0.2mg to 0.5 mg S/L_{ing} or S/C_{ut}, 2-hourly PRN

NB: The maximum recommended dose for clonazepam is 4mg in 24 hours and for midazolam is 60mg in 24 hours.

- **If further input required, seek specialist palliative care advice.**

Summary of clinical evidence

- Dysopnoea is a common symptom experienced in advanced disease irrespective of diagnosis. The prevalence and severity can increase over time particularly in the last days of life.[36, 43]
- Initiate simple measures to reduce dyspnoea such as repositioning of the patient, tepid sponge if febrile and air flow across the face using rotating fan or open window.[22]
- Systemic opioids administered in appropriate doses are safe and effective in managing dyspnoea.[31]
- Opioid naïve patients requiring opioids to manage symptoms should be commenced on the lowest opioid dose possible. Careful upward titration minimises the risk of toxicity.[37, 38]
- Morphine should be avoided in patients with severe renal failure (eGFR<30) due to the build up of toxic metabolites. Fentanyl has no active metabolites of relevance and has been identified as an opioid that is least likely to cause harm in patients with severe renal impairment when used appropriately.[39]
- Anxiety is often associated with shortness of breath and benzodiazepines are effective in managing this symptom.[36, 44]

Key:
- B/T – Breakthrough
- CSCI – Continuous subcutaneous infusion
- PRN – when required
- S/C_{ut} – Subcutaneously
- S/L_{ing} – Sublingually

Algorithm 4: Pharmacological Management of *Respiratory Tract Secretions*

Is the patient taking regular oral anticholinergics for secretion management?

YES

1. Review current anticholinergic

- **If patient unable to swallow oral anticholinergic, consider:**
  - › Converting the regular oral anticholinergic dose to an equivalent hyoscine butylbromide dose to be administered via CSCI over 24 hours e.g. hyoscine butylbromide 60 to 80mg/24hours via CSCI

PLUS

- › Prescribe hyoscine butylbromide 20mg S/C_{ut}, 2-hourly PRN

NB: The maximum recommended dose for hyoscine butylbromide is 120mg in 24 hours.

- **If further input required, seek specialist palliative care advice**

NO

1. Prescribe anticholinergic

- **Consider:**
  - › Hyoscine butylbromide 20mg S/C_{ut}, 2-hourly PRN
- **If secretions are excessive, ongoing or more than three B/T anticholinergic doses used in the last 24-hours, consider:**
  - › Hyoscine butylbromide 60 to 80 mg/24hours via CSCI

PLUS

- › Hyoscine butylbromide 20mg S/C_{ut}, 2-hourly PRN

NB: The maximum recommended dose for hyoscine butylbromide is 120mg in 24 hours.

- **If further input required, seek specialist palliative care advice**

2. Regularly assess effectiveness and review doses

- **Use clinical judgement to guide dose titration**
- **If required, seek specialist palliative care advice**

Summary of clinical evidence

- Excessive respiratory secretions can be very distressing for the patient and their family. Hyoscine butylbromide (Buscopan) reduces respiratory secretions. It does not cross the blood-brain barrier and therefore does not contribute to drowsiness or delirium.[32]
- Anticholinergic drugs are commonly used to reduce the production of respiratory secretions and manage rattly breathing; however, there is little evidence to support this practice.[22] If these drugs are used they should be given as soon as the rattle begins, because they can reduce the production of new secretions but do not affect existing secretions. Consider stopping therapy if there is no improvement after 12 to 24 hours.[22]

Key:
- B/T – Breakthrough
- CSCI – Continuous subcutaneous infusion
- PRN – when required
- S/C_{ut} – Subcutaneously
- S/L_{ing} – Sublingually

Algorithm 5: Pharmacological Management of *Restlessness and Agitation*

Flowchart 5A: Restlessness and agitation due to *Delirium*

Is the patient taking regular antipsychotic(s)?

YES

1. Review current antipsychotic dose and formulation

- **If the patient is unable to swallow regular oral antipsychotic(s), consider:**
  - › Converting the regular oral antipsychotic(s) dose to an equivalent haloperidol dose to be administered S/C_{ut}, regularly twice a day

  OR
  - › Converting the regular oral antipsychotic(s) dose to an equivalent haloperidol dose to be administered via CSCI over 24 hours

PLUS
- › Prescribe an appropriate PRN haloperidol dose to be given S/C_{ut} , 4-hourly PRN

NB: The maximum recommended dose of haloperidol is 5mg in 24 hours.

- **If haloperidol is inappropriate or if unsure of how to change the antipsychotic and/or route of administration, seek specialist palliative care advice.**

NO

1. Review need for antipsychotic

- **If antipsychotic indicated, consider anticipatory prescribing dose:**
  - › Haloperidol 0.5mg to 1mg S/C_{ut}, 4-hourly PRN
- **If delirium is ongoing or more than three B/T haloperidol doses are used in the last 24-hours, consider:**
  - › Haloperidol 1 to 2.5mg/24hours via CSCI

PLUS
- › Haloperidol 0.5mg to 1 mg S/C_{ut}, 4-hourly PRN

NB: The maximum recommended dose of haloperidol is 5mg in 24 hours.

- **If haloperidol is inappropriate, seek specialist palliative care advice.**

2. Observe closely for extrapyramidal side effects

- **Such as acute dyskinesia and dystonic reactions, akinesia or akathisia**
- **Review other medicines that may also cause EPSEs**

3. Regularly assess effectiveness and review doses

- **Use clinical judgement to guide dose titration**
- **If required, seek specialist palliative care advice**

Flowchart 5B: Restlessness and agitation due to *Associated Anxiety/Emotional Distress*

Is the patient taking regular benzodiazepine(s)?

YES

1. Review current benzodiazepine dose and formulation

- **If the patient is unable to swallow regular oral benzodiazepine(s), consider:**
  - › Converting the regular oral benzodiazepine(s) dose to an equivalent clonazepam dose to be administered S/L_{ing} or S/C_{ut}, regularly twice a day

  OR
  - › Converting the regular oral benzodiazepine(s) dose to an equivalent clonazepam dose to be administered via CSCI over 24 hours

  OR
  - › Converting the regular oral benzodiazepine(s) dose to an equivalent midazolam dose to be administered via CSCI over 24 hours

PLUS
- › Prescribe an appropriate PRN clonazepam dose to be given S/L_{ing} or S/C_{ut}, 2-hourly PRN

OR
- › Prescribe an appropriate PRN midazolam dose to be given S/C_{ut}, 1-hourly PRN

NB: The maximum recommended dose for clonazepam is 4mg in 24 hours and for midazolam is 60mg in 24 hours.

- **If unsure of how to change the benzodiazepine and/or route of administration, seek specialist palliative care advice.**

NO

1. Prescribe benzodiazepine

- **Consider anticipatory prescribing doses:**
  - › Midazolam 2.5 mg S/C_{ut}, 1-hourly PRN

  OR
  - › Clonazepam 0.2mg to 0.5 mg S/L_{ing} or S/C_{ut}, 2-hourly PRN
- **If agitation is ongoing or more than three B/T benzodiazepine doses used in the last 24-hour period, consider regular prescribing:**
  - › Midazolam 10 to 20mg/24 hours via CSCI
  - › **OR**
  - › Clonazepam 0.2mg to 0.5mg S/L_{ing} or S/C_{ut}, regularly twice a day

  OR
  - › Clonazepam 0.5 to 1 mg/24hours via CSCI

PLUS
- › Midazolam 2.5mg S/C_{ut}, 1-hourly PRN

OR
- › Clonazepam 0.2mg to 0.5 mg S/L_{ing} or S/C_{ut}, 2-hourly PRN

NB: The maximum recommended dose for clonazepam is 4mg in 24 hours and for midazolam is 60mg in 24 hours.

- **If further input required, seek specialist palliative care advice.**

2. Regularly assess effectiveness and review doses

- **Use clinical judgement to guide dose titration**
- **If required, seek specialist palliative care advice**

3. If symptom persists, consider addition of an antipsychotic

- **Follow flowchart 5A for suitable antipsychotic doses**
- **If required, seek specialist palliative care advice**

Key:
- B/T – Breakthrough
- CSCI – Continuous subcutaneous infusion
- PRN – when required
- S/C_{ut} – Subcutaneously
- S/L_{ing} – Sublingually

Summary of clinical evidence

- Restlessness and agitation occur commonly at end of life and can often be attributed to multiple causes. Investigating the underlying cause may not be appropriate in the last days of life.[22]
- It is important to assess and manage factors which contribute to restlessness and agitation such as pain, urinary retention, rectal impaction, hypoxia, environmental factors, psychological and spiritual distress.[17, 22]
- Non-pharmacological interventions have been shown to be effective in the prevention and management of delirium. These include a peaceful, familiar environment, the presence of a familiar person(s), avoidance of the dark and of bright lights and re-orientation of the patient in time and place.[17, 41]
- Restlessness and agitation at end of life can be caused by anxiety and distress. The addition of a low dose benzodiazepine can be effective in managing these symptoms.[41, 42]
- Low dose haloperidol is effective in managing restlessness and agitation associated with delirium.[35]
- Extrapyramidal side effects (dystonia and akathisia) occur more commonly in doses of haloperidol above 4.5mg per day.[35]

Appendix 5: PallConsult Subcutaneous Infusion Device Resources

PallConsult has developed syringe pump/device resources for:

- NIKI T34™, T34™ & Bodyguard™ T Syringe pumps
- Surefuser™+ infusion device

Resources listed below can be found on the PallConsult website: www.pallconsult.com.au

NIKI T34™, T34™ & Bodyguard™ T Syringe pumps	
Community service providers	
Example policy and procedures: *Using the NIKI T34™ , T34™ and BodyGuard™ T syringe pump for palliative care patients*	This Example Policy and Procedures is intended as a guide for healthcare organisations to help them develop or review their own policy and procedures on the management of NIKI T34™, T34™ and BodyGuard™ T syringe pump for palliative care patients.
NIKI T34™ , T34™ and BodyGuard™ T Subcutaneous Medication Infusion Chart	This chart is specifically for documenting medication orders and recording administration of medicines being given via continuous subcutaneous infusion (CSCI) using the NIKI T34™, T34™ and/or BodyGuard™ T syringe pumps only. It can be used by non-digital Queensland Health sites, any non-government inpatient or residential aged care facilities.
Community Subcutaneous Medication Infusion Order (over 24 hours)	This order is used to document medication orders and record administration of medicines being given by CSCI and/or PRN in the community setting only. It is suitable for use by domiciliary or community nurses administering medicines to patients residing in a private residence. The order is available as a writeable PDF which can be signed and emailed to service providers or printed and handwritten.
Healthcare professionals	
Online education module	The online education module aims to educate health professionals about how to safely use the NIKI T34™, T34™ and BodyGuard™ T syringe pump. This module is not supported for use on a mobile phone. Please complete using a PC or tablet.
A practical handbook for health professionals: *How to safely set-up, commence and provide necessary documentation for NIKI T34™,T34™ and BodyGuard™ T syringe pump infusions*	The handbook contains the essential information you need to know to safely set-up, commence and provide necessary documentation for NIKI T34™, T34™ and BodyGuard™ T syringe pump infusions.
A step-by-step guide: *Setting up and commencing a NIKI T34™, T34™ and BodyGuard™ T syringe pump infusion with a new syringe*	This illustrated guide explains how to start a NIKI T34™, T34™ or BodyGuard™ T syringe pump using a step-by-step approach.
Short training videos	Three videos illustrate some of the essential elements for ensuring safe delivery of NIKI T34™, T34™ and BodyGuard™ T syringe pump infusions: • **Video 1 – Using syringe pumps in the palliative care clinical environment** • **Video 2 – Getting to know the NIKI T34™ syringe pump** • **Video 3 – Starting and subsequent day set up of NIKI T34™ syringe pump infusions.**

NIKI T34™, T34™ & Bodyguard™ T Syringe pumps	
Competency checklist: *NIKI T34™, T34™ and Body-Guard™ T syringe pumps*	This checklist describes the requirements for ongoing demonstration of competency for safe and effective use of a NIKI T34™, T34™ and BodyGuard™ T syringe pump.
Families and Carers	
Information sheet for families	This information sheet can be supplied to families to support education and provide further information about the NIKI T34™, T34™ and BodyGuard™ T syringe pump information.

Surefuser™+ infusion device	
Community service providers	
Example policy and procedures: *Using a Surefuser™+ infusion device in a palliative care setting*	This Example Policy and Procedures is intended as a guide for healthcare organisations to help them develop or review their own policy and procedures on the management of Surefuser™ in a Palliative Care setting
Healthcare professionals	
A practical handbook for health professionals: *How to safely set up a Surefuser™+ infusion device, commence and monitor an infusion in a palliative care setting*	This handbook contains the essential information you need to know to safely set up a Surefuser™+ and commence and monitor an infusion in a palliative care setting.
A step-by-step guide: Setting up a Surefuser™+ infusion device, commencing and monitoring an infusion	This illustrated guide explains how to set up a Surefuser™+ and commence and monitor an infusion using a step-by-step approach.
Short training video: *A nurse's guide to using the Surefuser™+ infusion device in the palliative care setting*	This video illustrates some of the essential elements for ensuring safe delivery of the Surefuser™+ infusion in a palliative care setting.
A competency checklist: *How to safely set up a Surefuser™+ infusion device and commence and monitor an infusion in a palliative care setting*	This checklist describes the requirements for ongoing demonstration of competency for safe and effective use of a Surefuser™+ to administer infusions in a palliative care setting.
Surefuser™+ monitoring labels: • One-Day Labels • Two-Day Labels • Three-Day Labels	Monitoring labels have been developed as a part of this package to assist families, carers and health professionals to: • maintain the recommended regular four-hourly checks of the Surefuser™+ and the subcutaneous cannula insertion site • ensure the blue monitoring line is progressing at the correct infusion flow rate, and not running too fast or too slow.
Families and Carers	
Information sheet for families: *Surefuser™+ infusion device and infusions*	This information sheet can be supplied to families to support education and provide further information about the Surefuser™+ infuser device.
Troubleshooting and monitoring guide for families: *Surefuser™+infusion device and infusions*	This guide informs families of the necessary checks required to safely manage a Surefuser™+ infusion device in the home. It also includes guidance on how to troubleshoot issues with the device.

Appendix 6: Example Anticipatory Medicines Cover Letter to Pharmacist

[INSERT DETAILS OF HEALTHCARE SERVICE]
Letter to Pharmacist

Date: ___ /___ /___

Patient details:

UR number: _____

Name: _____

Address: _____

_____ DOB: ___ /___ /___

Fill in or attach the patient label

Dear Pharmacist,

Re: Prescription medicines for patient named above

After our recent assessment, it has been identified that the person above requires palliation and comfort cares. To support them, we have written prescriptions for medicines that will manage current distressing symptoms and/or future symptoms they may develop.

The most common preventable reason for an unplanned and unwanted hospital transfer is lack of adequate symptom control. Our aim is to address current symptoms as well as to anticipate other possible symptoms by having anticipatory medicines available in the home, if they are needed. Therefore, we ask that you ensure processes for rapid dispensing and supply of these medicines.

Additionally, we understand that we have prescribed monitored medicines which may trigger an alert on QScript. However, we would like to advise you that we have taken the necessary steps to ensure that these prescriptions are clinically justified, and associated risks have been discussed with the patient and/or their substitute decision maker.

If there are any issues with being able to supply these medicines in a timely manner or you need to discuss the QScript alert further, please do not hesitate to contact us.

We appreciate your assistance to support the person above to remain in their preferred place of care.

Kind regards,

Prescriber's name: _____

Prescriber's type: *(circle one only)* MP / NP

Signature: _____

Contact Number: _____

Appendix 7: List of clinical consumables for safe administration of subcutaneous medicines

Consumables for Continuous subcutaneous infusion (CSCI)	
Item	**Quantity**
Saf-T-Intima	2
Needle free injection BD SmartSite	5
Clear film dressing 10x12cm	2
Alcohol wipe	2
Normal saline amp 10mL	10
30 mL BD/L/L syringe	10
9V battery – check correct for version of pump	5
Terumo extension set 150cm	2
Subcutaneous use only label	10
Pink drawing up needle	10

Consumables for Subcutaneous PRN medicines	
Item	**Quantity**
1mL leur lock syringe	10
3mL leur lock syringe	30
Pink drawing up needle	10
Normal saline amp 10mL	5
Syringe bungs/stopper	30
If no CSCI in situ you will also need:	
Saf-T-Intima	2
Needle free injection BD SmartSite	2
Clear film dressing 10x12cm (Tegaderm)	2
Alcohol wipe	2
Sharps container	1

Appendix 8: *caring@home* resources

Resources listed below can be downloaded and ordered from the caring@home website (www.caringathomeproject.com.au).

Community service providers	
Guidelines for the handling of palliative care medicines in community services	These guidelines can be used by community service providers to inform the development of detailed protocols and procedures tailored to the requirements of individual services.
Example policies and procedures	These documents may be used by community service providers to develop and/or review relevant documentation within their own organisation's policy and procedure framework.
Healthcare professionals	
Online education modules	The online education aims to educate nurses about how to train carers to manage breakthrough symptoms safely using subcutaneous medicines.
palliMEDS	This app familiarises primary care prescribers and community pharmacists with *core palliative care medicines for Queensland community patients* used for management of terminal symptoms.
Palliative care symptom management medicines for Australians living in the community	A consensus-based list of medicines suitable for use in the community for the management of terminal symptoms.
Carers	
A practical handbook for carers: Helping to manage breakthrough symptoms safely using subcutaneous medicines	The handbook provides written and pictorial material with all the information a carer needs to help manage breakthrough symptoms safely using subcutaneous medicines.
Writing a label, opening an ampoule and drawing up medicine: A step-by-step guide	This illustrated guide explains how to label a syringe correctly, open an ampoule and draw up medicine using a step-by-step approach.
Giving medicine using a subcutaneous cannula: A step-by-step guide	This illustrated guide explains how to give medicine through a subcutaneous cannula using a step-by-step approach.
Medicines diary	The medicines diary is for carers to record all the subcutaneous medicines that are given.
Colour-coded labelling system	The colour-coded labelling system acts as an extra safety check to ensure the correct medicine is given for each breakthrough symptom. It includes sticky labels for syringes and the symptoms and medicines: *Colour-coded fridge chart*.
A practice demonstration kit	The demonstration kit is used to practise giving medicines through a subcutaneous cannula.
Short training videos	The videos show how to give subcutaneous medicines.

Appendix 9: Resources for anticipatory medicines education

Education topic	Consumer resource *(information to be given to family)*	Further information for clinicians
Palliative Care Medicines	Palliative Care Medicines Factsheet – An information sheet about palliative care medicines for people receiving palliative care and their families	
Storage	Storing your palliative care medicines safely Factsheet – An information sheet about safe storage of palliative care medicines for people receiving palliative care and their families	In cases, where reconstituted injectable medicines will be stored in the home, clinicians must provide further instructions on appropriate storage, including the need for labelling and refrigeration of these medicines. Further information about storage of reconstituted injection medicines can be found in: Example policy and procedures: Supporting carers to help manage breakthrough symptoms safely using subcutaneous medicines in the home (see page 13 and 14) Guidelines for handling of palliative care medicines in community services
Disposal	Disposing of your palliative care medicines safely Factsheet – An information sheet about safe disposal of palliative care medicines for people receiving palliative care and their families Locations for sharp's container disposal points – Local councils or pharmacies participating in the Queensland Needle and Syringe program can assist with the disposal of sharp containers. Contact the local council or find a participating pharmacy by visiting: The Pharmacy Needle and Syringe Program (PNSP)	Obsolete, expired or unused medicines must be disposed of safely, this includes adhering to relevant legislation regarding disposing and destroying of diversion-risk medicines within Queensland. Consequently, it is the clinician's responsibility to educate carers about safe disposal of medicines and sharps. So, carers can comply where appropriate. Return of expired and unwanted medicines (RUM) project

Appendix 10: End-of-Life and Palliative Care Resources and Support Services in Queensland

Online resources

Some patients, families and/or carers may wish to research online to better understand end of life and palliative care. Clinicians can refer these patients, families and/or carers to trusted online resources such as:

1. **Care at End of Life** (www.qld.gov.au/careatendoflife)
   - › Queensland Health information about care at the end of life including information on living with a terminal illness, advance care planning and what to do after someone dies
   - › Provides a list of family and carer support services
2. **CareSearch** (www.caresearch.com.au)
   - › Information and resources about living with or caring for someone with a serious illness, preparing for the end of life, and how to manage bereavement, grief and loss.
3. **Palliative Care Australia** (www.palliativecare.org.au)
   - › Palliative care resources for people living with a terminal condition and their carers, family and community.

Support services

Two useful palliative care support services for Queenslanders are:

1. PalAssist

- Free service, providing accurate information and compassionate support to those dealing with a life-limiting illness or condition, and/or their families and carers
- Operated by a team of nursing and allied health professionals
- Available 7am to 7pm, 7 days

PalAssist

There are 4 ways a person can connect with PalAssist:

- Chat online by visiting www.palassist.org.au
- Request a call back by filling in the appropriate online form available on www.palassist.org.au
- Email info@palassist.org.au
- Phone 1800 772 273

To find out more about PalAssist visit www.palassist.org.au

2. Palliative Care Queensland

- Membership-based organisation, supporting individuals, families, carers, community members and palliative care providers in Queensland
- Provides free statewide palliative care community education
- Has published resources to support carers

Palliative Care Queensland

PCQ has developed essential resources for consumers including:

- Events calendar – featuring upcoming palliative care education and events
- PalliLearn – a Community Education Program providing opportunities for community members to complete basic and/or intensive courses to build knowledge on aspects related to palliative care.
- Queensland Palliative Caring booklet – Information for families and carers who are caring for an older person with a life-limiting illness in Queensland
- Palliative Care Queensland Recommended Support Services – provides a list of useful support services: and recommended websites to help persons receiving palliative care and/or their family/carers

To find out more about Palliative Care Queensland visit www.palliativecareqld.org.au

Appendix 11: Palliative Care Medicines Management Information Letter

[INSERT DETAILS OF HEALTHCARE SERVICE]

Letter to family/carer

Date: ___ /___ /___

Patient details:

(Affix client identification label here or complete below)

URN/Client ID: _____

Family name: _____

Given names: _____

Date of birth: ___ /___ /___ Sex: ○ M ○ F ○ I

Dear family/carer,

Re: Important information on the Management of Palliative Care Medicines

The person above has been prescribed medicines to promote their comfort and relieve distress. It is anticipated that these medicines will enable the person to remain at home in your care.

This letter contains some important information you will need to know to manage these medicines.

Medicine list

A list completed by the doctor, nurse or pharmacist that includes the name of the medicines prescribed and instructions on how to give these medicines will be provided to you.

If you have any questions, day or night, about the medicines, you can call the numbers listed in this letter.

Prescriptions and supplies

You have been given supplies of: *(clinician to tick all that apply)*

- ○ Prescriptions
- ○ Medicines *(labelled with the person's name and instructions)*
- ○ Clinical consumables *(such as syringes, needles, sharp container, alcohol swabs, etc.)*

Please always make sure there is at least three days' supply of medicines and clinical consumables in the home so that supplies do not run out. Advise the appropriate healthcare service and/or practitioner if you are running low (see over for contact details).

Resources and information

You have been provided the following resources and/or information: *(clinician to tick all that apply)*

- ○ *caring@home* package for carers
- ○ Palliative Care Medicines Factsheet
- ○ Storing your palliative care medicines safely Factsheet
- ○ Disposing of your palliative care medicines safely Factsheet
- ○ Instructions on how to dispose of sharps containers safely
- ○ Family/Carer Support Services Information/Contact details: _____

_____

- ○ Other: _____

Important contact details *(clinician to fill in required details)*

There are various healthcare services and/or practitioners that will help you with the management of palliative care medicines in the home. Here are their details:

For emergency or after-hours advice please contact

Name: _____

Type of service or healthcare practitioner: _____

Phone number: _____

Regular home visits or telehealth consultations will be provided by

Name: _____

Type of healthcare service or practitioner: _____

Phone number: _____

To get more prescriptions written please contact

Name: _____

Type of healthcare service or practitioner: _____

Phone number: _____

To get more supply of medicines please visit

Name: _____

Type of healthcare service: Pharmacy

Phone number: _____

Address: _____

To get more supply of clinical consumables *(such as syringes, needles, sharp container, alcohol swabs, etc.)* **please contact**

Name: _____

Type of healthcare service or practitioner: _____

Phone number: _____

This letter has been completed by:

Clinician's name: _____

Clinician type: *(circle one only)* Doctor / Nurse / Pharmacist / Other: _____

Clinician's Organisation: _____

Clinician's signature: _____

Date: ___ /___ /___

Appendix 12: Example expected death letter

PallConsult
Support for clinicians delivering end-of-life care

Date: 3 November 2019
Time: 3pm

To whom it may concern

Dr Marion Peters, Smith Street Medical Practice, Coorparoo

(GP/health service name) has been providing care for:

Patient details here (full name, address and date of birth)
Mr John James Kennedy 19 Sydney Street, Greenslopes, Brisbane DOB: 19 May 1956

This person has been receiving treatment and palliative care support to manage symptoms related to a life-limiting illness. The person and family have planned for a home death.

In the event that you have been asked to visit the person's home after the death, please note that this death was expected.

The person's GP (Dr _____) or the local Community Palliative Care Service can provide a Cause of Death Certificate at their earliest convenience.

We would appreciate if you would complete the Life Extinct form to allow the family to arrange a funeral director.

If you have any questions, please contact the person's GP or the local Community Palliative Care Service.

Thank you

GP/Service Provider Signature: *Dr Marion Peters*

Provide Number: #54895236

PallConsult.com.au 1300 PALLDR 1300 PALLCR

Queensland Government

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