Subcutaneous Medications and Palliative Care: A guide for caregivers
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclaimer</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>1. FAQ – Frequently Asked Questions About Symptom Management and Subcutaneous Injections</td>
<td>7</td>
</tr>
<tr>
<td>Symptom Management:</td>
<td>8</td>
</tr>
<tr>
<td>a. What is meant by the term 'symptom management'?</td>
<td>8</td>
</tr>
<tr>
<td>b. Why is it important to keep symptoms well managed?</td>
<td>8</td>
</tr>
<tr>
<td>c. What is meant by 'breakthrough', 'PRN' or 'as required' medication?</td>
<td>8</td>
</tr>
<tr>
<td>d. What are side effects of medication and are they avoidable? What do I do if they happen?</td>
<td>9</td>
</tr>
<tr>
<td>Subcutaneous Cannula:</td>
<td>10</td>
</tr>
<tr>
<td>a. What is a subcutaneous cannula and why is it used?</td>
<td>10</td>
</tr>
<tr>
<td>b. What is a subcutaneous injection and why is it used?</td>
<td>10</td>
</tr>
<tr>
<td>c. Where is a subcutaneous cannula inserted?</td>
<td>11</td>
</tr>
<tr>
<td>d. How do I care for the cannula?</td>
<td>11</td>
</tr>
<tr>
<td>e. How will I know if the cannula is not working? What should I do if this happens?</td>
<td>11</td>
</tr>
<tr>
<td>Subcutaneous Injections:</td>
<td>12</td>
</tr>
<tr>
<td>a. What is meant by 'continuous medication(s)?'</td>
<td>12</td>
</tr>
<tr>
<td>b. What is meant by 'intermittent medication(s)?'</td>
<td>12</td>
</tr>
<tr>
<td>c. How do I give a breakthrough injection into a subcutaneous cannula?</td>
<td>13</td>
</tr>
<tr>
<td>2. Pain Management</td>
<td>15</td>
</tr>
<tr>
<td>a. Overview of pain management</td>
<td>16</td>
</tr>
<tr>
<td>b. Common myths and misconceptions about strong pain medications</td>
<td>18</td>
</tr>
<tr>
<td>Commonly Used Opioids for Subcutaneous Injection</td>
<td>19</td>
</tr>
<tr>
<td>a. Fentanyl</td>
<td>19</td>
</tr>
<tr>
<td>b. Hydromorphone (Dilaudid)</td>
<td>19</td>
</tr>
<tr>
<td>c. Morphine Sulphate (Morphine)</td>
<td>19</td>
</tr>
<tr>
<td>d. Oxycodone Hydrochloride (Oxycodeine)</td>
<td>19</td>
</tr>
<tr>
<td>3. Information About Other Common Symptoms</td>
<td>21</td>
</tr>
<tr>
<td>a. Anxiety</td>
<td>22</td>
</tr>
<tr>
<td>b. Breathlessness</td>
<td>22</td>
</tr>
<tr>
<td>c. Confusion or muddled thinking</td>
<td>23</td>
</tr>
<tr>
<td>d. Constipation</td>
<td>23</td>
</tr>
<tr>
<td>e. Itch</td>
<td>23</td>
</tr>
<tr>
<td>f. Moist or rattly breathing</td>
<td>23</td>
</tr>
<tr>
<td>g. Nausea and vomiting</td>
<td>24</td>
</tr>
<tr>
<td>h. Restlessness</td>
<td>24</td>
</tr>
<tr>
<td>Symptom Management: Commonly Used Subcutaneous Medications</td>
<td>25</td>
</tr>
<tr>
<td>a. Clonazepam (Rivotril)</td>
<td>25</td>
</tr>
<tr>
<td>b. Glycopyrrolate (Robinul)</td>
<td>25</td>
</tr>
<tr>
<td>c. Haloperidol (Serenace)</td>
<td>25</td>
</tr>
<tr>
<td>d. Hyoscine Butylbromide (Buscopan)</td>
<td>26</td>
</tr>
<tr>
<td>e. Hyoscine Hydrobromide (Hyoscyine)</td>
<td>26</td>
</tr>
<tr>
<td>f. Methotrimeprazine Hydrochloride (Nozinan)</td>
<td>26</td>
</tr>
<tr>
<td>g. Metoclopramide (Maxolon)</td>
<td>27</td>
</tr>
<tr>
<td>h. Midazolam (Hyno)</td>
<td>27</td>
</tr>
<tr>
<td>i. Promethazine (Phenergan)</td>
<td>27</td>
</tr>
<tr>
<td>4. Troubleshooting</td>
<td>29</td>
</tr>
<tr>
<td>a. What happens if I run out of medications?</td>
<td>30</td>
</tr>
<tr>
<td>b. What if the ampoule won't open?</td>
<td>30</td>
</tr>
<tr>
<td>c. What if the injection is painful when I give it?</td>
<td>31</td>
</tr>
<tr>
<td>d. What do I do if the injection site is leaking?</td>
<td>31</td>
</tr>
<tr>
<td>Reference List</td>
<td>32</td>
</tr>
<tr>
<td>Glossary</td>
<td>35</td>
</tr>
<tr>
<td>Documentation Forms and Instruction Guides</td>
<td>39</td>
</tr>
<tr>
<td>a. Example of Caregiver Daily Medication Diary</td>
<td>40</td>
</tr>
<tr>
<td>b. Example of Medication Order</td>
<td>42</td>
</tr>
<tr>
<td>c. Step by Step Guide: Opening and Drawing up from an Ampoule</td>
<td>43</td>
</tr>
<tr>
<td>d. Preparing and Giving a Subcutaneous Injection: 10 Step Plan</td>
<td>44</td>
</tr>
<tr>
<td>e. Preparing and Giving a Subcutaneous Injection: 10 Step Plan</td>
<td>44</td>
</tr>
<tr>
<td>f. Preparing and Giving a Subcutaneous Injection: Using a No Needle Technique</td>
<td>44</td>
</tr>
<tr>
<td>g. Preparing and Giving a Subcutaneous Injection: Using a Blunt Needle Technique</td>
<td>46</td>
</tr>
</tbody>
</table>
Disclaimer:
The content of this booklet is intended as a simple guide for a lay caregiver, to assist in their understanding of palliative care medications commonly given subcutaneously to people being cared for in the home.

The information is presented by the Brisbane South Palliative Care Collaborative for the purpose of disseminating health information free of charge and for the benefit of the lay caregiver of a person receiving palliative care and should only be used for the purpose for which it has been supplied.

While the Brisbane South Palliative Care Collaborative has exercised due care in ensuring the accuracy of the material contained in the booklet, the booklet is a general guide only to appropriate practice, to be followed subject to the clinician’s judgement and the lay caregiver’s preference in each individual case.

The 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 booklet.

© Copyright is retained by The State of Queensland, Queensland Health, 2009. Contact CIM@health.qld.gov.au.

First Edition January 2009
Second Edition June 2011
Third Edition April 2016

This work is licensed under a Creative Commons Attribution Non-Commercial No Derivatives 2.5 Australia licence. To view a copy of this licence, visit http://creativecommons.org/licenses/by-nc-nd/2.5/au/.

This book was originally compiled with funding from the Australian Government Department of Health and Ageing.

Written by:
Healy, S., Israel, F., Reymond, E., and Lyons-Micic, M. (Brisbane South Palliative Care Collaborative)

Community and Primary Health Services
Metro South Health Service District
PO Box 4069
Eight Mile Plains Q 4113
Email: bspcc@health.qld.gov.au
Introduction
Introduction

Palliative care is care provided for people of all ages who have a life limiting illness, with little or no prospect of cure, and for whom the primary treatment goal is improved quality of life. During the palliative phase care is focussed on promoting the comfort of the patient with attention given to addressing physical symptoms and psychological and spiritual concerns.

This booklet is one component of an education package that has been given to you by your palliative care nurse. In conjunction with the other components, it aims to increase your knowledge and understanding of how to manage unwanted symptoms using subcutaneous injections and to promote comfort and quality of life for the person you are caring for. By playing a major role in symptom management, you are helping the person to remain in their environment of choice – their home.

Good symptom management is essential in the care of all people with end stage disease, with the focus at this time shifting from quantity to quality of life. Managing symptoms in palliative care can sometimes be challenging. However, understanding the medications that are commonly used will help you identify the correct medication to give to control a particular symptom. Maintaining good symptom control will allow the person in your care to direct their energies to other important aspects of their life.  

To manage symptoms successfully it is essential that you talk with the nurse, doctor or specialist palliative care service provider and let them know when symptoms are becoming bothersome or difficult to manage.

We hope that the information presented here will allow you to understand the principles of symptom management and to learn how to manage specific unwanted symptoms using subcutaneous injections. For more in-depth information about symptoms and other ways to manage them, apart from using subcutaneous injections, talk to your nurse and doctor.
The booklet is divided into four main sections:

1. Frequently Asked Questions About Symptom Management and Subcutaneous Injections
2. Pain Management
3. Information About Other Common Symptoms
4. Troubleshooting
Frequently Asked Questions
About Symptom Management and Subcutaneous Injections
Symptom Management

a. What is meant by the term ‘symptom management’?
In palliative care, symptom management refers to care given to treat unwanted experiences, such as pain or shortness of breath, sometimes associated with end stage disease. Symptom management encompasses many different types of care that can range from simple things such as changes in diet, to invasive procedures such as surgery. This booklet only considers the use of subcutaneous injections for symptom management.

Good symptom management aims to prevent, or treat as early as possible, the symptoms of a disease, the side effects caused by treatments for a disease, and the psychological, social and spiritual problems related to a disease. Minimising symptoms is a goal of care for everyone involved in palliative care.

b. Why is it important to keep symptoms well managed?
Symptoms can be distressing for people and decrease their quality of life. This is why we try to keep them well managed.

The severity of a symptom, such as anxiety or nausea, is often hard to measure. Symptom severity is usually best judged by listening to the person when they describe what they are feeling or experiencing.

If pain or other symptoms that cause discomfort are allowed to build up, they can become much harder to control than if you take steps to manage them at the first sign of their appearance – this is what good symptom management is all about.

c. What is meant by ‘breakthrough’, ‘PRN’ or ‘as required’ medication?
Symptoms are often controlled with medications given at regular times throughout the day. Sometimes, however, a symptom can break through this background control. ‘Breakthrough’ is a term that is used to indicate that a symptom has re-occurred even with the use of regular medications to control that symptom.

Frequently Asked Questions

Subcutaneous Medications and Palliative Care: A guide for caregivers
Dealing with the breakthrough symptom may simply require giving an extra dose of medication, often called ‘breakthrough’, ‘PRN’, or ‘as required’ medication. Such medications will be prescribed by the doctor.

Symptoms in people receiving palliative care can appear very quickly. We prepare for this by reviewing the person regularly to see what changes in management may be needed. Sometimes we can predict what may occur and have plans in place in case it actually does occur. This is why ‘breakthrough’, ‘as required’ or ‘PRN’ medications are prescribed. This medication should be given at the first sign of an unwanted symptom, before it has a chance to build up, remembering that medications can take up to 20 minutes to take effect.

d. What are side effects of medications and are they avoidable? What do I do if they happen?

Medications may cause unwanted effects (also known as adverse or side effects) as well as the desired benefits for which they have been prescribed. Your doctor will always weigh up the benefit of a medication compared to the risk of side effects, with consideration of the disease being experienced by the person. The goal is to get the right dose of a medication to treat the symptoms, whilst minimising side effects. If side effects do occur, these should be reported to the doctor or nurse as soon as possible. Side effects vary dependant upon medications but can include experiences such as sleeplessness, muddled thinking or constipation.

Being aware of the possible side effects of the medications that a person is using is important, and understanding what to expect allows you to manage side effects if they occur.
Subcutaneous Cannula

a. What is a subcutaneous cannula and why is it used?

A subcutaneous cannula, also known as a ‘Saf-T-Intima™’, is a little plastic tube designed to carry medication into a person's body. One end, inserted by a registered nurse, sits just under the person's skin. The other end divides into two parts and is shaped like a Y. One part of the Y-arm can be connected to a syringe driver or infusion pump; the other can be used for subcutaneous injections. (See Figure 1).

Your nurse may insert a second cannula in a different part of the body. This allows for back up in case the original cannula stops working and ensures that there will be no delay in giving medications to the person you are caring for. It can be especially useful if the original cannula stops working at night when nurses are not readily available.

b. What is a subcutaneous injection and why is it used?

Subcutaneous means 'just below the skin'; a subcutaneous injection means giving an injection just under the skin. There is good blood supply under the skin and this carries the drug into the rest of the body. Subcutaneous injections are normally less painful than an injection into the muscle and are easier to give than an intravenous or intramuscular injection.

The subcutaneous method is a safe and effective way of giving medications, especially when a person is experiencing swallowing problems or has nausea and/or vomiting.

c. Where is a subcutaneous cannula inserted?

The cannula can be inserted into the person’s abdomen or chest, upper thigh or upper arm. If the person is experiencing some confusion and is likely to remove the cannula, it can be placed in the upper back. (See Figure 2).

The nurse will secure the cannula to the person's body (see Figure 3) using clear film, so that you can see the insertion site. This allows you to check the site regularly.
d. How do I care for the cannula?
Caring for a cannula is quite easy; mostly it looks after itself. You will need to check the insertion site before and after you give an injection into the cannula and report to the nurse if there is any swelling, redness, inflammation or leakage around the cannula site. (Figure 4 illustrates a site that is inflamed).

As mentioned previously, the cannula is secured in place with a clear plastic film. This clear film is waterproof, so you can wash the area, either in the shower or when bathing, without causing any problems.

Cannulas do not last forever – they need to be changed. Each nursing service will have different guidelines that determine how frequently the cannula needs to be changed. The frequency will depend on how often the cannula is being used and the number and type of medications being injected into the site. Your nurse will advise you when the cannula needs to be changed.

e. How will I know if the cannula is not working? What should I do if this happens?

It is normal for a small lump to appear at the insertion site immediately after the injection has been given. This is the medication sitting in the tissue just under the skin. The small lump will disappear as the medication is absorbed into the bloodstream. If it does not, contact your nurse.

If you notice that the cannula site is red, swollen, leaking or smelly, contact your nurse as it is likely the cannula will need to be changed. (See Figure 4).

If it is hard to inject medications or if the medications leak out onto the skin when you inject, then contact your nurse as this means the cannula is no longer working. Leave the cannula in place for the nurse to remove. In the meantime, if there is a second cannula, this can be used until the other cannula is changed.
Subcutaneous Injections

Commonly used palliative care medications can either be given continuously as an infusion or intermittently using subcutaneous injections.

a. What is meant by ‘continuous medication(s)’?

Continuous medication(s) refers to the giving of medications that enter the bloodstream slowly and continuously throughout the day. Continuous medication(s) are usually given via a syringe driver or infusion pump, which is a portable, battery-operated machine. (See Figure 5).

The syringe driver or infusion pump may be attached to a subcutaneous cannula. Once the cannula has been inserted the person should not experience any discomfort from it.

A nurse will reload the syringe driver or infusion pump regularly and may sometimes change the combination of drugs or the dose of medications in the syringe, after discussion with the doctor. This may need to occur if the person is experiencing ongoing and increasing unpleasant symptoms, has required an increase in the number of breakthrough medications daily or has been generally unsettled. It sometimes takes a few days to get the right dose(s) and combination of medication(s).

b. What is meant by ‘intermittent medication(s)’?

In palliative care, ‘intermittent medication(s)’ refers to medication given occasionally through the day. Intermittent medication(s) can be given by subcutaneous injection either for one-off symptom management or for more regular breakthrough symptom management. So breakthrough medication is a type of intermittent medication, and, as mentioned earlier, is used to control a symptom that has re-occurred in spite of regular medication.
c. How do I give a breakthrough injection into a subcutaneous cannula?

There are two options available when giving an injection into a subcutaneous cannula; your nurse will explain which one you will use.

Option 1
Firstly, remove the coloured cap of the end of the syringe. Then give the injection directly into the Y-arm by pushing the syringe into the blue area using a twisting or screwing motion until the syringe is securely attached to the cannula, as shown in figure 6.

Option 2:
Give the injection into the Y-arm using a syringe that has a small blunt needle attached.

The Y-arm cap, which has a white rim or similar (your nurse will advise you), is topped with a special membrane with a slit in it so you can choose to inject the medication straight into this opening, without removing the cap. (See Figure 7).

Your nurse will show you how to do this. Once the medication has been given you can remove the syringe by use a twisting motion to unscrew the syringe.

For further instructions refer to the DVD provided by your nurse or doctor or refer to the step-by-step guides in the Documentation Forms and Instruction Guides section at the back of this booklet.
Overview of pain management

Pain is probably the most feared symptom in palliative care. For this reason we have included this section on its management. Pain management can be simple or complex, according to its cause. Don’t ignore pain, as that may only make it harder to manage and can reduce a person’s ability to take pleasure in life. Some types of pain are more difficult to manage. That is why it is important to talk with the nurse and doctor, letting them know whether the medication has had the desired effect.

When managing pain it helps to keep a record about the type of pain that the person experiences (what words the person uses to describe it), and when it occurs, and then discuss this with the nurse or doctor when they next visit. The nurse will check the daily diary you have kept that records the medications you have given since the nurse’s or the doctor’s last visit (see Example of a Caregiver Daily Medication Diary). This will help health professionals to decide if medications need to be changed.

There are many different classes of medications that can be used to manage pain, but we will only concentrate on the drugs that you will be likely to use subcutaneously. Choosing the right drug to control pain can sometimes be difficult. Your doctor will consider all options and choose the medication that is best suited to the person’s individual pain.

Generally pain is classified in three ways:

1. Soft organ and body tissue pain; this pain is often described as deep or cramping;
2. Bony pain; this pain is often described as aching or throbbing;
3. Nerve pain; this pain is often described as burning, tingling, shooting, stabbing or having a numbing sensation.

Incidental pain is pain that occurs in certain circumstances. For example, it may occur with particular movements, such as during bathing, or getting out of bed. If intermittent pain is occurring, medication should be given at least 20-30 minutes before the task is performed.
There are many types of medications, so there is usually something that will keep the person you are caring for comfortable. Table 1 outlines some of the commonly used opioids given subcutaneously, that assist with pain control. The doctor will make every effort to keep the person as comfortable as possible, though it may take some adjustment to get the medication right. The doctor will leave medication orders (see Example of Medication Order) in the house so that you will know exactly what medications to give, and when to give them. The nurse will also give you further information that will help you understand about the medication(s) so you will be able to give the best medication at the right time for a particular symptom.

Strong pain medications such as opioids are often used to manage pain. Sometimes these same medications can be given for other symptoms like breathing difficulties or coughing.

All strong pain medications have side effects that can usually be managed. Common side effects may include:
- constipation, which is corrected by taking laxatives regularly;
- nausea and/or vomiting, though this is usually only temporary, lasting 5-10 days, and tends to occur when the person first starts to use opioids. The doctor will usually order medications to address this;
- drowsiness or poor concentration, which again usually only lasts for a short while after the person starts to use strong pain medications;
- itchy skin, which, if it occurs, is usually only temporary; and
- dry mouth, which is also common, and can be a side effect of several other medications. Frequent sips of water can help.

Less common side effects, which, if experienced, should be reported immediately to the person’s doctor, include:
- decreased breathing rate;
- jerking of limbs;
- confusion.
Common myths and misconceptions about strong pain medications

Addiction can occur when a person takes strong pain medications like morphine for recreational purposes. There is a misconception that when people have pain and need to use opioids that they too, can become addicted. This concern can lead to under-usage of strong pain medications and can lead to loss of pain control. Concern about physical or psychological dependence is never a reason to delay giving an opioid if it is required.

It is true that a person’s tolerance to a particular drug may increase and more medication may be needed as the illness progresses. This is quite normal. The nurse, in consultation with the doctor, may alter the dose from time to time to ensure that the person remains as comfortable as possible.
### Commonly Used Opioids for Subcutaneous Injection

#### Table 1 – Subcutaneous Pain Medication

<table>
<thead>
<tr>
<th>Name of drug</th>
<th>What is it used for?</th>
<th>How long does it take to work after subcutaneous injection?</th>
<th>Common side effects</th>
</tr>
</thead>
</table>
| **Fentanyl**                        | - pain                      | 20 minutes to take effect; peaks at about 1 hour, then starts to wear off. | - constipation  
- nausea and vomiting*  
- dry mouth  
- itchy skin*  
- confusion*  
- drowsiness*  
*usually temporary |
| **Hydromorphone (Dilaudid)**        | - pain                      | 20 minutes to take full effect and lasts up to 2.5 hours.    | Same as Fentanyl, see above.  
Irritating to the skin: give slowly; your nurse will guide you. |
| **Morphine Sulphate (Morphine)**   | - pain                      | 20 minutes to take effect and peaks around 30-60 minutes.    | Same as Fentanyl, see above. |
| **Oxycodone Hydrochloride (Oxycodone)** | - pain                     | Similar to morphine                                         | Same as Fentanyl, see above. |

**Currently on the Pharmaceutical Benefit Scheme (PBS). This means that the cost of the medication has been subsidised by the Australian Government.**

Special Medication Prescriptions “Authority Scripts”

Some medications used in palliative care may require your doctor to get authority from the government to obtain larger quantities of the drug than are usually prescribed. This authority may reduce the number of times you have to collect scripts from the doctor. Discuss this with your doctor.

Check instructions left for you by the doctor. The nurse will explain to you how often the medication can be given.
Information About Other Common Symptoms
Overview of Common Symptoms

The information provided below is a guide to some of the common symptoms experienced by palliative care patients. It aims to provide simple suggestions that can ease the symptoms and outlines subcutaneous medications that can assist with management. For more comprehensive information about common palliative care symptoms consult your doctor, nurse or pharmacist.

Anxiety
Anxiety is a common symptom, experienced by many people receiving palliative care. At some stage during their illness most people experience anxiety, sadness or depression. The causes for this may be physical, emotional or a combination of both. If a person becomes anxious it can increase other symptoms such as pain, nausea or breathlessness.

It is important to recognise if the person you are caring for becomes anxious, so that you can relieve this with the medication that has been prescribed by the doctor. Table 2 outlines some of the common subcutaneous medications used for anxiety.

Breathlessness
Some people may experience difficulty with breathing. This may be related to disease processes, to anxiety or a combination of both. If this is a new symptom please report it to the doctor or nurse. Often, shortness of breath can contribute to anxiety.

Some strategies that can help a person with breathing difficulties include:
- keeping physical activity to a minimum;
- using an electric fan or encouraging the person to fan themselves;
- opening a window to allow air to flow through the room;
- use of relaxation and breathing techniques. Your nurse may be able to organise a visit from an occupational therapist who can assist with teaching these techniques.

If breathlessness is causing the person discomfort, check the medication order and see what medications can be given to settle this symptom. Refer to Table 2 for commonly used subcutaneous medications that your doctor may have ordered.
Confusion or muddled thinking
Confusion is a common symptom, particularly as palliative diseases progress. The person may appear anxious, restless or agitated, or behave in a way that it is out of character. Some people may think the person is suffering from a mental illness, but this is rarely the case.

Check to see if the person is experiencing any pain, or anything obvious that may be causing the problem. Table 2 outlines some of the common subcutaneous medications used for confusion.

Constipation
This is a common side effect of many disease processes and the use of strong pain medications. It can be corrected with the use of laxatives. Generally all people who require strong pain medications will require laxatives such as Movicol® or Coloxyl and Senna.

Itch
Itchiness is common during the end of life phase and can be caused by many things such as dry skin, allergy, side effects of medications or the disease itself. If left untreated it may cause the person to become restless or anxious. Applying skin creams that are water-based, especially after a bath, will help.

Moist or rattly breathing
Towards the end of life a person's breathing may become moist or rattly. This is due to secretions pooling in the person's airways. This will not cause the person harm but the sound can be distressing for lay caregivers and family. Sometimes repositioning the person onto their side and slightly elevating the head can assist. There are medications that can help to dry up some of the secretions. Refer to Table 2 for commonly used subcutaneous medications that your doctor may have ordered.
Nausea and vomiting

Nausea and/or vomiting can be caused by many disease processes and can also be side effects of strong pain medications. Nausea may be experienced with or without vomiting. 1,2,3,4 It may help if the person rests for about one hour after taking strong pain medications. 3

Nausea and/or vomiting can be treated with medications, given either in a syringe driver/infusion pump or given as breakthrough medication via the cannula or a combination of both. There are several medications that assist with nausea and vomiting – Refer to Table 2 for commonly used subcutaneous medications that your doctor may have ordered.

Restlessness

Restlessness during the end of life is very common. It can appear in the last days or hours of life and is characterised by unsettled or fidgety movements, agitation, distressed vocalising or twitching. The person may pick at the bedclothes, or they may moan or call out, or make a noise each time they breathe. 1,2,3,4

This can be distressing for lay caregivers to see. You may be able to help reduce the restlessness by simply sitting with the person and reassuring them that they are safe and loved. The nurse will also advise you about what medications you can give to assist the person during this time. Refer to Table 2 for commonly used subcutaneous medications that your doctor may have ordered.
### Table 2 – Commonly Used Subcutaneous Medications

<table>
<thead>
<tr>
<th>Name of drug</th>
<th>What is it used for?</th>
<th>How long does it take to work after subcutaneous injection?</th>
<th>Common side effects</th>
</tr>
</thead>
</table>
| Clonazepam (Rivotril) | - restlessness  
- anxiety  
- nerve pain  
- prevention/treatment of seizures**  
(PBS only for seizures) | 15-20 minutes, long acting.                                  | - can irritate the skin; give slowly; your nurse will guide you  
- drowsiness  
- shaky and unsteady movements  
- nausea  
- dry mouth  
- blurred vision |
| Glycopyrrolate (Robinul) | - respiratory secretions                                                            | 15-20 minutes; peaks within 45 minutes.                    | - can irritate the skin; give slowly; your nurse will guide you  
- nausea  
- blurred vision  
- dry mouth |
| **Haloperidol (Serenace)** | - nausea and vomiting  
- confusion and/or restlessness                                                      | 10-15 minutes; stays in the system for 13-35 hours.         | - it is unusual, but Haloperidol can cause excessive, repetitive movements of the face  
- restlessness  
- drowsiness |
<table>
<thead>
<tr>
<th>Name of drug</th>
<th>What is it used for?</th>
<th>How long does it take to work after subcutaneous injection?</th>
<th>Common side effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hyoscine Butylbromide</strong> (Buscopan)</td>
<td>- stomach secretions</td>
<td>Rapid acting and lasts about 2 hours.</td>
<td>- dry mouth</td>
</tr>
<tr>
<td></td>
<td>- stomach cramps</td>
<td></td>
<td>- rash</td>
</tr>
<tr>
<td></td>
<td>- respiratory secretions</td>
<td></td>
<td>- blurred vision</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- constipation</td>
</tr>
<tr>
<td>Hyoscine Hydrobromide (Hyoscine)</td>
<td>- respiratory secretions</td>
<td>30 minutes to take full effect and lasts about 4 hours.</td>
<td>- drowsiness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- dry mouth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- blurred vision</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- rash</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- agitation</td>
</tr>
<tr>
<td>Methotrimeprazine Hydrochloride (Nozinan)</td>
<td>- restlessness</td>
<td>60 minutes to take full effect.</td>
<td>- drowsiness</td>
</tr>
<tr>
<td></td>
<td>- nausea and vomiting</td>
<td></td>
<td>- rash</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- dry mouth</td>
</tr>
</tbody>
</table>

Table 2 – Commonly Used Subcutaneous Medications
**Metoclopramide**  
(Maxolon)  
- nausea and vomiting  
- hiccups  
- 30-60 minutes to take effect and lasts in the system for approximately 2.5-5 hours, may be longer in some patients.  
- can irritate the skin; give slowly; your nurse will guide you  
- restlessness  
- drowsiness  
- dizziness  

Midazolam  
(Hypnoval)  
- restlessness  
- to reduce anxiety  
- seizures  
- 5-10 minutes, short acting.  
- can irritate the skin; give slowly; your nurse will guide you  
- drowsiness  
- forgetfulness  

**Promethazine**  
(Phenergan)  
- nausea and vomiting  
- itchiness  
- 30-60 minutes; lasts in the system for 5-14 hours.  
- can irritate the skin; give slowly; your nurse will guide you  
- dry mouth  
- drowsiness  
- blurred vision  
- dry eyes  

---

**Currently on the Pharmaceutical Benefit Scheme (PBS). This means that the cost of the medication has been subsidised by the Australian Government.**

**Special Medication Prescriptions “Authority Scripts”**

Some medications used in palliative care may require your doctor to get authority from the government to obtain larger quantities of the drug than are usually prescribed. This authority may reduce the number of times you have to collect scripts from the doctor. Discuss this with your doctor.

*Check instructions left for you by the doctor. The nurse will explain to you how often the medication can be given.*

---

**Table 2 – Commonly Used Subcutaneous Medications**

<table>
<thead>
<tr>
<th>Name of drug</th>
<th>What is it used for?</th>
<th>How long does it take to work after subcutaneous injection?</th>
<th>Common side effects</th>
</tr>
</thead>
</table>
| **Metoclopramide** (Maxolon) | - nausea and vomiting  
- hiccups | 30-60 minutes to take effect and lasts in the system for approximately 2.5-5 hours, may be longer in some patients. | - can irritate the skin; give slowly; your nurse will guide you  
- restlessness  
- drowsiness  
- dizziness |
| Midazolam (Hypnoval) | - restlessness  
- to reduce anxiety  
- seizures | 5-10 minutes, short acting. | - can irritate the skin; give slowly; your nurse will guide you  
- drowsiness  
- forgetfulness |
| **Promethazine** (Phenergan) | - nausea and vomiting  
- itchiness | 30-60 minutes; lasts in the system for 5-14 hours. | - can irritate the skin; give slowly; your nurse will guide you  
- dry mouth  
- drowsiness  
- blurred vision  
- dry eyes |
Troubleshooting
a. What happens if I run out of medications?

This is a problem that can cause worry. However, with a little planning you can minimise the likelihood of it occurring. A few suggestions to ensure that you always have enough medication(s) include:

**Make contact with your local pharmacist.**
- Discuss your needs, and the medications you might require from time to time.
- Try to get prescriptions to the pharmacist at least one day before you need them.
- Let your pharmacist know that sometimes the medications will need to be changed or doses altered quickly. See what your pharmacist can advise.

**Check if the pharmacist has an after-hours service.**
- If not, ask whether they can give you another contact in case you need supplies out of business hours.
- Private hospitals in your local area often have an after-hours pharmacy that you may be able to access.

**Check your stock of medication before 9am each day.**
- Make sure you have enough to see you through, especially if a weekend or public holiday is approaching. If you notify the pharmacist before 9am they can usually arrange same-day delivery to the pharmacy.
- Some pharmacies have a home delivery service. Ask your pharmacist.

b. What if the ampoule won’t open?

Sometimes glass ampoules can be a bit tricky to open.
- If you find the neck of the ampoule will not break open easily, simply score it with a nail file, or a blunt knife.
- Some ampoules have a ‘dot’ located on the neck of the ampoule. If so, face the dot away from you as you break the ampoule open. The ampoule should then open with ease and minimal pressure.
c. What if the injection is painful when I give it?

Subcutaneous injections can sometimes cause mild discomfort when being given.
- Some medications do sting the person’s tissues more than others. Giving the injection slowly can help to minimise the stinging.
- Cold injections can cause pain and irritation. To overcome this, just gently rub the filled syringe between your palms for a couple of seconds. This will warm up the solution enough to stop it stinging and irritating the person’s tissues.

Check the site for redness.
- If the site is, or becomes red (inflamed) and painful when giving the injection the cannula site may need changing. Check with your nurse.

d. What do I do if the injection site is leaking?

Sometimes you may notice that the medication is leaking out.
- See if you can locate where the leakage is coming from.
- If a syringe driver or infusion pump is in use, first check the syringe connection point.
- Try tightening all the connections.
- Check if the leakage is coming from the insertion site. This usually indicates that the cannula site needs to be changed. If there is a second cannula in place, you could use that one to give the injection. If this is not successful, contact your nurse.
Reference List


5. Facts about morphine and other opioid medications used in palliative care, Palliative Care Australia http://www.palliativecare.org.au


7. Centre for Palliative Care Research and Education 2006 Guidelines for Syringe Driver Management in Palliative Care.


## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analgesic</td>
<td>A drug or medicine given to reduce pain. Analgesics are sometimes referred to as pain medications. There are many different types of analgesic medications available in both prescription and over the counter preparations.</td>
</tr>
<tr>
<td>Bony pain</td>
<td>Pain experienced in a bone.</td>
</tr>
<tr>
<td>Breakthrough medications</td>
<td>Breakthrough medications are medications used to treat breakthrough symptoms. Breakthrough symptoms are called that because they ‘breakthrough’ a regular medication schedule.</td>
</tr>
<tr>
<td>Constipation</td>
<td>Difficulty passing a bowel motion or absence of any bowel motions for three days.</td>
</tr>
<tr>
<td>Delirium</td>
<td>A fluctuating state of confusion and rapid changes in brain function sometimes associated with hallucinations (seeing things that are not there) and restlessness. Symptoms may include inability to concentrate and disorganised thinking, evidenced by rambling, irrelevant, or incoherent speech.</td>
</tr>
<tr>
<td>Incidental pain</td>
<td>Pain that occurs in association with a specific activity, e.g. bed sponging, turning, getting out of bed.</td>
</tr>
<tr>
<td>Laxative</td>
<td>A food or drug that stimulates the emptying of the bowel.</td>
</tr>
<tr>
<td>Lay caregiver/lay</td>
<td>Anyone responsible for, or taking part in, the provision of care for another person, including family members, friends and guardians. A lay caregiver in this document refers to an unpaid carer and can also be known as ‘informal lay caregiver’.</td>
</tr>
<tr>
<td>Myoclonic movement</td>
<td>A sudden twitching of muscles or parts of muscles, without any rhythm or pattern.</td>
</tr>
<tr>
<td>Term</td>
<td>Meaning</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Opioid</td>
<td>A drug that reduces pain, alters mood and behaviour, and usually causes some drowsiness. Natural and synthetic opioids are used in medicine to control pain.</td>
</tr>
<tr>
<td>Nerve pain</td>
<td>Pain that results from damage to the nervous system. The damage can be to the brain and/or spinal cord, or the peripheral nervous system, ie. nerves outside the brain and spinal cord.</td>
</tr>
<tr>
<td>Palliative care</td>
<td>Care provided for people of all ages who have a life limiting illness, with little or no prospect of cure, and for whom the primary treatment goal is quality of life.</td>
</tr>
<tr>
<td>Soft organ and body tissue pain</td>
<td>Pain experienced within an organ. The organ can become enlarged with tumour bulk or congestion.</td>
</tr>
<tr>
<td>Subcutaneous cannula</td>
<td>A thin plastic tube that is inserted just under the skin for the purpose of administering medications. The cannula is also known as ‘Saf-T-Intima™’.</td>
</tr>
<tr>
<td>Subcutaneous injection via a cannula</td>
<td>A subcutaneous injection given into a cannula, which allows medication to be given directly into subcutaneous tissues. The medication is then absorbed into the bloodstream.</td>
</tr>
<tr>
<td>Symptom management</td>
<td>Symptom management in palliative care refers to care given to treat unwanted experiences such as pain, shortness of breath, nausea, anxiety, confusion or terminal restlessness associated with end stage disease.</td>
</tr>
<tr>
<td>Terminal restlessness</td>
<td>Terminal restlessness is a common symptom at the end of life and generally appears in the last days of life. The person may show symptoms such as an inability to relax, picking at clothing or sheets, confusion and agitation, and trying to climb out of bed.</td>
</tr>
</tbody>
</table>
Documentation Forms and Instruction Guides
## Example of Caregiver Daily Medication Diary

<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Medication</th>
<th>Dose</th>
<th>Reason for Injection</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ / ___am</td>
<td></td>
<td></td>
<td>□ Pain</td>
</tr>
<tr>
<td>___pm</td>
<td></td>
<td></td>
<td>□ Nausea</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Restlessness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Breathlessness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Other</td>
</tr>
<tr>
<td>/ / ___am</td>
<td></td>
<td></td>
<td>□ Pain</td>
</tr>
<tr>
<td>___pm</td>
<td></td>
<td></td>
<td>□ Nausea</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Restlessness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Breathlessness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Other</td>
</tr>
<tr>
<td>/ / ___am</td>
<td></td>
<td></td>
<td>□ Pain</td>
</tr>
<tr>
<td>___pm</td>
<td></td>
<td></td>
<td>□ Nausea</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Restlessness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Breathlessness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Other</td>
</tr>
<tr>
<td>/ / ___am</td>
<td></td>
<td></td>
<td>□ Pain</td>
</tr>
<tr>
<td>___pm</td>
<td></td>
<td></td>
<td>□ Nausea</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Restlessness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Breathlessness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Other</td>
</tr>
<tr>
<td>/ / ___am</td>
<td></td>
<td></td>
<td>□ Pain</td>
</tr>
<tr>
<td>___pm</td>
<td></td>
<td></td>
<td>□ Nausea</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Restlessness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Breathlessness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Other</td>
</tr>
<tr>
<td>Pain/Symptom Score Before (0-10)</td>
<td>Pain/Symptom Score After (0-10)</td>
<td>Comments</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Example of Subcutaneous Infusion Medication Order (as per below)**

![Medication Order Form]

**SUBCUTANEOUS MEDICATION INFUSION ORDER**

<table>
<thead>
<tr>
<th>Service:</th>
<th>(Affix client identification label here)</th>
</tr>
</thead>
<tbody>
<tr>
<td>URN / Client ID:</td>
<td>11224</td>
</tr>
<tr>
<td>Family name:</td>
<td>Health</td>
</tr>
<tr>
<td>Given names:</td>
<td>Community</td>
</tr>
<tr>
<td>Date of birth:</td>
<td>01/01/1961</td>
</tr>
<tr>
<td>Sex</td>
<td>☑ Male ☐ Female</td>
</tr>
</tbody>
</table>

**Date:** 31/01/2009

**From (prescriber name, service and contact details):**

Dr Bloggs  
Expert Palliative Care Service  
17 McKechnie Drive  
Six Mile Plateau Q 6621

**To:**

Community Nurse  
Caring Street  
Homesworth Q 6621

**Allergies:**

Nil known

**Please administer the following medication**

**Medications in Infusion Device - Per 24 hours**

<table>
<thead>
<tr>
<th>Drug name</th>
<th>Dose</th>
<th>Route</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine</td>
<td>20mg</td>
<td>S/C</td>
<td>Pain</td>
</tr>
<tr>
<td>Clonazepan</td>
<td>2mg</td>
<td>S/C</td>
<td>Restlessness</td>
</tr>
<tr>
<td>Maxolon</td>
<td>10mg</td>
<td>S/C</td>
<td>Nausea</td>
</tr>
</tbody>
</table>

**PRN / Other Medications**

<table>
<thead>
<tr>
<th>Drug name</th>
<th>Dose</th>
<th>Freq.</th>
<th>Route</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maxolon</td>
<td>10mg</td>
<td>PRN/6 hourly</td>
<td>S/C</td>
<td>Nausea</td>
</tr>
<tr>
<td>Morphine</td>
<td>2.5mg</td>
<td>PRN</td>
<td>S/C</td>
<td>Pain</td>
</tr>
<tr>
<td>Midazolam</td>
<td>2.5mg</td>
<td>PRN</td>
<td>S/C</td>
<td>Restlessness</td>
</tr>
</tbody>
</table>

**Prescriber’s name:** Dr Bloggs  
**Prescriber’s designation:** Medical Officer  
**Prescriber’s signature:** [Signature]

**Order is not valid unless form is printed and signed**

If sending to the service provider by facsimile, please **post** the original ASAP.

A facsimile copy of a medication order is a legal document; however it is best practice to encourage the medical officer to send the original copy of the medication order in the post. ([Guidelines for the Handling of Medication in Community Based Palliative Care Services in Queensland (July 2008)](http://example.com))
Step by Step Guide
Opening and Drawing Up from an Ampoule

Instructions

1. Wash your hands with soap and water and dry well.

2. Assemble the equipment in a clean container.

3. Attach blunt drawing up needle to luer-lock syringes.
   - Take the syringe out of the packet
   - Put the needle onto the syringe using a twisting action until secure

4. Opening an ampoule:
   a) For a plastic ampoule:
      - Simply twist the top of the ampoule until it is removed.
   b) For a glass ampoule:
      - Hold the ampoule upright with the pointed end at the top
      - Check all fluid removed from neck of ampoule
      - If not, gently flick the top of the ampoule until the fluid runs back into it
      - If there is a dot on the ampoule ensure the dot is facing away from you
      - Hold the ampoule in one hand, using the other hand to snap the neck of the ampoule away from you.

5. Drawing up medication from an ampoule:
   - Hold the ampoule in your non-dominant hand upside down at a slight angle or in a position that is comfortable for you such as on a table
   - The medication should not come out of the ampoule if you tip it upside down
   - Insert the needle into the ampoule
   - Draw the medication into the syringe by slowly pulling back on the plunger of the syringe
   - Once fluid is in the syringe, take the needle out of the ampoule.

6. Dispose of the ampoule directly into the sharps or hard walled container.

7. Point the needle to the ceiling, flicking the syringe with your index finger to get all air bubbles in the syringe to move to the top. Slowly push the plunger of the syringe upwards until you have the correct dose/amount as instructed by the doctor/nurse.
Preparing and Giving a Subcutaneous Injection
10 Step Plan – No Needle Technique

1. Wash your hands with soap and water and dry well.

2. Assemble the equipment in a clean container. You will need:
   - Medication ampoules as well as normal saline for flushing
   - Luer-lock Syringes
   - Blunt drawing up needle(s) and coloured cap(s)
   - Labels
   - Alcohol wipe (optional)
   - Sharps or hard walled container.

3. Attach the blunt drawing up needle to the syringe.
   - Take the syringe out of the packet
   - Put the needle onto the syringe using a twisting action until secure

4. Open the plastic or glass ampoule.
   - Refer to the guide ‘Opening and drawing up from an Ampoule’

5. Drawing up medication from an ampoule:
   - Place the ampoule in a position that is comfortable for you, such as on a table, or turn the ampoule upside down. The medication should not come out of the ampoule when turned upside down
   - Insert the needle into the ampoule
   - Draw up the medication by slowly pulling back on the plunger of the syringe
   - Once the medication is removed from the ampoule, hold the syringe with the needle pointing upright
   - Flick the syringe with your finger to get all the air bubbles to the top, then slowly push the plunger up to expel the air bubbles from the syringe
   - Slowly push the plunger of the syringe upwards until you have the correct dose/amount as instructed by the doctor/nurse
   - Label syringe(s)
   - Leave blunt needle on or remove blunt needle and replace with red cap
   - Dispose of the ampoule directly into the sharps or hard walled container.

Developed by Brisbane South Palliative Care Collaborative with funding from the Australian Government Department of Health and Ageing - March 2016
6. Give the injection into the cannula:

- Take the prepared medication syringe(s) and normal saline flush in a clean container.
- Take the coloured caps off the end of the syringe.
- Next pick up the cannula, and push the syringe into the blue area (see picture), using a twisting or screwing motion until the syringe is securely attached to the cannula.
- Push the plunger in until all the medication has been given.
- Remove the syringe, use a twisting motion to unscrew the syringe.
- Place syringe in bin.
- Repeat the process by flushing the line with 0.3mls of normal saline (this allows the patient to have full effect of the medication).

7. Check the injection site again for:

- Redness
- Tenderness
- Swelling
- Leakage.

8. Record the medication(s) given and check later that they have worked.

9. Safe storage and disposal of medication(s):

- Store medication(s) in a container in a cool place away from children and away from the view of the general public.
- Store prepared labelled syringes in an airtight container in the fridge, either in a compartment in the door or in an out of the way position in the fridge; or as directed by your nurse.
- Store sharps and hard walled container out of reach as directed by your nurse.
- It is important to dispose safely of unused medication(s). Return unused medication(s) to your local pharmacist when they are no longer required.

10. Contact your nursing service/doctor if you have any concerns.

Contact details: ________________________________

Developed by Brisbane South Palliative Care Collaborative with funding from the Australian Government Department of Health and Ageing - March 2016
Preparing and Giving a Subcutaneous Injection
10 Step Plan – Using a Blunt Needle Technique

1. Wash your hands with soap and water and dry well.

2. Assemble the equipment in a clean container. You will need:
   - Medication(s) ampoule(s) as well as normal saline for flushing
   - Luer-lock Syringes
   - Blunt drawing up needle(s) and small blunt needles
   - Labels
   - Alcohol wipe (optional)
   - Sharps or hard walled container.

3. Attach the blunt drawing up needle to the Luer-lock syringe.
   - Take the Syringe out of the packet
   - Put the needle onto the syringe using a twisting action until secure

4. Open the plastic or glass ampoule.
   - Refer to the guide ‘Opening and drawing up from an Ampoule

5. Drawing up medication from an ampoule:
   - Place the ampoule in a position that is comfortable for you, such as on a table, or turn the ampoule upside down. The medication should not come out of the ampoule when turned upside down
   - Insert the needle into the ampoule
   - Draw up the medication by slowly pulling back on the plunger of the syringe
   - Once the medication is removed from the ampoule, hold the syringe with the needle pointing upright
   - Flick the syringe with your finger to get all air bubbles to the top, then push the plunger up to expel the air bubbles from the syringe
   - Slowly push the plunger of the syringe upwards until you have the correct dose/amount as instructed by the doctor/nurse
   - Label syringe(s)
   - Dispose of the ampoule directly into the sharps or hard walled container.

Developed by Brisbane South Palliative Care Collaborative with funding from the Australian Government Department of Health and Ageing - March 2016
6. Give the injection into the cannula:

- Take the prepared syringe(s) in a clean container, and a sharps or hard walled container to the person
- Rub the syringe between your hands if it has been in the fridge, as this will minimise stinging when injecting
- Check the injection site
- Remove the drawing up needle and dispose of it into the sharps or hard walled container
- Place the blunt plastic needle on the end of the syringe using a twisting motion to secure it
- Swab the white rimmed cap at the end of the cannula with an alcohol wipe (optional)
- Push the blunt plastic needle into the centre of the white rimmed cap
- Slowly push the plunger of the syringe until the barrel is empty
- Remove the needle and dispose of it into the sharps or hard walled container
- Repeat the process as necessary. Flush the cannula with 0.5ml sterile normal saline.

7. Check the injection site for:

- Redness
- Tenderness
- Swelling
- Leakage.

8. Record the medication(s) given and check later that they have worked.

9. Safe storage and disposal of medication(s):

- Store medication(s) in a container in a cool place away from children and away from the view of the general public
- Store prepared labelled syringes in an airtight container in the fridge, either in a compartment in the door or in an out of the way position in the fridge; or as directed by your nurse
- Store sharps of hard walled container out of reach as directed by your nurse
- It is important to dispose safely of unused medication(s). Return unused medication(s) to your local pharmacist when they are no longer required.

10. Contact your nursing service / doctor if you have any concerns.

Contact details: ________________________________

Developed by Brisbane South Palliative Care Collaborative with funding from the Australian Government Department of Health and Ageing - March 2016