



# Instruction Guidelines

for the

**'Caring Safely at Home'**

**Resources and  
Educational Framework**



**2011**

## Background

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Palliative care services strive to support patients to live and to die within their setting of choice, usually home, with optimal symptom control and with a pattern of care that is also supportive of caregivers. The likelihood of patients remaining symptomatically well managed at home usually depends upon input from lay carers who may be required to administer subcutaneous medications. Bereaved carers report their ability to provide injections adds value to patient care; nonetheless many report the need for education and resources to assist them to confidently manage this aspect of their care giving role.<sup>1</sup>

The Caring Safely at Home (CSAH) project was managed by the Brisbane South Palliative Care Collaborative (BSPCC) in partnership with the Centre for Palliative Care Research and Education (CPCRE) and Blue Care with funding from the Australian Government Department of Health and Ageing (DoHA) under the *Supporting Carers of People Requiring Palliative Care at Home* initiative.<sup>2</sup> The purpose of the project was to enhance the capacity and confidence of lay carers to help palliative patients to remain at home, with timely access to symptom control, by teaching them to safely and competently deliver subcutaneous medications.

The CSAH project has resulted in the development of a suite of resources that can be used within a standardised educational framework to ensure that lay carers can manage subcutaneous injections. Central to the framework is a time effective one-on-one educational session delivered by registered nurses (RNs) to lay carers in the home setting. Mindful of the time required to teach lay carers and variability in adult learning styles, the resources have been separated into mandatory and non-mandatory categories that can be delivered at the discretion of the RN and lay carer.

Results from the CSAH project demonstrated that if lay carers are supported with quality resources and standardised information, they can confidently and competently manage symptoms that require the delivery of subcutaneous medications to home-based palliative care patients. Further, lay carers' confidence with symptom management is not diminished when they, rather than a health professional, such as an RN or pharmacist, prepare the injection. Not surprisingly, when lay carers are well educated regarding symptom management, their levels of confidence increase as they gain experience with preparing and administering subcutaneous injections.

The following sections describe the components of the standardised educational framework and the resources developed to support lay carers in their administration of subcutaneous medications.

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## Section 1: Components of the Standardised Educational Framework

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It is recognised that any educational package delivered by RNs to lay carers needs to be flexible. The educational framework must be able to be tailored to the differing geographical environments and jurisdictional requirements of individual health care services operating within Queensland. However, to ensure consistent information is provided to lay carers certain core components of the framework need to be standardised.

The following list includes five components considered essential for teaching lay carers to deliver subcutaneous medications.

In the one-on-one education session RNs should:

### **1. Teach and demonstrate to lay carers how to prepare and administer subcutaneous injections**

It is well recognised that palliative patients are inherently unstable and require timely access to palliative medications as soon as symptoms emerge. Consequently lay carers should be taught the skills necessary to prepare and administer a subcutaneous injection. It is expected that every nurse will teach injecting skills according to their own educational style. Irrespective of style, the content taught should include the following:

- Hand washing
- Assembling the necessary equipment safely
- Preparing the needle and syringe
- Opening an ampoule
- Drawing up medication from an ampoule
- Giving an injection into a cannula
- Checking cannula site
- Recording medication in the caregiver daily medication diary
- Safe storage and disposal of medications
- Contact details of nursing service

### **2. Explain the value of a blunt needle or no needle technique**

To maximise patient/lay carer and staff safety and reduce the incidence of needle stick injury, it is considered best-practice to use a blunt needle or a no needle technique when administering subcutaneous injections.

### **3. Explain the rationale for the insertion of a second subcutaneous cannula**

On occasion a subcutaneous cannula e.g. Saf-T-Intima can become blocked. The insertion of a second cannula ensures that the patient can still have timely access to symptom control medications, even when a nurse is not immediately available to change the cannula.

**4. Explain the need to flush the static cannula with 0.3-0.5mls normal saline after subcutaneous injection(s) given**

Some subcutaneous medication doses are delivered in very small volumes; therefore flushing the cannula after the last injection ensures the palliative patient receives the complete dose of prescribed medications.

**5. Assess that the carer is competent to safely prepare and administer subcutaneous injections**

RNs have a legal obligation to ensure that a lay carer taught to prepare and administer a subcutaneous injection(s) is competent to do so. Competency can be demonstrated in the use of the Competency Checklist.

## Section 2 – Resources

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The resources developed by the CSAH project have been separated into mandatory and non-mandatory categories. The resources can be delivered at the discretion of the RN and lay carer. It is not expected that every lay carer will use all of the resources; a range of resources was developed to accommodate differing adult learning styles.

### Mandatory Resources

All the mandatory resources should be introduced by the RN in the one-on-one educational session.

- **Illustrated step-by-step charts** that provide a simple guide for lay carers to follow, when required to prepare and administer subcutaneous injections. There are two options available when using this guide depending on the preference of individual services; a blunt needle or no needle technique. Option 1 ‘Preparing and Giving a Subcutaneous Injection 10 Step Plan – Using a Blunt Needle Technique’ and option 2 ‘Preparing and Giving a Subcutaneous Injection 10 Step Plan – No Needle Technique’.
- A **practice demonstration injecting device** that includes a cannula inserted into stoma-type adhesive dressing that mimics a person’s skin and other equipment involved with subcutaneous injections (eg. glass and plastic ampoules, blunt drawing-up needles and syringes). This tool is useful for both the RN and the lay carer. The RN can use the kit as a teaching aid during education sessions and the lay carer as a practice kit after they have had the education.



- **Colour-coding medication labels** for labelling prepared syringes in the community setting. The colour-coding system adopts the Australian and New Zealand Standard – *User-applied labels for use on syringes containing drugs used during anaesthesia*.<sup>3</sup> (Table 1 – Colour-coding Legend – Medication Classification). This allows carers to easily distinguish between the different subcutaneous medications with the aim of reducing carer stress and the incidence of medication error. Labels must remain clear and legible. All injectable medications drawn up in syringes should be labelled IMMEDIATELY. The label is to be placed parallel to the long axis of the syringe and from the needle end of the syringe to the plunger.<sup>4</sup> Ensure the label is flat when attached to the syringe, so it does not interfere with the barrel clamp or obscure the measurement gradient.

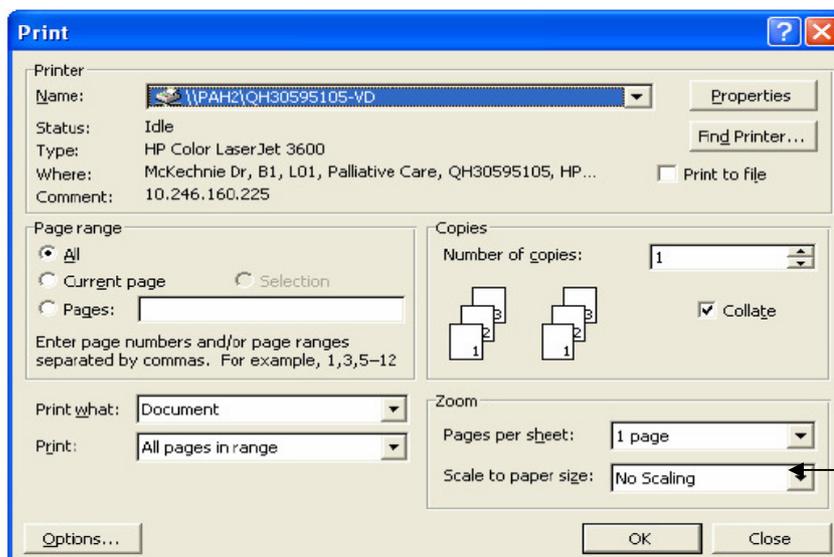


**Important Note:**

The labels, included in this package, can be printed using *Premium Laser Labels*, 33 labels per sheet. Each printer will be different, however to ensure alignment, it is recommended that when printing you follow these simple tips.

Recommended printer settings:

- set the printer to ‘manual feed’ tray
- choose from the drop down list in the scale to paper size ‘no scaling’



- A **colour-coded guide for medication (fridge magnet)** consistent with the syringe label colour-coding system, allows the lay carer to match relevant medications with symptoms, ensuring the right medication is given for the right symptom. As pre-prepared syringes are stored in the fridge, this colour-coded guide for medications can be laminated or professionally printed as a fridge magnet, and placed on the fridge, providing another fail-safe to decrease the possibility of medication errors.
- A **caregiver daily medication diary** that allows lay carers to document aspects of medication administration, including date, time, medication type, reason for administration and symptom assessment score pre and post administration of medication to measure its effectiveness. This allows the registered nurse and/or general practitioner to monitor the daily progress of symptom management.
- A **competency checklist** administered by the RN at the completion of the one-on-one education session. This checklist provides the RN with a mechanism to confirm that competency has been reached by the lay carer to safely prepare and inject subcutaneous medications. This competency is a requirement under the *Queensland Health (Drugs and Poisons) Regulation 1996*.

**Table 1: Colour-Coding Legend – Medication Classification**

Medication Classification	Colour
Narcotics	Blue
Tranquillisers	Orange
Anticholinergic Agents	Green
Major Tranquillisers	Salmon
Antiemetics	Salmon
Induction Agents	Yellow
All other classifications	White

**Reference:** Adapted from Australian and New Zealand Standard – User-applied labels for use on syringes containing drugs used during anaesthesia 2001.

## Non - Mandatory Resources

- A **medication booklet** ‘Subcutaneous Medications and Palliative Care: A guide for caregivers’. This booklet covers topics such as frequently asked questions, importance of symptom control, management of common palliative symptoms, commonly used subcutaneous medications and injecting processes. It includes a brief overview addressing some of the common myths surrounding opioid usage.
- A **DVD** ‘Palliative Subcutaneous Medication Administration: A guide for carers’. This 19 minute DVD, which can be viewed section by section or in its entirety, demonstrates aspects of subcutaneous medication preparation and administration, safe storage and disposal of medications and includes a troubleshooting guide.
- Additional **illustrated step-by-step charts**. These one-page documents provide a simple guide for lay carers to follow when required to prepare and administer subcutaneous injections. ‘Opening and Drawing Up from an Ampoule’, ‘How to Give a Subcutaneous Injection via a Cannula’ – Using a Blunt Needle Technique or Using a No Needle Technique.

## Resources for the RN:

- A **lanyard**, developed for RNs provides easy reference to the colour-coding medication legend as well as the principles of the standardised education framework.
- A **‘RN Medication Classification Colour-Coded Legend’** poster has also been developed which outlines the symptoms, drug classifications, examples and colour-coded legend.

## References:

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1. Israel, F., Reymond, E., Slade, G., Menadue, S., Charles, M. Lay carers' perspectives on injecting subcutaneous medications at home. *International Journal of Palliative Nursing* (2008); 14(8): 390-395.
2. Healy, S., Israel, F., Charles, M., Reymond, L. *Supporting Carers of People Requiring Palliative Care at Home* Final Report. Australian Government Department of Health and Ageing. May 2010.
3. Australian Standard <sup>TM</sup>, User-applied identification labels for use on fluid bags, syringes and drug administration lines, Standards Australia International Ltd. 2001.
4. National Recommendations for User-applied Labelling of Injectible Medicines, Fluids and Lines Educational Support Explanatory Notes – Copyright NSW Therapeutic Advisory Group Inc. 2010.