Fylde Coast guidance on community symptom management in the last days of life where there are shortages of syringe drivers or insufficient healthcare professionals to facilitate frequent subcutaneous injections (during Covid-19 outbreak)

Scope of Policy

1. Alternative medications for use in the event of shortages of 4 key drugs in use (Morphine, Glycopyrronium, Levomepromazine and Midazolam).
2. Non pharmacological means of symptom control and other considerations.
3. One page summary of symptom control for patients with Covid-19 and expected poor prognosis.
4. A care plan for the pharmacological management of symptoms **in the last days of life where a syringe driver would normally be needed, irrespective of diagnosis, where patient is no longer able to tolerate oral medications and symptoms not managed with infrequent 'as required' medication.**

These guidelines assume that the patient is receiving all appropriate supportive treatments and that correctable causes of the symptoms have been managed appropriately. Examples include:

- Antibiotic treatment for a superadded bacterial infection may improve fever, cough, breathlessness and delirium
- Optimising treatment of comorbidities (e.g. COPD, heart failure may improve cough or breathlessness)

SAFE PRESCRIBING IS KEY AND IF IN DOUBT OR CONCERN THEN PLEASE CONTACT THE TRINNITY PALLIATIVE CARE TEAM ON:

01253 952 566 (Community teams 24hrs/day)

Concerns have been raised regarding the provision of end of life care across the Fylde Coast given the increasing demand on all services in light of the Covid-19. It is anticipated that all services will face a significantly increased workload in an environment where resources are increasingly stretched.

Good practice in providing symptom control at end of life is described in the *Clinical Practice Summary: Guidelines on consensus to managing Palliative Care Symptoms* (NHS North West Coast Strategic Clinical Network 2017), which is available on the Blackpool Teaching Hospitals intranet site and has been widely disseminated in the community.

https://www.nwcscnsenate.nhs.uk/files/4615/0661/0362/Clinical_Practice_Summary_-_Lancashire__South_Cumbria_Consensus_Guidance.pdf

Further guidance has recently been released by the Northern Care Alliance NHS Group and the Association for Palliative Medicine covering the symptom based management of Covid-19 **in secondary care**, *COVID-19 and Palliative, End of Life and Bereavement Care in Secondary Care: Role of the Specialty and guidance to aid care.*

https://apmonline.org/wp-content/uploads/2020/03/COVID-19-and-Palliative-End-of-Life-and-Bereavement-Care-22-March-2020.pdf

This Fylde coast guideline is intended to complement these guidelines and offer **specific community focussed advice**. Current practice relies on the use of the subcutaneous syringe driver in the event of poorly controlled symptoms not adequately managed by intermittent as required SC injections. A significant limiting factor in the provision of good symptom management at end of life is the supply of syringe drivers and it is anticipated that there will not be sufficient supply to meet local needs. This guideline is designed to inform the management of symptoms at end of life in the event that subcutaneous syringe drivers are not available or there are insufficient staff available to facilitate their use. **This guideline is pertinent for all patients in last days of life irrespective of diagnosis or Covid-19 status.**

If a syringe driver is available but any of the four core drugs in use locally (Morphine, Levomepromazine, Glycopyrronium and Midazolam) are not available then alternatives, their uses and dosing are described in the *Clinical Practice Summary* but are summarised below.

Table 1: Core Medications and alternatives to use in syringe drivers

Symptom	1st line medication as per *Clinical Practice Summary*	2nd line alternative	3rd line alternative
Pain	**Morphine**	Oxycodone	Alfentanil
Nausea and vomiting	**Levomepromazine**	Haloperidol	Cyclizine
Respiratory secretions	**Glycopyrronium**	Hyoscine Butylbomide	Hyoscine Hydrobromide
Agitation/terminal restlessness	**Midazolam**	Levomepromazine	Haloperidol

Advance Care Planning

Background

The UK population is aging and many more people are living with chronic illness and multiple comorbidities. A third of all patients admitted unexpectedly to hospital are in the last year of life.

Advance Care planning is of value at any time for palliative and frailer patient with underlying health conditions. The current risk of an acute deterioration from Covid-19 infection makes it even more important.

In the event of an acute deterioration from Covid-19, NICE Guidance (March 2020) indicates patients with a frailty scale score of ≥5 (see appendix) have an uncertain benefit from critical organ support.

Consider

Open, honest and sensitive conversations should take place regarding ceilings of treatment and overall goals of care with all palliative and frailer patients (where appropriate). All patients with terminal illness in last 6 months of life have a frailty scale score of 9, many will not benefit from critical organ support. Acknowledging this and discussing what is important to the patient and family may inform decisions around ceilings of treatment.

This enables those with significant potential to recover to receive the appropriate level of care and that those unlikely to survive an acute deterioration (from whatever cause) receive good, appropriate, individualised and patient centred care at end of life.

Consider a DNACPR in line with national guidance

Consider discussions around preferred place of death and care

Sensitively explore ceilings of treatment with patients and families

Example treatment levels from 'Coordinate My Care', a London based EPaCCs

Level 1: Full active Treatment including CPR

Level 2: Full active treatment including acute hospital settings but not CPR

Level 3: Treatment of an reversible conditions including acute hospital settings) but not for CPR or ventilation

Level 4: Treatment of any reversible conditions but only in home/nursing home/hospice setting

Level 5: Symptomatic treatment only: Keep comfortable

Document in Clinical notes and EPaCCS (Electronic Palliative Care Coordination system)

Non pharmacological options for symptom control

Breathlessness

- Positioning (various advice depending on position: sit upright, legs uncrossed, let shoulders droop, keep head up; lean forward)
- Relaxation techniques
- Reduce room temperature
- Cooling the face by using a cool flannel or cloth.
- **Portable fans not recommended for use** in health and social care facilities (Hospitals and Nursing homes etc) due to potential risk of cross infection but have role in patients own home.

Cough

- Humidify room air where possible
- Oral fluids
- Honey and lemon in warm water
- Suck cough drops/hard sweets
- Elevate the head when sleeping
- Avoid smoking

Delirium

- Identify and manage the possible underlying cause or combination of causes. Ensure effective communication and reorientation (for example explaining where the person is, who they are and what your role is) and provide reassurance for people diagnosed their a delirium
- Consider involving family, friends and carers to help with this.
- Ensure that people at risk of delirium are cared for by a team of healthcare professionals who are familiar to the person at risk, if possible.
- Avoid moving people between wards or rooms unless absolutely necessary.
- Ensure adequate lighting.

Fever

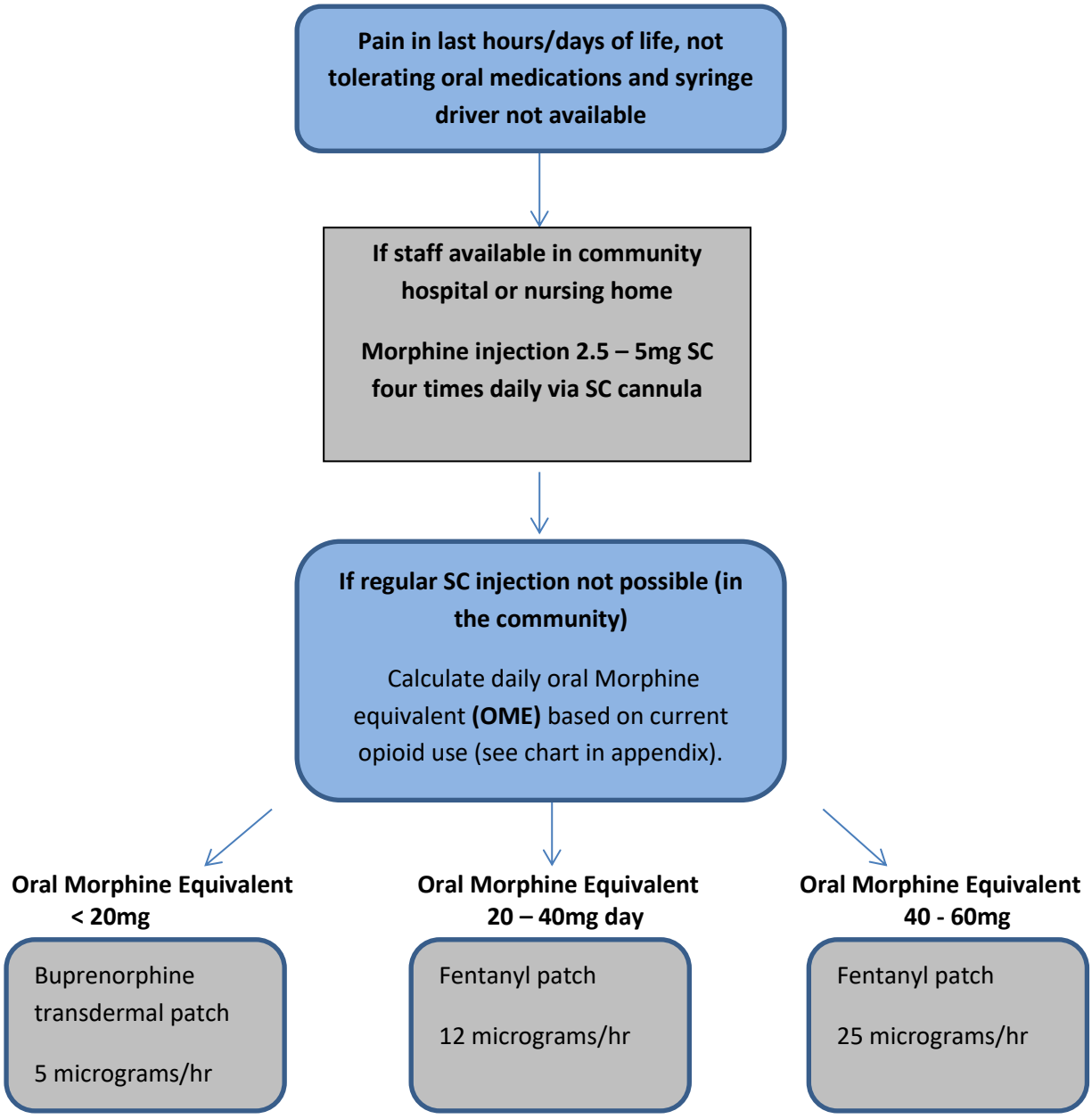
- Reduce room temperature
- Wear loose clothing
- Cooling the face by using a cool flannel or cloth.
- **Portable fans not recommended for use** in health and social care facilities due to potential risk of cross infection but may have role in own home.

Symptom control for patients with suspected Covid-19 and expected poor prognosis

Symptom	Treatment	PRN rescue dose
Fever	Paracetamol 1 g oral or PR (IV route may be possible in hospital) every 4-6 hours (max x 4/day) Non drug measures to manage fever	Not applicable
Episodic Breathlessness/Cough	Non drug measures for breathlessness Oral Morphine Solution 2.5-5 mg oral if can swallow as needed four hourly for cough/SOB **OR** Morphine 1.25 to 2.5mg subcut as needed four hourly for cough/SOB Simple linctus 5-10mg PO QDS for cough	As treatment
Persistent breathlessness and unable to swallow and syringe driver not available	Morphine 2.5 to 5mg subcut four times daily by SC cannula (if staff available in hospital community hospital or nursing home) If regular SC injections not possible see separate breathlessness flowchart for advice on starting regular opioid transdermal patch.	Morphine 2.5 -5mg subcut as needed 4hrly If distressed: Midazolam 2.5 - 5mg subcut as needed 2hrly **OR** Buccal midazolam 2.5 –5mg as needed 2 hrly **OR** Lorazepam 500 microgram sublingual as needed 1hrly
Pain	See separate flowchart or discuss with palliative care team.	
Delirium	Non drug measures for delirium Midazolam 2.5-5mg SC PRN 1-2hrly **OR** Lorazepam 500 micrograms sublingual 1-2hrly	See refractory symptoms or flowchart
Refractory symptoms E.g. refractory delirium at end of life, massive haemoptysis	Midazolam injection 2.5 – 5mg subcut four times daily (if staff available in hospital, community hospital or nursing home) **OR** Buccal midazolam 2.5-5mg four times daily **OR** Levomepromazine 12.5-25mg subcut as needed six hourly (Max 50mg/24hrs) – single dose may be adequate **OR** Massive Haemoptysis: Midazolam injection SC/IM - 10mg (IM route preferable) Buccal Midazolam – 10mg	Midazolam 2.5-5mg subcut as needed 2hrly **OR** Buccal midazolam 2.5 – 5mg as needed 2hrly **OR** Lorazepam 500 micrograms sublingual as needed 1hrly
General measures	**<u>If help needed contact Trinity specialist palliative care on 01253 952 566</u>** Family support (patients are isolated and family members may be in quarantine) Management of the body after death: notify to funeral services COVID positivity	

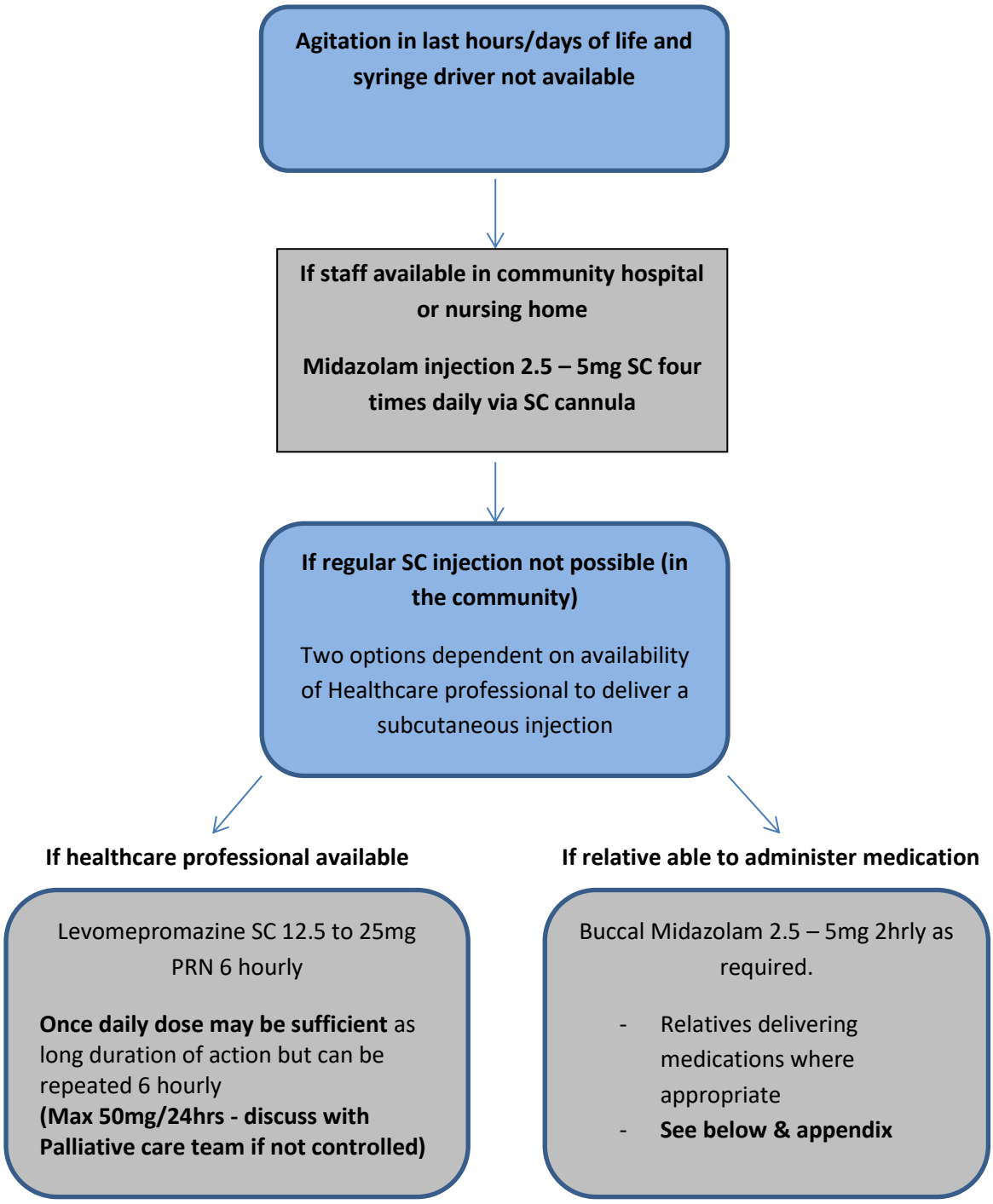
Symptom management flowchart for last days of life

Pain in the last days of life



- **Buprenorphine available as a twice-weekly or weekly patch**
- **If background Oral Morphine Equivalent is higher than 60mg, guidance should be sought from the Trinity palliative care team: 01253 952 566**
- **Limitations of transdermal route are slow onset of analgesic effect (8-12hours+). Management of pain whilst waiting for effect should be considered with consideration of concurrent SC dose of opioid (normally 1/6 of background opioid) on application of patch, if possible.**

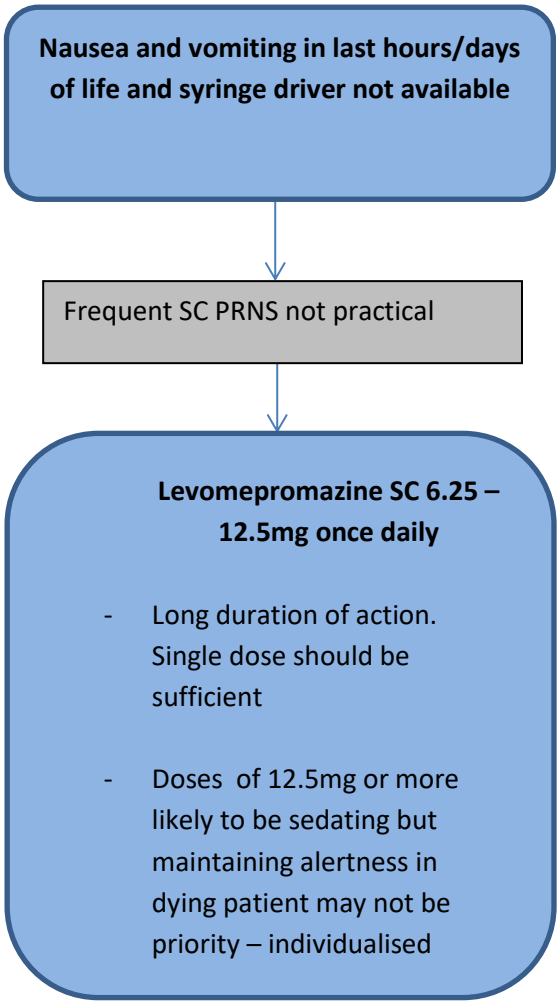
Agitation/Terminal Restlessness in the last days of life



- **Injectable Midazolam can be given by buccal/sublingual/intranasal route but practical considerations make administration difficult (Midazolam for injection 10mg/2mls ampoules) but this may be necessary dependent on supply of the buccal preparations (see appendix for guide)**

- **Buccal preparations of Midazolam are available (Buccalam and Epistatus) their ease of use means that when available these should be used ahead of the injectable form.**

Nausea and Vomiting in the last days of life



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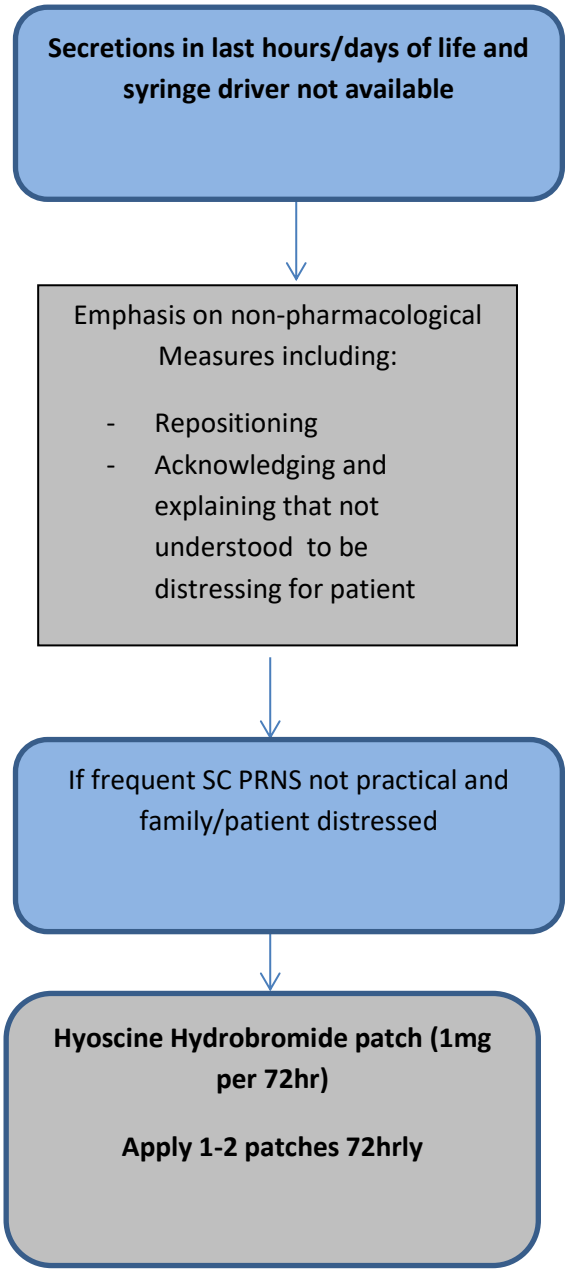
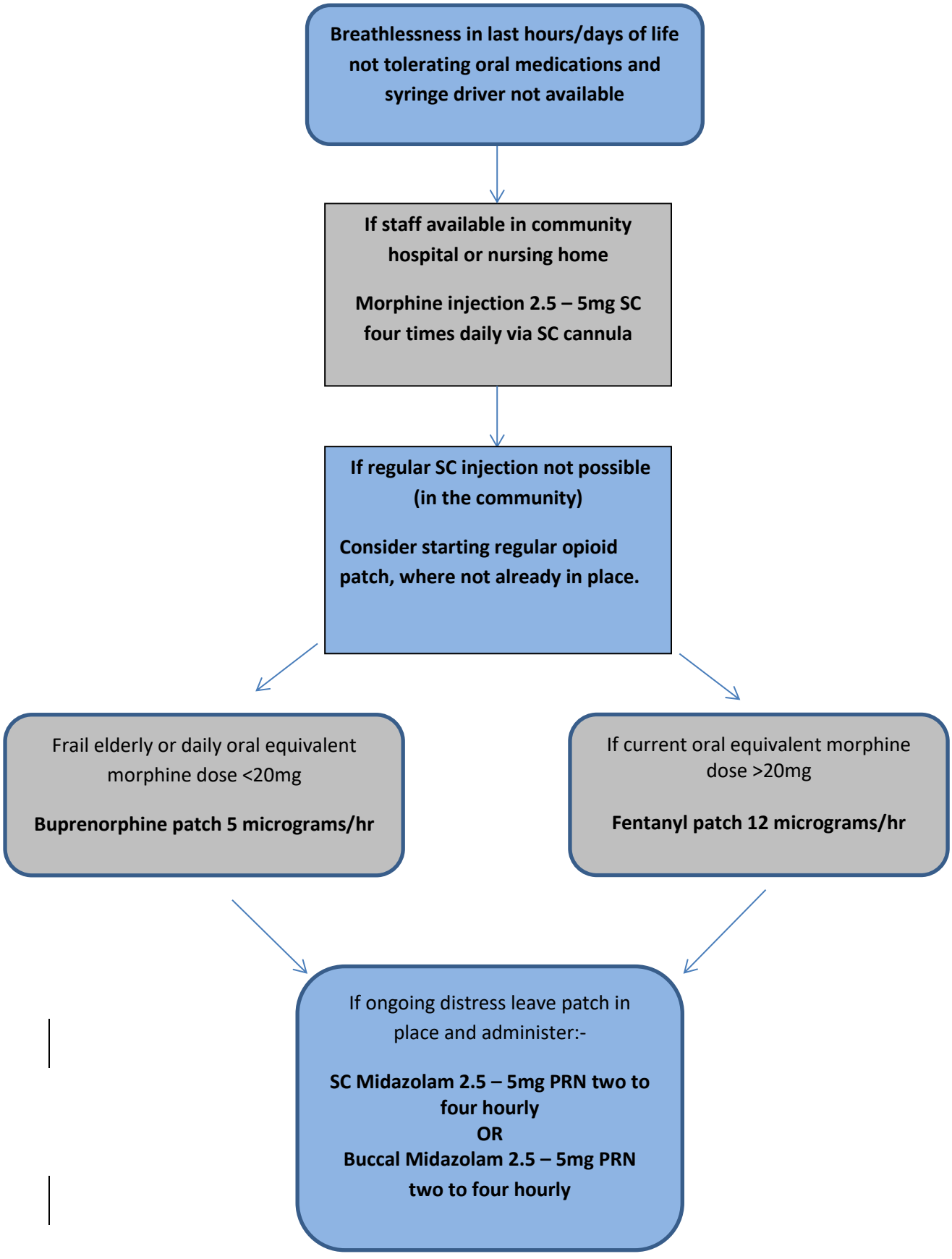
Respiratory Tract secretions in the last days of life



Breathlessness in the last days of life



Other Symptoms

Problem/Symptom	Solution
Seizures	5 to 10mg of Midazolam via buccal route or 5-10 mg midazolam IM (can be repeated after 20 minutes) - if seizure not terminating after 20mg Midazolam – discuss with palliative care.
Haemoptysis	If distressed give medication but **priority is reassurance and staying with patient** • Midazolam Injection 10mg (SC or IM) – IM route preferable due to peripheral shutdown • Buccal Midazolam 10mg • Can be repeated after 20 minutes

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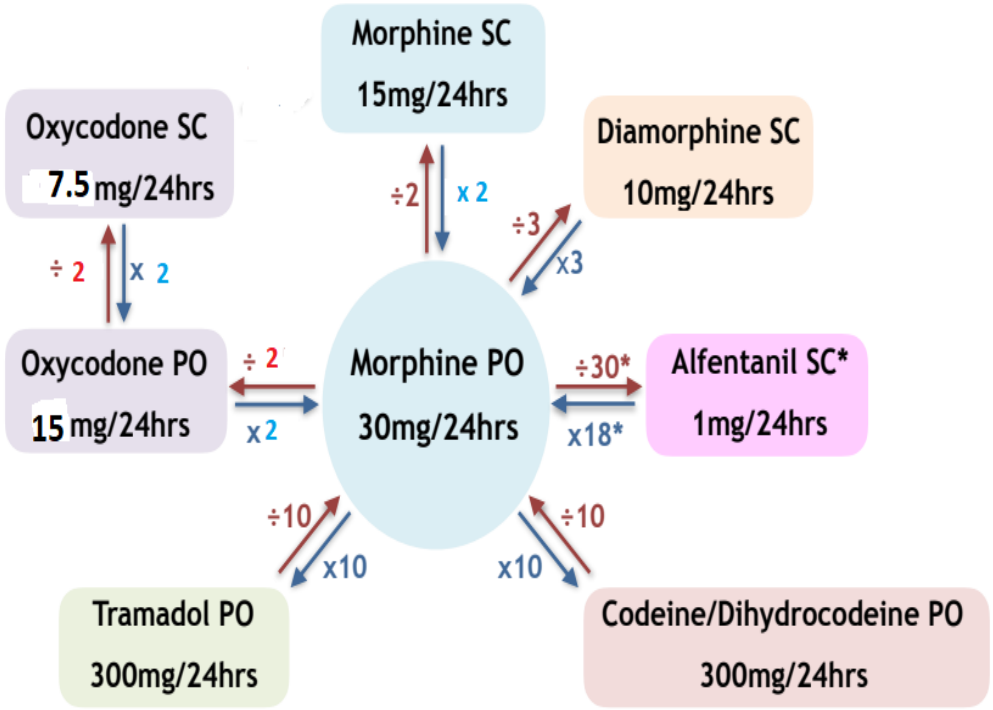
Appendix

Approximate Equivalency Chart

Trinity Hospice
Compassion and care

- To be used as a guide when changing from one opioid to another.
- Consider reducing prescribed dose by 30 - 50% when rotating between drugs or changing route.
- Breakthrough dose should be 1/10th - 1/6th of the total dose over 24hours.



***Alfentanil**: The dose conversion ratio of PO morphine: SC alfentanil is between 18-30:1. It is prudent to use the more conservative ratio when switching from one to the other e.g. if switching from morphine to alfentanil, use ratio of 30:1 (30mg PO morphine = 1mg SC alfentanil). If switching from alfentanil to morphine use ratio of 18:1 (1mg SC alfentanil = 18mg PO morphine).

Sources: 1. BNF online: Prescribing in palliative care. https://bnf.nice.org.uk/guidance/prescribing-in-palliative-care.html (18/8/19); 2. Palliative Care Formulary (Sixth Edition): Opioid Dose Conversion Ratios; 3. Scottish Palliative Care Guidelines: Alfentanil. https://www.palliativecareguidelines.scot.nhs.uk/guidelines/medicine-information-sheets/alfentanil.aspx (18/8/19); 4. Cran A, Dorman S, Kirkham S. 2017. Opioid rotation to alfentanil: comparative evaluation of conversion ratios. BMJ Supportive & Palliative Care 2017;7:265-266. https://spcare.bmj.com/content/7/3/265 (8.10.19).

Clinical Frailty Scale*

1 **Very Fit** – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2 **Well** – People who have **no active disease symptoms** but are less fit than category 1. Often, they exercise or are very **active occasionally**, e.g. seasonally.

3 **Managing Well** – People whose **medical problems are well controlled,** but are **not regularly active** beyond routine walking.

4 **Vulnerable** – While **not dependent** on others for daily help, often **symptoms limit activities.** A common complaint is being "slowed up", and/or being tired during the day.

5 **Mildly Frail** – These people often have **more evident slowing,** and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6 **Moderately Frail** – People need help with **all outside activities** and with **keeping house**. Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing.

7 **Severely Frail** – **Completely dependent for personal care**, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8 **Very Severely Frail** – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9. **Terminally Ill** - Approaching the end of life. This category applies to people with **a life expectancy <6 months**, who are **not otherwise evidently frail.**

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

Giving Midazolam (Injectable solution) by buccal route to help with Agitation/restlessness or breathlessness in last days of Life
To be used when buccal specific preparations (Buccalam & Epistatus) not available

Midazolam can be given 2.5 – 5mg as needed by buccal route as frequently as every 2 hours

It is sensible to start with the lower dose (2.5mg) at first but use higher dose (5mg) if the smaller dose is not effective

Midazolam is a sedative medication which can be given to people in the last days of life when they are agitated/restless or otherwise distressed. It can help people feel more relaxed calm and allow them to have a more peaceful death. It is not given to shorten life. It can be given to people in the form of an injection and by different routes.

This leaflet is intended to demonstrate how Midazolam injectable solution can be given by relatives and health care professionals. This involves giving the medication by the *buccal route* (Giving the medication between the gums of lower jaw and cheek, where it is absorbed into the bloodstream).

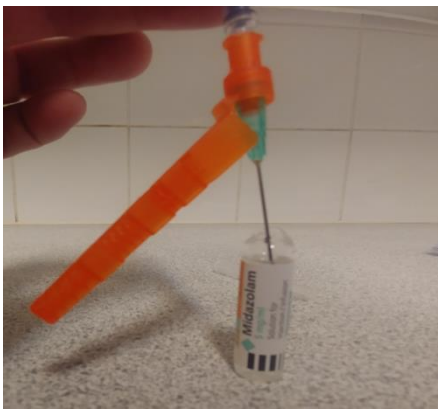
Injectable Midazolam comes in the form of a little glass ampoule.

Step 1: Open vial of Midazolam and place open vial on clean flat surface.

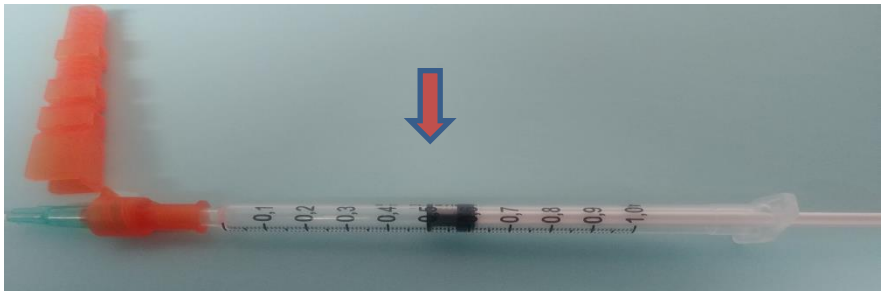
- Position the vial so that **the coloured dot should be facing towards you**
- Hold the vial in two hands. Use your dominant thumb and index finger (dependent on whether you are right or left handed) to hold the top of the vial (with the dot still pointed towards you) using tissue paper or gauze.
- Your thumb should be just above the blue dot and you index finger on the other side
- Apply pressure with your dominant thumb whilst bending the neck of the vial away from you – the neck of the vial should snap.

A You tube video showing the process, for a similar ampoule shows the process in more detail, if you are uncertain https://www.youtube.com/watch?v=3l9p4VXVaOk

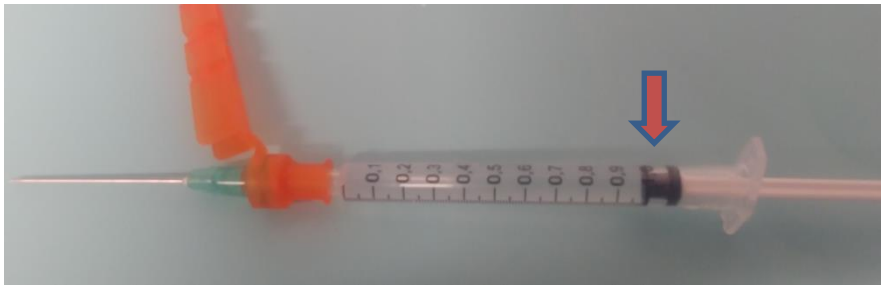
Step 2: Attach drawing up needle to a 1ml syringe and draw up either:



0.5mls (half of a 1ml syringe) is 2.5mg of Midazolam

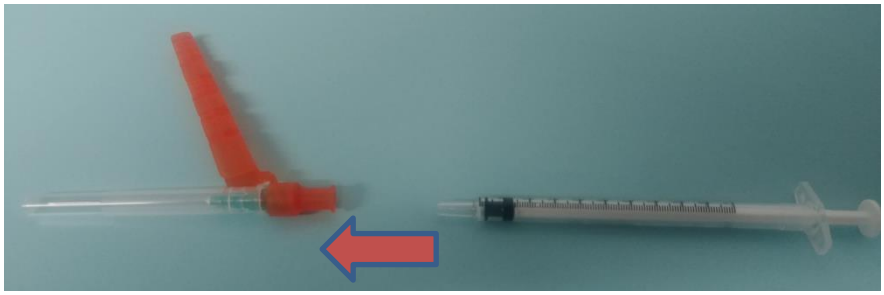


1ml (a full 1ml syringe) is 5mg of Midazolam

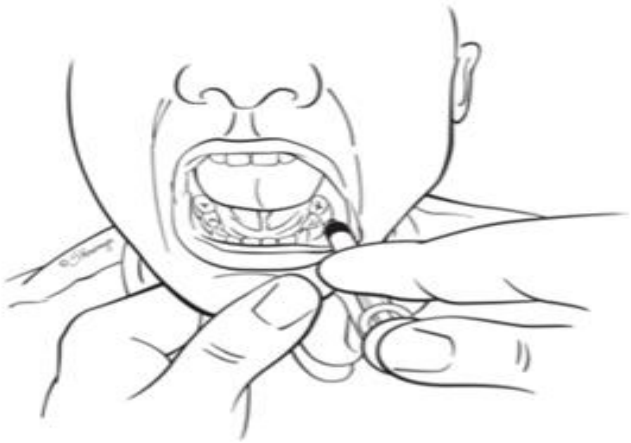


- Flicking the syringe will get rid of air bubbles to ensure that you have enough solution in the syringe.

Step 3: Remove needle (and dispose safely)



Step 4: Place the syringe by the side of the patient's teeth between the gums of the lower jaw and cheek, giving the solution slowly over 5-10 seconds.



Picture 1 How to give buccal medicines.

- **Remember to remove needle before administration.**
- **Don't put syringe between patient's teeth as they may bite it if they are confused.**

- The medication may take 10- 15mins to work effectively
- This can be repeated after 2 hours if needed

References

1. NHS Scotland 2014. Midazolam in Palliative care. *Scottish Palliative Care Guidelines.*