Anticipatory prescribing for symptom control for frail elderly patients in the last days of life (‘Just in case’ injectables)

**Scope:** This guidance should be used alongside NICE guidance for care of patients in the last days of life (https://www.nice.org.uk/guidance/ng31) and Palliative care for adults: strong opioids for pain relief (https://www.nice.org.uk/Guidance/CG140). This guidance is intended for both generalist and palliative care prescribers across hospice and community settings.

**Paperwork:** Every patient needs a copy of:
- Authorisation to administer charts: ‘Continuous Subcutaneous Infusion…’; ‘As required…’ and ‘Regular and Single Dose…’ administration charts you write for this patient
- Controlled Drug Stock Balance Chart
- ‘Guidelines When Using Syringe Pump Community Charts’ and Subcutaneous T34 Syringe Pump Infusion Administration Record and Checklist.
  

**General Principles:**
- Offer oral drugs where the patient can swallow; consider liquid preparations to aid administration.
- Consider transdermal preparations where likely prognosis > 1 week, but ensure breakthrough (oral or subcutaneous) available.
- Prescribe current and/or anticipatory meds for the 4 key symptoms:
  a. Pain
  b. Nausea / Vomiting
  c. Agitation
  d. Respiratory secretions.
- Individualise your prescribing plan considering:
  a. likely causes of any symptoms
  b. other medical conditions (including renal failure, heart failure, parkinsons) and other medications concurrently prescribed
  c. previous response to medications
  d. patient preferences.
- Review and rationalise other regular medications and consider the risk/benefit of continuing with these (for example anticoagulants, antibiotics, antiepileptic or diabetic medications) and whether or not medications require a gradual dose reduction (eg steroids). Consider discussion with senior clinicians when reducing/stopping disease modifying medications (eg cardiac meds).
- Start new drugs at the lowest effective dose and regularly review and titrate as required for symptom control. Lower doses may be needed in the frail elderly because of altered organ function and increased sensitivity.
- Dosing frequency of prns of 1 hourly is to ensure adequate initial dosing to achieve symptom control: if more than 3 prn doses are required in 24 hours telephone for advice.
- Telephone the hospice for advice (020 87678 4500) in any case where the patients’ symptoms are not responding or further specialist assessment/support with decision making is required.
PAIN

• Doses below are for patients who are opioid naïve i.e. not on regular codeine / tramadol / buprenorphine / morphine or other opioid. Where patients are already on regular opioids, starting doses will be higher to incorporate previous 24 hour dose of opioid.

1. Transdermal
Buprenorphine 5 micrograms to 20 micrograms every 7 days
• ensure prn oral or injectable breakthrough available (see below)

2. Injectables: subcutaneous

<table>
<thead>
<tr>
<th>Renal Function</th>
<th>PRN</th>
<th>24 hour syringe driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>eGFR known / likely &gt; 50 mls / minute or stable at &gt; 30 mls / minute</td>
<td>MORPHINE SULPHATE 1 mg to 2 mg to 5 mg 1 hrly</td>
<td>MORPHINE SULPHATE 5 mg to 10 mg to 20 mg</td>
</tr>
<tr>
<td>eGFR 30 - 50 mls /minute and likely to deteriorate</td>
<td>OXYCODONE 1 mg to 2 mg 1 hrly</td>
<td>OXYCODONE 5 mg to 10 mg</td>
</tr>
<tr>
<td>For all patients with eGFR &lt; 30 mls / minute please discuss with specialist palliative care team</td>
<td>ALFENTANIL 50 to 100 to 200 microgram 1 hrly</td>
<td>ALFENTANIL 500 microgram to 1 mg to 2 mg</td>
</tr>
</tbody>
</table>

Breathlessness: Opioids are also helpful to relieve breathlessness and may be commenced at similar doses – please state indication as ‘breathlessness’ on chart.

NAUSEA / VOMITING

1. Injectables: subcutaneous

• Choice of antiemetic may be influenced by the likely aetiology of nausea: consider reversible causes (eg hypercalcaemia).
• Choice of antiemetic must take into account comorbidities
  a. Avoid cyclizine in severe heart failure
  b. Avoid dopamine antagonists (Haloperidol/Metoclopramide/Levomepromazine) in patients with Parkinsons and Lewy body dementia
  c. Avoid prokinetics (Metoclopramide/Domperidone) in patients with bowel obstruction
  d. Avoid Levomepromazine in patients with high risk of seizures
  e. Use lowest possible doses in renal failure

<table>
<thead>
<tr>
<th>Drug</th>
<th>PRN</th>
<th>24 hour syringe driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haloperidol</td>
<td>500 microgram to 1 mg 8 hrly</td>
<td>1 mg to 2 mg to 3 mg</td>
</tr>
<tr>
<td>Cyclizine</td>
<td>25 mg to 50 mg 8 hrly</td>
<td>100 mg to 150 mg</td>
</tr>
<tr>
<td>Metoclopramide</td>
<td>10 mg 8 hrly</td>
<td>30 mg</td>
</tr>
<tr>
<td>Levomepromazine</td>
<td>2.5 mg to 5 mg 4 hrly</td>
<td>5 mg to 15 mg</td>
</tr>
</tbody>
</table>

AGITATION

1. Injectables: subcutaneous

<table>
<thead>
<tr>
<th>PRN</th>
<th>24 hour syringe driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>No relevant comorbidities</td>
<td>MIDAZOLAM 1 mg to 2 mg 1 hrly</td>
</tr>
<tr>
<td>Renal failure (eGFR &lt; 30 mls/min)</td>
<td>MIDAZOLAM 1 mg to 2 mg 1 hrly</td>
</tr>
</tbody>
</table>

RESPIRATORY SECRETIONS

1. Transdermal
Hyoscine hydrobromide 1.5 mg patches = 1 mg per 24 hours: every 72 hours.
• ensure prn oral or injectable breakthrough available (see below)

2. Injectables: subcutaneous

<table>
<thead>
<tr>
<th>PRN</th>
<th>24 hour syringe driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLYCOPYRRONIUM 200 microgram to 400 microgram 1 hrly</td>
<td>GLYCOPYRRONIUM 600 microgram to 1.2 mg to 2.4 mg</td>
</tr>
</tbody>
</table>