Pain management flow chart

Morphine is the first-line opioid if eGFR > 45mL/min (unless contraindicated).
Use morphine with caution when eGFR 30–45mL/hr.
Use oxycodone with caution when eGFR 15–30mL/hr.

If the person is in renal failure, GFR < 30 mL/min consider an alternative opioid to morphine/oxycodone, eg, fentanyl. (See pain management flow chart for patients with severe renal impairment.)

PAIN PRESENT

Is the person already taking oral morphine, oral oxycodone or fentanyl patches?

YES

1. Continue with fentanyl patches if being used.
2. Convert oral morphine/oxycodone to 24-hour dose (SCSI).\(^b\)
3. Prescribe PRN dose of morphine Q1-hour for breakthrough pain.\(^c\)

NO

If there are no contraindications, prescribe morphine 2.5–5 mg PRN via subcutaneous line.

Review within 24 hours
- If pain is escalating and three or more PRN doses are required, increase the morphine/oxycodone in SCSI by the total additional dose required in the last 24 hours.
- Increase morphine/oxycodone PRN dose.
- If pain is incidence pain (eg, turning), continue to give PRN dose via subcutaneous line.

If symptoms persist, contact the hospice or palliative care team for advice.

a. If methadone is being used, please contact the palliative care team for advice.

Morphine/oxycodone calculations
b. To CONVERT from oral morphine/oxycodone to 24-hour SCSI morphine/oxycodone, halve the total 24-hour dose of oral morphine (24-hour total oral morphine = 60 mg; then prescribe 30 mg subcutaneous morphine).
c. PRN doses of morphine/oxycodone: divide 24-hour dose by six and give up to Q1 hour.

Anticipatory prescribing in this manner will ensure that in the last hours and days of life there is no delay responding to a symptom if it occurs.
Pain management flow chart for patients with severe renal impairment (eGFR < 30mL/min)

Morphine and oxycodone have a risk of toxicity in renal impairment (myoclonic jerks, delirium, drowsiness and respiratory depression).

Fentanyl is the safest first-line opioid when eGFR < 30mL/min.

Methadone is an alternative but can be complex to use and should be started only with advice from a palliative medicine specialist.

If person is on a fentanyl patch leave in situ and dose PRN fentanyl accordingly. a

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**PAIN PRESENT**

- Give a stat dose of fentanyl 10–20 mcg via subcutaneous line
- Consider starting fentanyl 100–300 mcg via CSCl over 24 hours.

If no contraindications, prescribe fentanyl 10–20 mcg PRN hourly via subcutaneous line.
If already on fentanyl, this does will need to be higher. a

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**Review within 24 hours**

- If pain is escalating and three or more PRN doses are required, increase the fentanyl in CSCl by the total additional dose required in the last 24 hours.
- Increase the fentanyl PRN dose accordingly.
- If pain is incidence pain (eg, turning), continue to give PRN dose via subcutaneous line.

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If pain uncontrolled or conversion from standard opioid to fentanyl unclear, contact palliative care team for advice.

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a. For patients established on a fentanyl patch the breakthrough dose is roughly equivalent to the hourly transdermal dose given via subcutaneous line to a maximum of 100 mcg (2 mls).
Agitation, delirium, restlessness management flow chart

AGITATION / TERMINAL RESTLESSNESS PRESENT

- Exclude pain.
- Exclude urinary retention.
- Exclude faecal impaction.
- Exclude spiritual distress.

IF CONSCIOUS:
Use first-line haloperidol (the goal is to improve clarity)
Prescribe and give PRN dose haloperidol 0.5–1 mg Q1 hour PRN via subcutaneous line (maximum dose 5 mg/24 hours).
(Do not use in Parkinson’s disease)

Review within 24 hours. If ≥ 3 PRN doses have been given, consider a CSCI 3 mg/24 hours.

Maximum total daily dose of haloperidol 5 mg/24 hours via a CSCI.

IF UNCONSCIOUS:
Use first-line midazolam
Prescribe and give PRN dose midazolam 2.5–5 mg Q30 min PRN via subcutaneous line.

Prescribe PRN dose of haloperidol 0.5 mg Q1 hour PRN via subcutaneous line (max dose 5 mg in 24 hours).

If agitation, delirium or restlessness occur, change to PRESENT guide.

Midazolam 10–60 mg/24 hours via a CSCI.

If haloperidol and midazolam combination is ineffective, continue midazolam but change haloperidol to levomepromazine (Nozinan®)
25 mg/24 hours via CSCI
and
6.25 mg Q1 hour PRN via subcutaneous line.
Consider contacting palliative care team for guidance.

Anticipatory prescribing in this manner will ensure that in the last hours and days of life there is no delay responding to a symptom if it occurs.
Nausea/vomiting management flow chart

NAUSEA / VOMITING PRESENT

Is the person already obtaining relief from existing antiemetics?

YES

Continue these parenterally, eg:
- Cyclizine 50 mg PO 8-hourly = cyclizine 150 mg/24 hours via SC/SI
- Metoclopramide 10 mg PO TDS = metoclopramide 30 mg/24 hours via SC/SI
- Haloperidol 0.5–1 mg PO BD or TDS = haloperidol 1–2 mg/24 hours via SC/SI

NO

Prescribe PRN dose
- Haloperidol 0.5–1 mg Q4 hour via subcutaneous line (maximum dose 5 mg/24 hours)
- If nausea/vomiting occur, change to PRESENT guide.

If the cause of the nausea and vomiting is unknown OR the symptom is not fully controlled, use a broad-spectrum antiemetic, ie, LEVOMEPROMAZINE (Nozinan).

Prescribe:
1. Levomepromazine 6.25 mg/24 hours via SC/SI.
2. PRN Levomepromazine 6.25 mg Q4 hour PRN via subcutaneous line (maximum dose 25 mg/24 hours).

If more than two PRN doses given in 24 hours increase to:
1. Levomepromazine 12.5–25 mg/24 hours via SC/SI
2. PRN Levomepromazine 6.25 mg Q4 hour PRN (maximum dose 25 mg/24 hours)

Contact the palliative care team for further advice.

Anticipatory prescribing in this manner will ensure that in the last hours and days of life there is no delay responding to a symptom if it occurs.
Excessive respiratory tract secretions management flow chart

**SECRETIONS PRESENT**

- Explain symptoms to the family and whānau.
- Re-position the person.
- If persistent and causing distress:
  
  1. Give STAT dose
     - Hyoscine Butylbromide 20 mg
     - Q2-4 hours via subcutaneous line.
  
  2. Prescribe PRN dose
     - Hyoscine Butylbromide 20 mg
     - Q2 hours PRN via subcutaneous line (maximum of 120 mg/24 hours).

  Review within 6 hours:
  - If symptoms persist and STAT dose was helpful, consider:
    - HYOSCINE BUTYLBROMIDE
      - 40-80 mg over 24 hours via CSCL
      - *(Maximum total daily dose of 120 mg/24 hours).*

  If symptoms persist, contact the palliative care team for advice.

**SECRETIONS ABSENT**

- Review if the person has known risk factors for excessive secretions (as above).
- These situations are associated with an increase in oral, bronchial mucous and exudative secretions.

- Prescribe PRN dose
  - Hyoscine Butylbromide 20 mg
  - Q2 hours PRN via subcutaneous line (maximum of 120 mg/24 hours).

- If respiratory tract secretions occur change to ‘PRESENT’ guide.

*Anticipatory prescribing in this manner will ensure that in the last hours and days of life there is no delay responding to a symptom if it occurs.*
Dyspnoea/breathlessness management flow chart

There is no established evidence that fentanyl or oxycodone is effective in managing dyspnea/breathlessness. If there is renal impairment, refer to pain management flowchart (eGFR<30) for guidance on fentanyl use. If the person is already established on oxycodone for pain, it is reasonable to use oxycodone for dyspnea.

**Dyspnoea / Breathlessness Present**

- **Is the person already taking oral morphine?**
  - **YES**
    - If not swallowing, convert background oral morphine to 24 hours SCSC.¹
    - Calculate PRN dose of subcutaneous morphine (lower doses may be appropriate for dyspnea of pain).
  - **NO**
    - **Prescribe PRN dose of morphine 2.5–5 mg Q1 hour via subcutaneous line.**
    - **Titrate requirements for 24 hours.**
    - **If ≥3 PRN doses required initiate 24 hours SCSC.²**

- **Review within 24 hours. If ≥3 PRN doses have been given, consider increasing morphine in SCSC by total PRNs required in previous 24 hours.**

  - If the person is still dyspnoic and anxious, consider adding midazolam 5–15 mg/24 hours via SCSC.

  - If symptoms persist, contact the palliative care team for advice.

**Dyspnoea / Breathlessness Absent**

- **Prescribe PRN dose of morphine 2.5–5 mg Q1 hour via subcutaneous bolus.**

- **If dyspnea / breathlessness occurs, change to “Present” guide.**

**Morphine Calculations**

- **e. To CONVERT from oral morphine to 24 hours continuous subcutaneous infusion (SCSC) of morphine via a syringe driver, halve the total 24-hour dose of oral morphine (eg. 24-hour total oral morphine = 60 mg then prescribe 30 mg morphine via SCSC).**

- **b. PRN doses of morphine: Divide 24-hour dose by six and give up to Q1 hour.**

- **c. To INITIATE 24-hour SCSC of morphine via a syringe driver, add up the PRN subcutaneous morphine doses given in the last 24 hours.**

*Anticipatory prescribing in this manner will ensure that in the last hours and days of life there is no delay responding to a symptom if it occurs.*