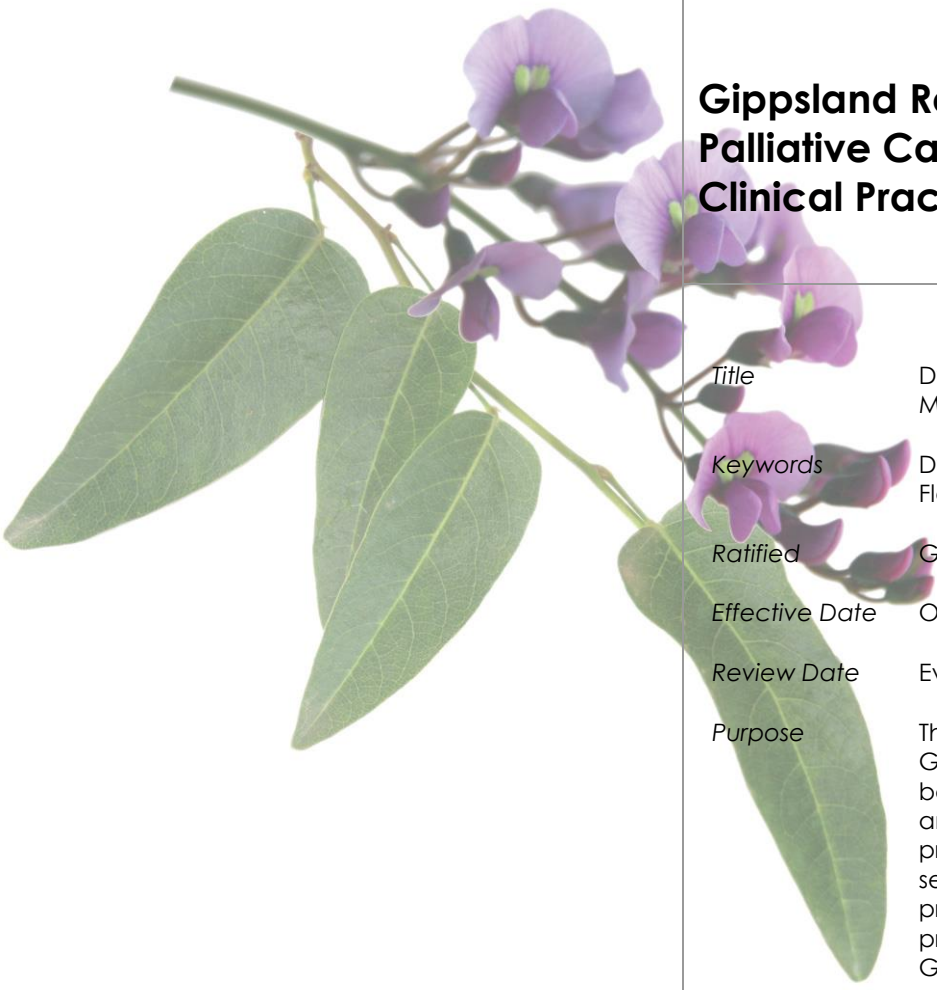
Gippsland Region Palliative Care Consortium

Dyspnoea (Breathlessness) Guidelines and Flowchart

Effective: June 2019



Gippsland Region Palliative Care Consortium Clinical Practice Group

Title	Dyspnoea (Breathlessness) Guidelines and Management Flowchart
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Ratified	GRPCC Clinical Practice Group
Effective Date	October 2013 (reviewed 2016, 2018)
Review Date	Every two years from effective date.
Purpose	This policy has been endorsed by the GRPCC Clinical Practice Group and is based on current evidence-based practice and should be used to inform clinical practice, policies and procedures in health services. The intent of the policy is to promote region wide adoption of best practice. Enquiries can be directed to GRPCC by email enquiries@grpcc.com.au or 03 5623 0684.
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Disclaimer

The intent of the clinical guidelines endorsed and made available by the GRPCC Clinical Practice Group is to assist health services and clinical staff across the Gippsland region to facilitate evidence-based practice in palliative care.

Clinical guidelines are intended to provide general advice to the medical, nursing, and allied health staff working with clients who have life limiting illness. They should never be relied upon as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of each patient or organisation. There may be sound clinical reason for therapy that is different to that suggested in these guidelines. In all cases, clinicians should assess the individual clinical situation, and exercise independent clinical judgement when basing therapy on these guidelines. These guidelines are not a substitute for seeking appropriate consultation advice from the palliative care service.

Whilst the GRPCC endeavours to ensure these clinical guidelines are accurate at the time of their preparation, it takes no responsibility for matters arising from changed circumstances or information or material that may have become available after the issued or reviewed date.

The guidelines may be used by providers to develop protocols and procedures tailored to the requirements of their individual service or facilities.

Organisations and health care professionals should ensure that in using the GRPCC guidelines that they are complementary to their current organisational governance structures, and individual clinicians scope of practice.

Policy Statement

The management of dyspnoea (breathlessness) associated with end stage disease processes should be based on a comprehensive assessment of the physical and psychological factors and optimal management of reversible causes using both pharmacological and non-pharmacological measures.

Definitions

Dyspnoea (breathlessness) The subjective experience of difficult or uncomfortable breathing. It consists of qualitatively distinct sensations that vary in intensity. The experience of dyspnoea involves interaction between multiple physiological, psychological, social and environmental factors and may induce secondary physiological and behavioral responses (American Thoracic Society 1999: Therapeutic Guidelines 2016).

Hypoxaemia *Reduced oxygen concentration in the blood with arterial partial pressure of oxygen less than 60mmHg or oxygen saturation of ≤ 90%.*

Often presents without recognisable signs. Signs of hypoxemia if present can include neurological signs such as anxiety, agitation leading to confusion and ultimately loss of consciousness. Other signs include tachypnoea, nasal flaring, use of accessory breathing muscles, changes in vital signs and cyanosis.

Policy

1. Assessment

In broad terms, dyspnoea has at least five main components:

- Sensation (what if feels like)
- Perception (how it is viewed in the context of the illness
- Distress (does it cause suffering or grief)
- Response (how individual reacts)
- Reporting (the language used to report these elements)

  (Therapeutic Guidelines 2016)

History

- When did symptoms begin? Clarify patterns of breathlessness
- Assess for precipitating /alleviating factors and associated symptoms; e.g. exertion, posture, anxiety, associated with pain.
- Evaluate impact on mobility or activities of daily living and quality of life.

Undertake a physical examination

- Record all vital signs and perform baseline Oxygen Saturation (to exclude need for oxygen therapy - ? to rule out hypoxaemia).
- Perform auscultation of cardiac and respiratory system (if confident to do so)

- Report any of the following to relevant medical staff i.e. general practitioner, medical specialist:
  - Pulmonary dullness
  - Crackles and/or wheezes
  - Reduced air entry or air entry absence
  - Cyanosis
  - Tachypnoea
  - Inability to clear secretions
  - Use of accessory muscles
  - Stridor
  - Oedema.

Examine possible causes

- Airway Obstruction
- Anaemia
- Anxiety
- Ascites
- Arrhythmias
- Bronchospasm
- Cardiac failure
- Hypoxaemia
- Infective exacerbation of COPD
- Infection
- Pleural/Pericardial Effusion
- Pulmonary Embolus
- Pulmonary Oedema
- Superior Vena Cava Obstruction.

Reversible causes are to be treated in keeping with the patient's goals of care and prioritised accordingly.

2. Management

(If rapid response required refer to flowchart Appendix 1)

Management and interventions are to be tailored according to the identified patterns and determinants of the patient's breathlessness.

Management is not necessarily prescriptive due to the variety of possibilities contributing to breathlessness.

Management will generally fall into the following categories:

1. Medical – report to officer
2. Non-pharmacological
3. Pharmacological
4. Emergency specialist treatment including radiotherapy and surgical intervention.

<u>Non-Pharmacological Interventions</u>

For breathlessness associated with posture, exertion, pain, anxiety and eating, management may be implemented through allied health and nursing interventions.

These may include:

- Psychological support and anxiety management, through the use of active listening, exploration of the meaning of breathlessness, use of relaxation and distraction techniques
- Positioning adjustment

- Controlled breathing techniques
- Aids and equipment
- Planning and pacing activities
- Pain and analgesia review
- Dietician review
- Speech pathology review
- Increase air movement around the patient e.g. fan, open window
- Complementary therapies, music or art therapy
- Explanation, reassurance and education.

Pharmacological Interventions:

To help with expectoration and or cough.

- **Saline Nebuliser or bronchodilator** - cease if no symptomatic benefit
- **Trial of Dexamethasone/Prednisolone** therapy may be indicated for:
  - Infiltration pressure from primary or metastatic tumour on lung structures
  - Lymphangitis carcinomatosa
  - SVC obstruction (emergency treatment requiring specialist input if sudden onset and if patient not in the terminal phase).

Aspects to consider when instigating corticosteroids therapy:

- Therapy to be given in the morning
- Cease after one week if no relief to breathlessness
- Wean prescribed amount to lowest effective dose
- Monitor Blood sugar levels
- Observe for wakefulness, agitation, proximal myopathy.

- **Opioids**

Opioids generally used in lower doses and slow increments. Opioids can be titrated in the same way as when used for pain control. Particularly effective at rest and in the terminal phase.

Considerations when titrating opioids:

- Opiate naivety of patient
- Prescribing for patient already receiving Opioids
- Response
- Age: (≤14 or ≥75)
- Weight (≤ 45Kg)
- Renal function (GFR & creatinine clearance).

Monitor responses and side-effects (SE) (especially cognitive SE i.e. excessive drowsiness, confusion and emesis and constipation- always consider aperients).

Prescribe subcutaneous opioid if oral route problematic.

- **Benzodiazepines**

Benzodiazepines (anxiolytics) are helpful as second line agent when breathlessness is associated with anxiety.

- Lorazepam: fast acting sublingually (SL) for panic attacks
- Diazepam/Oxazepam: consider nocte dose for long-standing continuous anxiety
- Midazolam: consider for subcutaneous (SC) infusion.

- **Anticholinergics**

Excessive respiratory secretions associated with breathlessness (often in the terminal stage of illness):

- Hyoscine Butyl bromide SC bolus or continuous SC infusion
- Glycopyrrolate SC
- Hyoscine hydrobromide SC.

- **Consider Oxygen therapy if hypoxaemia observed and proven low O2 saturation**

  (Please note: access to O2 may not always be available - it does not mean patient requires hospital admission for this very reason. Oral or parenteral opioids and/or benzodiazepines can be just as effective to relief the subjective/distressing experience of breathlessness).

(Refer to *Oxygen Use in Palliative Care Guideline,* GRPCC Clinical Practice Group, October 2018).

Key Performance Indicators

If patient is not improving or continues to deteriorate, seek specialist advice.

Consultation and advice:

- If breathlessness not responsive to outlined management
- When there is uncertainty about drug therapy regimes
- When invasive procedures are indicated
- When radiotherapy or stenting is indicated eg. Bleeding, airway obstruction.

Optimally, the patient and carer/family should have access to timely support, information/explanation, education and coaching about the likely courses and treatment options to manage breathlessness.

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Breathlessness Management Flowchart