Physiotherapy

Potential advantages
- Decreases the work of breathing by reducing the use of accessory muscles of respiration, improving lung volumes and decreasing airway resistance
- Improved ABGs

Potential complications
- Positions may need modification in the presence of other existing pathology

Positioning
- Gravity-assisted positioning

Suctioning
- Can be used to achieve several different goals:
  - Drainage of secretions
  - Reduced work of breathing / breathlessness
  - Maximising V/Q ratio

Active cycle breathing technique
- Consists of:
  - Breathing controlling minimising accessory muscle use
  - Thoracic expansion emphasising inspiration
  - Forced expiration emphasising "huff"

CPAP & BIPAP
- For physio

Table 4.4 Potential advantages and complications of chest shaking and vibrations, compression, chest clapping and NPP

Table 4.10 Potential advantages and complications of IPPB, CPAP and bi-level non-invasive ventilation

Roles of physiotherapy
- Active cycle breathing techniques
- Modified mobilisation
- Suctioning
- Gravity-assisted positioning

Positioning
- chest physio

Physiotherapy

Potential complications
- Cardiac arrhythmias
- Bronchoospasm in patients with reactive airways
- Reduced pulmonary compliance
- Patient discomfort

Manual hyperinflation

Mobilisation

Table 4.11 Potential advantages and complications of ventilator modes

- i) Optimisation of ventilation & cardiopulmonary function
- ii) Assistance in the weaning process, utilising ventilatory support & oxygen therapy
- iii) Advice on positioning to optimise ventilation / perfusion matching & oxygenation
- iv) Advice on positioning to protect joints and to minimise potential muscle & soft tissue shortening / injury & nerve damage
- v) Optimisation of body position to affect muscle tone in the brain injured patient
- vi) Instigation of an early rehabilitation / mobilisation to assist in preventing consequences of enforced immobility & optimise voluntary movement to promote function independence & improve exercise tolerance
- vii) Assessment / treatment / advice on presenting musculoskeletal pathology
- viii) Enlisting other appropriate specialist physiotherapists to optimise patient care
- ix) Liaison with medical and nursing staff on continuation and monitoring of ongoing physiotherapy careplans