Questionnaire (Part A)

Physiotherapy management of patients with acute exacerbation of COPD

1. For how many years have you been practicing as a physiotherapist?

( ) 0 to <5 years

( ) 5 to <10 years

( ) 10 to <15 years

( ) 15 to <20 years

( ) 20+ years

2. For how many years have you been practicing in cardiorespiratory physiotherapy?

( ) 0 to <5 years

( ) 5 to <10 years

( ) 10 to <15 years

( ) 15 to <20 years

( ) 20+ years

3. For approximately what % of patients (on average) with AECOPD do you prescribe ACTs?

( ) 0 to <20%

( ) 20 to <40%

( ) 40 to <60%

( ) 60 to <80%

( ) 80 to 100%

4. For those patients with AECOPD who require ACTs, approximately how much time (on average) per therapy session would you devote to ACTs? Please tick one response only.

( ) 0 to <5 mins

( ) 5 to <10 mins

( ) 10 to <15 mins

( ) 15 to <20 mins

( ) 20+ mins

5. How important do you feel sputum clearance is in the overall management

(not just physiotherapeutic) of patients with AECOPD?

( ) Very important

( ) Fairly important

( ) Moderately important

( ) Fairly unimportant

( ) Very unimportant

6. How frequently do you use the following ACTs for patients with AECOPD?

Please indicate by placing a tick (√) in the corresponding box. Please tick only one box for each ACT:

Very often or always / Often / Sometimes / Rarely / Very rarely or never

- Active cycle of breathing technique
- Autogenic drainage
- Deep breathing exercises
- Directed coughing
- Directed huffing (FET)
- Gravity-assisted drainage (including head down positions)
- Modified gravity-assisted drainage (excluding head down positions)
- Manual vibration
- Mechanical vibration via a device (e.g. vest)
- Oscillating PEP (device): e.g. Flutter®, Acapella®, Cornet®
- Oscillating PEP (other): e.g. bubble / bottle
- PEP (device): e.g. mask, mouthpiece / Pari
- Percussion
- Physical exercise (for airway clearance)
- Positioning (to influence regional ventilation)
- Sustained maximal inspiration (SMI)
- Other (please specify):

7. How effective at clearing sputum do you feel the following ACTs are for patients with AECOPD?

Please indicate by placing a tick (√) in the corresponding box. Please tick only one box for each ACT:

Very effective / Effective / Neutral or N/A / Ineffective / Very ineffective

- Active cycle of breathing technique
- Autogenic drainage
- Deep breathing exercises
- Directed coughing
- Directed huffing (FET)
- Gravity-assisted drainage (including head down positions)
- Modified gravity-assisted drainage (excluding head down positions)
- Manual vibration
- Mechanical vibration via a device (e.g. vest)
- Oscillating PEP (device): e.g. Flutter®, Acapella®, Cornet®
- Oscillating PEP (other): e.g. bubble / bottle
- PEP (device): e.g. mask, mouthpiece / Pari
- Percussion
- Physical exercise (for airway clearance)
- Positioning (to influence regional ventilation)
- Sustained maximal inspiration (SMI)
- Other (please specify):

8. How easy is it for patients with AECOPD to master the following ACTs?

Please indicate by placing a tick (!) in the corresponding box. Please tick only one box for each ACT:

Very easy / Easy Neutral or N/A / Difficult / Very difficult

- Active cycle of breathing technique
- Autogenic drainage
- Deep breathing exercises
- Directed coughing
- Directed huffing (FET)
- Gravity-assisted drainage (including head down positions)
- Modified gravity-assisted drainage (excluding head down positions)
- Mechanical vibration via a device (e.g. vest)
- Oscillating PEP (device): e.g. Flutter®, Acapella®, Cornet®
- Oscillating PEP (other): e.g. bubble / bottle
- PEP (device): e.g. mask, mouthpiece / Pari
- Physical exercise (for airway clearance)
- Positioning (to influence regional ventilation)

- Sustained maximal inspiration (SMI)
- Other (please specify):

9. What do you consider to be important indications for ACTs in patients with AECOPD?

You may tick (√) multiple responses if required.

( ) A recent change in sputum characteristics (e.g. volume, colour, consistency)

( ) Anyone with a productive cough (e.g. is expectorating or swallowing)

( ) Clinical signs suggestive of an infectious exacerbation (e.g. purulent sputum, febrile, raised white cell count etc)

( ) Evidence of difficulty managing secretions (e.g. ineffective cough, audible gurgling, crackles due to secretions)

( ) Patients in need of education (e.g. little insight into how best to clear sputum)

( ) Patients who produce >30mls sputum/day (e.g. >1 shot-glass)

( ) Patients who usually perform ACTs as part of the management of their condition

( ) Presence of secretions (whether expectorating or not)

( ) Other (please specify):

10. What are your primary aims of using ACTs with patients with AECOPD?

You may tick multiple responses.

( ) To alter/improve pulmonary function (e.g. FEV1, VC, FRC)

( ) To clear sputum

( ) To educate the patient

( ) To enhance recovery from AECOPD

( ) To improve oxygen saturation

( ) To improve quality of life

( ) To increase exercise tolerance

( ) To increase ventilation

( ) To prevent future readmissions

( ) To prevent the development of pulmonary complications (e.g. pneumonia)

( ) To promote independence

( ) To reduce dyspnoea

( ) To reduce inpatient length of stay

( ) To reduce mortality

( ) To reduce the need for antibiotics

( ) To reduce the frequency of coughing

11. Do you prefer to use one ACT over others?

( ) Yes If yes, please indicate your 1 (one) most preferred ACT:……..

( ) No

12. How do you decide which ACT to use for patients with AECOPD? You may tick multiple responses.

( ) Access to resources/equipment

( ) Choose the one that is likely to be easiest to master

( ) Consider what has been done before

( ) Cost effectiveness

( ) Degree of dyspnoea or work of breathing

( ) Departmental/ward-based protocols

( ) Presence/absence of dynamic airway collapse / 'floppy' airways

( ) Presence/absence of dynamic hyperinflation

( ) Presence/absence of precautions/contraindications

( ) The highest level of evidence supporting a particular ACT

( ) The patient's preference for a particular ACT

( ) The physiotherapist's experience using a technique

( ) The physiotherapist's preference for using a particular ACT

( ) Time effectiveness (including time to prepare, find and clean equipment)

13. When do you advise patients with AECOPD to cease performing ACTs? You may tick multiple responses.

( ) When sputum characteristics (e.g. volume, colour, consistency) have returned to baseline

( ) When the patient feels their chest condition overall is back to 'usual' (irrespective of sputum characteristics)

( ) Whenever the patient wants to stop

( ) When there is no evidence of sputum (e.g. dry cough)

( ) On discharge from hospital

( ) After discharge (e.g. advice to continue after discharge)

( ) Never – they should perform daily airway clearance irrespective of clinical status

( ) Other (please specify):…….

14. What is your understanding of the scientific evidence for the effectiveness of ACTs for patients with AECOPD?

( ) There is strong evidence supporting the usefulness of ACTs during AECOPD

( ) There is weak evidence supporting the usefulness of ACTs during AECOPD

( ) The evidence is conflicting, inconclusive or non-existent to support or refute the usefulness of ACTs during AECOPD

( ) There is weak evidence refuting the usefulness of ACTs during AECOPD

( ) There is strong evidence refuting the usefulness of ACTs during AECOPD

( ) I am unsure what the current evidence is for ACTs during AECOPD