DORSET MEDICINES ADVISORY GROUP
COMMISSIONING STATEMENT ON THE USE OF OSCILLATING POSITIVE EXPIRATORY PRESSURE DEVICES

<table>
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<th>SUMMARY</th>
<th>The NHS Dorset Clinical Commissioning Group, does not commission oscillating positive expiratory pressure devices.</th>
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| BACKGROUND | Devices causing vibration in the airways listed in the Drug Tariff are the Flutter®, Acapella®, Lungflute®, RC-Cornet®, and Pari O-PEP®

These handheld devices consist of a steel ball in a plastic holder that resembles a smokers’ pipe. Exhaling into the device causes the steel ball to oscillate and vibrate in the casing. The resulting vibrations that are set up are thought to travel back into the lungs, vibrating the walls of the lungs and encouraging loosening of mucus. This then facilitates clearance of mucus by coughing. It is normally used for 5 to 15 minutes at a time, twice daily. More details can be found on the manufacturers websites. |
| RELEVANT NICE GUIDANCE | None |
| FORMULARY STATUS | Non formulary |
| PBR STATUS | Cost included in PbR tariff. |
| COMMISSIONING IMPLICATIONS | The management of cystic fibrosis is the commissioning responsibility of NHS England. The management of bronchiectasis or COPD is the commissioning responsibility of CCGs. |
| RELEVANT SERVICE DELIVERY GROUP | Not currently identified as a Right Care priority |
| PATIENT PATHWAY IMPLICATIONS | The device is intended for use in medical conditions where there is excessive production of mucus and/or where mucus clearance is reduced, including cystic fibrosis and bronchiectasis. |
| PRESCRIBING INFORMATION | The devices are normally contraindicated in right-sided heart failure, pneumothorax, TB and haemoptysis. |
| SUMMARY OF EVIDENCE TO SUPPORT FORMULARY STATUS | A Cochrane evaluation of clinical studies of oscillating devices in assisting mucus clearance in patients with cystic fibrosis was published in 2009, it included 708 participants in trials.2

This did not find a significant difference in effect between oscillating devices and other methods of airway clearance on FEV1 or other lung function parameters. Where a statistically significant change in secondary outcome variables was found, e.g. on sputum volume or weight, this was small and not wholly in favour of oscillating devices. No data have been published on long term clinical outcomes. A randomised trial of 17 patients with bronchiectasis compared Active Breathing Technique for mucus clearance with the Flutter device for 4 weeks.

No significant differences between the treatments were identified in lung function, health status measured by questionnaire, sputum weight or |
breathlessness though 11 of the 17 patients said they preferred the Flutter device. The British Thoracic Society guidelines for non-Cystic Fibrosis Bronchiectasis say that oscillation devices such as the flutter should be considered for use with postural drainage and forced expiration when helping patients develop effective mucus clearance techniques.

The respiratory working group of DMAG stated in June 2017:

*Evidence to support use is limited and mainly centred around use in cystic fibrosis rather than COPD.*

*It was agreed that flutter devices should be added to the formulary as ‘non-formulary – no evidence of benefit’.*

### ASSESSMENT OF COST IMPLICATIONS

- Cost per Flutter® unit: £40.50
- Cost per Acapella® unit: £40.50
- Cost per Lungflute® unit £37.50
- Cost per RC-Cornet® unit £39.95
- Cost per Pari O-PEP® unit £27.28

Prices taken from the August 2017 Drug Tariff. Cost of purchase by a patient would be higher as it would involve addition of VAT. It is unclear how long a device lasts and several would probably be needed each year with regular use. Costs may vary in different NHS settings because of negotiated procurement discounts.

### REFERENCES

- **Product information**
  - Lungflute® website: [http://www.lungflute.co.uk/about](http://www.lungflute.co.uk/about)
  - Pari O-PEP® website: [https://www.pari.com/uk-en/home/](https://www.pari.com/uk-en/home/)

- **References**
  - Thompson C et al. Randomised study of the Flutter device. Thorax. 2002 May;57(5):446-8, accessed via [http://thorax.bmj.com/content/57/5/446.long](http://thorax.bmj.com/content/57/5/446.long)
  - BTS guideline for non-CF bronchiectasis Thorax 2010;65:i1-i58 at, (page i30)

### DATE

November 2017

### REVIEW DATE

November 2019 or before, in light of new information

### CONTACT FOR THIS POLICY

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