

Appendix 1: Search strategies of specific database**Ovid MEDLINE (1946 to March 2020)**

1. Pulmonary Disease, Chronic Obstructive/ or Lung diseases, obstructive/ or Obstructive airway disease/ or Chronic obstructive lung disease/
2. Emphysema/ or Pulmonary Emphysema/ or Bronchitis, Chronic/ or Bronchitis/
3. Chronic Obstructive Pulmonary* Disease*.mp.
4. Chronic Obstructive lung* disease*.mp.
5. (COPD or COAD or chronic bronchi* or emphysema* or hyperlucent lung*).mp.
6. or/1-5
7. airway* clearance device*.mp.
8. airway* clearance therapy.mp.
9. sputum* clearance technique*.mp.
10.chest clearance*.mp.
11.Acapella*.mp.
12.Aerobika*.mp.
13.lung flute*.mp.
14.positive* expiratory pressure*.mp.
15.positive expiratory pressure therapy*.mp.
16.Oscillatory Positive Expiratory Pressure*.mp.
17.OPEP*.mp.
18.or/7-17
19.6 and 18
20.limit 19 to (english language and humans)

EMBASE (1947 to March 2020)

1. Pulmonary Disease, Chronic Obstructive/ or Lung diseases, obstructive/ or Obstructive airway disease/ or Chronic obstructive lung disease/
2. Emphysema/ or Pulmonary Emphysema/ or Bronchitis, Chronic/ or Bronchitis/
3. Chronic Obstructive Pulmonary* Disease*.mp.
4. Chronic Obstructive lung* disease*.mp.
5. (COPD or COAD or chronic bronchi* or emphysema* or hyperlucent lung*).mp.
6. or/1-5
7. airway* clearance device*.mp.

8. airway* clearance therapy.mp.
9. sputum* clearance technique*.mp.
10.chest clearance*.mp.
11.Acapella*.mp.
12.Aerobika*.mp.
13.lung flute*.mp.
14.positive* expiratory pressure*.mp.
15.positive expiratory pressure therapy*.mp.
16.Oscillatory Positive Expiratory Pressure*.mp.
17.OPEP*.mp.
18.or/7-17
19.6 and 18
20.limit 19 to (english language and humans)

CINAHL (EBSCO) (1960 to March 2020)

1. (MM “Lung Diseases, Obstructive”) OR (MM “Pulmonary Disease, Chronic Obstructive”)
2. (MM “Emphysema”) OR (MM “Bronchitis, Chronic”) OR (MM “Bronchitis”)
3. S1 OR S2
4. (TX “OPEP”) OR (MM” Oscillatory Positive Expiratory Pressure”)
5. (MM” positive expiratory pressure therapy”) OR (MM” positive expiratory pressure”)
6. (TX” lung flute”) OR (MM” lung flute”)
7. (TX” Flutter device”) OR (MM” Flutter device”)
8. (MM” Aerobika”) OR (MM” Acapella”)
9. (TX” chest clearance technique”) OR (TX” sputum clearance technique”)
10. (TX” airway clearance therapy”) OR (MM” airway clearance device”)
11. S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10
12. S3 AND S11
13. Limit S12 to Language: English

Cochrane Database of Systematic Reviews – up to March 2020

ID	Search
#1	(airway clearance device):ti,ab,kw (Word variations have been searched)
#2	airway clearance technique
#3	airway clearance therapy
#4	chest clearance technique
#5	sputum clearance technique
#6	Acapella
#7	Aerobika
#8	Flutter device
#9	lung flute
#10	positive expiratory pressure
#11	positive expiratory pressure therapy
#12	Oscillatory Positive Expiratory Pressure
#13	OPEP
#14	#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13
#15	Chronic Obstructive Pulmonary Disease
#16	Chronic Obstructive lung disease
#17	COPD
#18	#15 or #16 or #17
#19	#14 and #18

PubMed – up to March 2020

1. airway[All Fields] AND clearance[All Fields] AND ("equipment and supplies"[MeSH Terms] OR ("equipment"[All Fields] AND "supplies"[All Fields]) OR "equipment and supplies"[All Fields] OR "device"[All Fields])
2. airway[All Fields] AND clearance[All Fields] AND technique[All Fields]
3. airway[All Fields] AND clearance[All Fields] AND ("therapy"[Subheading] OR "therapy"[All Fields] OR "therapeutics"[MeSH Terms] OR "therapeutics"[All Fields])
4. ("thorax"[MeSH Terms] OR "thorax"[All Fields] OR "chest"[All Fields]) AND clearance[All Fields] AND technique[All Fields]
5. ("sputum"[MeSH Terms] OR "sputum"[All Fields]) AND clearance[All Fields] AND technique[All Fields]
6. Acapella[All Fields]
7. Aerobika[All Fields]
8. Flutter[All Fields] AND ("equipment and supplies"[MeSH Terms] OR ("equipment"[All Fields] AND "supplies"[All Fields]) OR "equipment and supplies"[All Fields] OR "device"[All Fields])
9. ("lung"[MeSH Terms] OR "lung"[All Fields]) AND flute[All Fields]
10. positive[All Fields] AND ("exhalation"[MeSH Terms] OR "exhalation"[All Fields] OR "expiratory"[All Fields]) AND ("pressure"[MeSH Terms] OR "pressure"[All Fields])
11. positive[All Fields] AND ("exhalation"[MeSH Terms] OR "exhalation"[All Fields] OR "expiratory"[All Fields]) AND ("pressure"[MeSH Terms] OR "pressure"[All Fields])

- AND ("therapy"[Subheading] OR "therapy"[All Fields] OR "therapeutics"[MeSH Terms] OR "therapeutics"[All Fields])
12. Oscillatory[All Fields] AND Positive[All Fields] AND ("exhalation"[MeSH Terms] OR "exhalation"[All Fields] OR "expiratory"[All Fields]) AND ("pressure"[MeSH Terms] OR "pressure"[All Fields])
 13. OPEP[All Fields]
 14. "pulmonary disease, chronic obstructive"[MeSH Terms] OR ("pulmonary"[All Fields] AND "disease"[All Fields] AND "chronic"[All Fields] AND "obstructive"[All Fields]) OR "chronic obstructive pulmonary disease"[All Fields] OR ("chronic"[All Fields] AND "obstructive"[All Fields] AND "pulmonary"[All Fields] AND "disease"[All Fields])
 15. "pulmonary disease, chronic obstructive"[MeSH Terms] OR ("pulmonary"[All Fields] AND "disease"[All Fields] AND "chronic"[All Fields] AND "obstructive"[All Fields]) OR "chronic obstructive pulmonary disease"[All Fields] OR ("chronic"[All Fields] AND "obstructive"[All Fields] AND "lung"[All Fields] AND "disease"[All Fields]) OR "chronic obstructive lung disease"[All Fields]
 16. "pulmonary disease, chronic obstructive"[MeSH Terms] OR ("pulmonary"[All Fields] AND "disease"[All Fields] AND "chronic"[All Fields] AND "obstructive"[All Fields]) OR "chronic obstructive pulmonary disease"[All Fields] OR "copd"[All Fields]