PNMEDICAL
PULMONARY AND SPEECH DEVICES

THE BREATHER™

ONE DEVICE – MANY THERAPIES

CLINICAL & FINANCIAL IMPACT OF RMT WITH THE BREATHER

CHILDREN WITH ASTHMA

- Reduces asthma attacks in children by 92%.
- Reduces diurnal and nocturnal symptoms in children with asthma by 100% and 88%, respectively.
- Restores the ability to perform ADL in 100% of children with asthma [1].

WOMEN WITH ASTHMA

- Increases PImax in women with asthma by 37%.
- Reduces ß2 agonist consumption by 38% in women with asthma [2].

BACK PAIN

- Reduces low back pain severity by 60% [3].

HEART FAILURE

- Improves MIP and MEP by 24% and 13%, respectively in patients with heart failure.
- Reduces dyspnea by 29% in patients with heart failure [4].
- Improves peak oxygen uptake by 17% in patients with heart failure.
- Improves exercise capacity by 19% in patients with heart failure [5].
- Improves inspiratory fraction (dynamic hyperinflation) by 10%, effectively reducing mortality [6].

BLOOD PRESSURE

- Reduces your blood pressure by 8/5 mmHg [7].
- Based on this reduction in blood pressure, RMT can reduce the risk of coronary heart disease by about 20 to 25% and the risk of stroke by 36-40% [8].

REDUCTION IN HOSPITALIZATION AND UTILIZATION

- Reduces health care utilizations and hospitalization by 30%.
- Reduces duration of hospitalization by 23%.
- Improves QOL by 19% [9].
- Pulmonary rehabilitation including RMT reduces exacerbations by 44%, hospitalization by 63% and duration of hospitalization by 55% [10].
- Reduced LOS by 16%, reduced risk of endotracheal intubation by 64%, hospital mortality by 78%, reduced muscle weakness by 64% [11].
- Based on a 30% reduction in hospitalization, and based on average hospitalization costs of $4714 per stage II or III patient per year, and a prevalence of 12 million diagnosed COPD patients in the US (total annual hospitalization costs of $56.5 billion),
- RMT could reduce hospitalization costs by $17 billion per year.
- Pulmonary rehabilitation including RMT could reduce hospitalization costs by $35.6 billion per year [12].

- RMT improves successful weaning from mechanical ventilation by 21% [13].
- Based on aggregated annual costs of prolonged mechanical ventilation of $16 billion, a reduction of 21% of PMV translates to a reduction in health-care costs of $3.4 billion per year [14].

- RMT reduces the mortality rate from pneumonia after stroke by 38%, saving 57 patients per year [15].
- RMT reduces the mortality rate from pneumonia after stroke by 38%, reducing hospitalization costs by $1.6 million per year [16].

COPD, COMORBIDITIES AND MORTALITY

- By reducing dynamic hyperinflation, 8 weeks of RMT reduce the relative mortality from respiratory failure by 1%, saving 10 COPD patients in every 1000 per year [6, 17].
- Based on this and the prevalence of 12 million diagnosed COPD patients, RMT could save 120,000 COPD patients per year from death in the US.
- RMT is effective in 80% of the most common comorbidities in COPD [18].

QUALITY OF LIFE

- Reduces fatigue by 22%.
- Reduces depression by 6.5%.
- Improves bodily pain perception by 31%.
- Improves vitality by 14%.
- Improves overall mental health perception by 16% [19].

MUSCLE STRENGTH

- Improves your quadriceps strength by 25% [19].
- Improves inspiratory muscle strength by 24% [4].
- Improves expiratory muscle strength by 13% [4].

DISORDERS RMT IS CLINICALLY EFFECTIVE FOR

DISORDERS AND DISEASES:

1. COPD
2. Asthma
3. Chronic heart failure
4. Coronary artery disease
5. Left ventricular dysfunction
6. Sleep apnea
7. Parkinson's disease
8. Duchenne Muscular disease
9. Multiple Sclerosis
10. Amyotrophic Lateral Sclerosis
11. Hypertension
12. Pulmonary hypertension
13. Stroke
    - Child may lose abilities similar to the results of Stroke...
14. Depression
15. Anxiety
16. Lung cancer
17. Gastro-oesophageal reflux disease
18. Sarcoidosis
19. Sickle cell anemia
20. Low back pain
21. * Dysphagia
22. Spinal cord injuries
23. Vocal cord dysfunction
    - * Low tone and muscles
24. Myasthenia Gravis

LIMITED DATA BUT DID SHOW CLINICAL EFFICACY:

1. Renal insufficiency
2. Skeletal muscle dysfunction
3. Fontane Circulation

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