

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.

http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1806-37132008000800003&lng=en&nrm=iso&tlng=en

WOMEN WITH ASTHMA

- Increases P_Imax in women with asthma by 37%.
- Reduces β 2 agonist consumption by 38% in women with asthma.

[http://journal.chestnet.org/article/S0012-3692\(16\)46299-9/fulltext](http://journal.chestnet.org/article/S0012-3692(16)46299-9/fulltext)

BACK PAIN

- Reduces low back pain severity by 60%. <https://www.ncbi.nlm.nih.gov/pubmed/24870567>

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.

<https://www.ncbi.nlm.nih.gov/pubmed/9256871>

- Improves peak oxygen uptake by 17% in patients with heart failure.
- Improves exercise capacity by 19% in patients with heart failure.

<http://www.sciencedirect.com/science/article/pii/S0735109705027841>

- Improves inspiratory fraction (dynamic hyperinflation) by 10%, effectively reducing mortality.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3516469/#b25-copd-7-797>

BLOOD PRESSURE

- Reduces your blood pressure by 8/5 mmHg.
- 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%.

<http://www.internationaljournalofcardiology.com/article/S0167-5273%2811%2901798-0/fulltext>

<https://www.ncbi.nlm.nih.gov/pubmed/19454737/>

REDUCTION IN HOSPITALIZATION AND UTILIZATION

- Reduces health care utilizations and hospitalization by 30%.
- Reduces duration of hospitalization by 23%.
- Improves QOL by 19%.

http://sobrafir1.tempsite.ws/imagens_up/artigos/The_effects_year_inspiratory_muscle_training_patients_COPD.pdf

- Pulmonary rehabilitation including RMT reduces exacerbations by 44%, hospitalization by 63% and duration of hospitalization by 55%.

[http://www.archives-pmr.org/article/S0003-9993\(09\)00933-2/pdf](http://www.archives-pmr.org/article/S0003-9993(09)00933-2/pdf)

- 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.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3694800/>

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

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3219341/>

<http://www.medscape.com/viewarticle/574908> – see PDF attached to email

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

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3255072/>

<http://www.sciencedirect.com/science/article/pii/S1836955316300170>

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.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3516469/>

<http://www.atsjournals.org/doi/pdf/10.1164/rccm.200407-867OC>

- 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.

<http://err.ersjournals.com/content/23/131/131.figures-only>

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%.

[http://www.resmedjournal.com/article/S0954-6111\(11\)00163-6/fulltext](http://www.resmedjournal.com/article/S0954-6111(11)00163-6/fulltext)

MUSCLE STRENGTH

- Improves your quadriceps strength by 25%.

[http://www.resmedjournal.com/article/S0954-6111\(11\)00163-6/fulltext](http://www.resmedjournal.com/article/S0954-6111(11)00163-6/fulltext)

- Improves inspiratory muscle strength by 24%.
- Improves expiratory muscle strength by 13%

<https://www.ncbi.nlm.nih.gov/pubmed/9256871>

DISORDERS RMT IS CLINICALLY EFFECTIVE FOR

- COPD
- Asthma
- Chronic heart failure
- Coronary artery disease
- Left ventricular dysfunction
- Sleep apnea
- Parkinson's disease
- Duchenne Muscular disease
- Multiple Sclerosis
- Amyotrophic Lateral Sclerosis
- Hypertension
- Pulmonary hypertension
- Stroke
- Child may lose abilities similar to the results of Stroke...
- Depression
- Anxiety
- Lung cancer
- Gastro-oesophageal reflux disease
- Sarcoidosis
- Sickle cell anemia
- Low back pain
- Dysphagia
- Spinal cord injuries
- Vocal cord dysfunction
- Low tone and muscles
- Myasthenia Gravis