

ResMed-sponsored Studies Show Combining Home Oxygen and Home Noninvasive Ventilation is a Cost Effective Treatment for COPD

Studies presented at the ATS 2018 International Conference demonstrate that combining home non-invasive ventilation with home oxygen therapy is more cost effective for patients with COPD and reduces risks of mortality and hospital readmission

SAN DIEGO--(BUSINESS WIRE)-- ResMed (NYSE: RMD, ASX: RMD) announced today the results of two clinical analyses conducted for the U.K. and U.S., demonstrating the cost effectiveness of combining home oxygen therapy and home non-invasive ventilation (NIV) therapy for patients with persistent hypercapnia following a life-threatening exacerbation of chronic obstructive pulmonary disease (COPD).

The ResMed-backed Home Oxygen Therapy – Home Mechanical Ventilation (HOT-HMV) health economic studies, presented today at the ATS 2018 International Conference, build on earlier data demonstrating the clinical and cost effectiveness of HOT-HMV therapy (i.e. combining home oxygen therapy with home NIV), compared to treating with oxygen alone.

The U.K. study found that HOT-HMV treatment reduced exacerbation frequency and 28-day hospital readmission. The U.S. analysis found a 58.3 percent reduction in 30-day readmissions for HOT-HMV patients compared to those on home oxygen alone – and that HOT-HMV can actually save patients money while improving their quality of life.

"It's common for a procedure or therapy to improve patient outcomes and quality of life, but it's rare to have a significant clinical impact with such a favorable economic impact as well, as HOT-HMV does," said ResMed Chief Medical Officer Carlos M. Nunez, M.D. "This finding is very positive news for people living with COPD who could benefit from HOT-HMV. The cost-saving potential is one more factor for encouraging wider use of this therapy option."

About the analyses

Cost-Effectiveness of Home Oxygen Therapy – Home Mechanical Ventilation (HOT-HMV) for the Treatment of Chronic Obstructive Pulmonary Disease (COPD) with Chronic Hypercapnic Respiratory Failure Following an Acute Exacerbation of COPD in the United Kingdom (UK): This economic analysis was based on patient-level medical resource utilization (MRU) from the intention-to-treat analysis of an open-label parallel-group randomized clinical trial. Patients with a hospital admission due to an exacerbation of COPD

requiring acute home mechanical ventilation (also known as non-invasive ventilation, or NIV) with persistent hypercapnia 2–4 weeks after resolution of respiratory acidosis were enrolled. Patients in the control arm were permitted to have NIV added to home oxygen therapy if the primary end-point (hospital readmission) was met and if pre-set safety criteria were breached (for example, persistent acidosis and inability to wean from NIV). The MRU analysis included patient-level evaluation of equipment (oxygen concentrator and NIV device, including maintenance and support), patient-reported medication, physician office visits, and hospital readmissions due to exacerbations. Trial data was used to develop an economic model from the U.K. National Health Service perspective. Costs were calculated by multiplying observed MRU by standard unit costs (2017£) and summed at the patient level. Quality-adjusted life years (QALYs) were measured based on patient health utilities calculated with U.K. coefficients and EuroQOL-5D data from the trial. One-way sensitivity analyses and a bootstrap analysis with 1,000 iterations were conducted.

The U.S. analysis was based on the U.K. study. Trial data was used to develop an economic model from the U.S. payer perspective. Costs were calculated by multiplying observed MRU by standard unit costs (2017\$) and summed at the patient level. QALYs were measured based on patient health utilities calculated with U.S. coefficients and EuroQOL-5D data from the trial. One-way sensitivity analyses and a bootstrap analysis with 1,000 iterations were conducted. Base-case incremental cost/QALYs gained was negative \$50,856.

About ResMed

ResMed (NYSE: RMD, ASX: RMD), a world-leading connected health company with more than 5 million cloud-connected devices for daily remote patient monitoring, changes lives with every breath. Its award-winning devices and software solutions help treat and manage sleep apnea, chronic obstructive pulmonary disease and other respiratory conditions. Its 6,000-member team strives to improve patients' quality of life, reduce the impact of chronic disease and save healthcare costs in more than 120 countries. ResMed.com

View source version on businesswire.com: https://www.businesswire.com/news/home/20180520005007/en/

ResMed For media:

Jayme Rubenstein, +1 858.836.6798 news@resmed.com

or

For investors:

David Pendarvis, +1 858.836.5000 investorrelations@resmed.com

Source: ResMed