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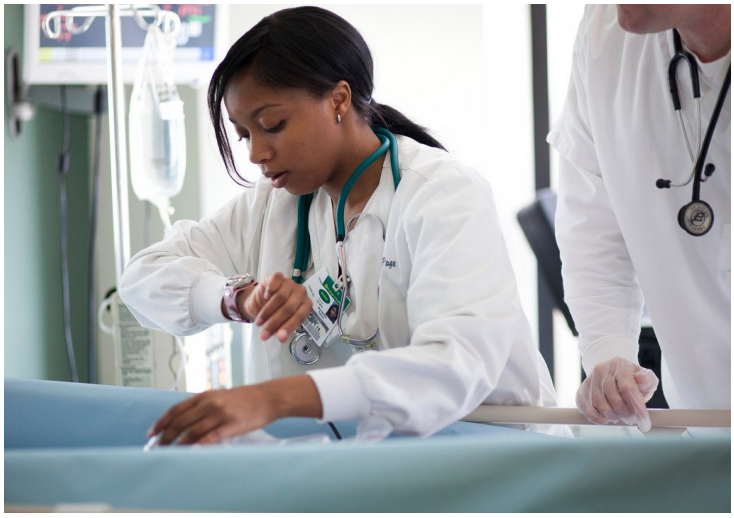
ASIA EDITION

Significant cost reduction in COPD care with simple, drug-free device

09 November 2017 | News

Aerobika device proves to be a cost-effective treatment option in the management of post-exacerbation COPD patients.



The Aerobika device (Trudell Medical International) is a cost-effective treatment option in the management of COPD exacerbations, according to a study published in the International Journal of COPD. This study, which used data from the published literature and national fee schedules to model the cost-effectiveness of the Aerobika device, shows that it provides both clinical benefit and direct medical cost savings in a post-exacerbation care COPD population.

COPD is a major (and growing) source of morbidity, mortality and healthcare utilization, with hospitalization for acute exacerbations being the biggest cost driver. Once a patient experiences an exacerbation, the risk of further exacerbation is increased two- to four-fold, and many patients experience two or three exacerbations every year. As many as one in five patients discharged from hospital following an exacerbation are re-admitted within 30 days.

The Aerobika device is a drug-free, handheld mechanical oscillating positive expiratory pressure (OPEP) device that has been designed to address the structural and functional challenges in the airways of patients with COPD. When the patient exhales through the device, it helps to expand the airways, loosen and expel mucus from the lungs and may also enhance drug deposition. It has been shown to improve lung function, exercise capacity and quality of life in COPD patients, and a recent real-word study showed that the device reduced exacerbation rates in patients during the critical 30-day post-exacerbation period. Using data from the latter study to provide real-world input, the authors of this current analysis showed cost savings ($553 per patient) and improved outcomes (equivalent to 6 fewer exacerbations per 100 patients per year) with the Aerobika device compared with no OPEP/PEP use, and concluded that the device provides cost-effective treatment for post-exacerbation COPD patients.

The authors also used various scenarios to investigate the likelihood of the benefit continuing over a full year, and predicted further clinical and cost benefits (21 exacerbations per 100 patients per year; cost savings of $1,952 per patient). Author Dominic Coppolo, MBA, RRT, FAARC, Vice President Clinical Strategy and Development noted, "Our model provides evidence of clinical and cost benefits of the Aerobika device in that critical 30-day period following an exacerbation. Given the high burden of COPD - in particular, costs relating to exacerbations - in the US population, we would expect that even a small benefit would have a significant impact on the healthcare system". He

went on to say that, although further studies would be needed to validate the long-term effectiveness, these data also give a good indication that the benefits will be sustained with long-term use.