New CoughAssist Model Approved

Judith R. Fischer, MSLS, IVUN Information Specialist, info@ventusers.org

In January 2013, Philips Respironics received clearance from the FDA to market the next generation CoughAssist model – the CoughAssist T70. (Outside the United States, it's called the CoughAssist E70 and comes with an oscillation feature.)

The CoughAssist, earlier known as the In-Exsufflator developed by the J.H. Emerson Co. in the 1990s, provides a noninvasive secretion clearance alternative to suctioning. Individuals who have a trach can use the CoughAssist with an adapter, and those who use noninvasive ventilation can use it with a mouthpiece or facial mask.

The unit works by gradually applying positive air pressure to the airway (inspiratory phase) and then rapidly shifting to negative air pressure (expiratory phase). The shift in pressure creates a high outward flow that simulates a deep, natural cough. Each cough cycle is composed of an inspiratory, expiratory and pause (20-30 seconds) phase, for a typical sequence of four to six cycles. Treatments can be performed several times per day, as needed.

The new model is much lighter, weighing less than 9 lbs., with smaller dimensions (9.1"H x 11.5"W x 7.5"D). The Cough-Trak feature provides a unique trigger with automatic sensitivity to allow individuals to initiate therapy and synchronize treatment with their own breathing patterns. Up to three settings can be saved to provide different therapies, such as for routine use, mucus plug removal and lung volume recruitment.

The large color screen display is user-friendly. Tidal volume, peak cough flow and oxygen saturation levels can be effectively monitored with data management software (SD card) that is the same used for the Trilogy100. One of the most innovative features is the ability to operate the CoughAssist hands-free with a foot pedal.



Philips Respironics' CoughAssist

The CoughAssist also has a detachable lithium-ion battery that can support up to four treatments on a single charge. Accessories include an SD card, hose clip, air filter, patient circuit, adult mask, carrying case and AC power cord. The unit has been FAA-approved for air travel.

The cost of the new model is about the same as the previous model. Vent users who have the older model and want to "upgrade" should work with their physician, DME home care company and insurance provider to determine eligibility for the newer model.

The CoughAssist is an invaluable device for people with neuromuscular conditions who do not have a strong enough cough to remove secretions and vital to the success of noninvasive ventilation. The use of this mechanical device during respiratory infections may minimize the risk of mucus plugs that could lead to pneumonia and possible emergency hospital admission.

For clinical references and reimbursement information:

http://coughassistt70.respironics.com/resources.html http://coughassiste70.respironics.com

For background:

www.ventusers.org/edu/valnews/val7-1a.html#the www.ventusers.org/edu/valnews/val12-1.html#ass