PHILIPS

CoughAssist T70

Prevent reintubation and **inspire better outcomes**

Invasive mechanical ventilation has consequences for **hospitals and their patients**

Financial consequence
lengthened ICU stay

Clinical consequence
decreased survival

Operational consequence
consumes more resources

As few as 6% of patients with prolonged weaning can consume

37% of ICU resources

Preventing reintubation is key to weaning patients from ventilation and transitioning them out of the ICU.

Reference: Wagner DP. *Am Rev Respir Dis*. 1989;140:S14-S18.

Patients are at **high risk for reintubation**

Reasons include[1]:

- Lack of improvement in the work of breathing
- Hypoxemia
- Respiratory acidosis
- Retained secretions
- Decreased consciousness

Patients with slowly progressing neuromuscular disease should be extubated directly to non-invasive ventilation (NIV) combined with cough clearance support.[2]

References: 1. Capdevila X, et al. *Crit Care Med*. 1998;26(1):79-87. **2.** Vianello A, et al. *J Crit Care*. 2011;26:517-524.

For patients with a low peak cough flow, **a different approach is needed**

Two approaches for patients requiring secretion removal[1]

	Direct tracheal suction	Mechanical insufflation–exsufflation (MI-E)
Mechanism	Vacuum applied through a catheter inserted in an artificial airway	Gradual positive pressure (insufflation) to the airway, then rapid shift to negative air pressure (exsufflation)
Area affected	With an endotracheal or tracheostomy tube, the suction is applied only to the central airways	The entire airway (upper, central and peripheral)
Outcomes	Ongoing irritation from the suction catheter, short-term increase in airway resistance, clearance of central airways only[2]	Supports natural cough-clearance mechanisms

Patients report that MI-E is more comfortable and effective than direct suctioning.[2]

References: 1. Chatwin M, et al. *Eur Respir J.* 2003;21(3):502-508. **2.** Sancho J, et al. *Am J Phys Med Rehabilitation.* 2003;82:750-753.

MI-E and NIV may result in **better outcomes** than NIV alone after extubation in a variety of patient conditions

In a study of 75 patients, of those randomized to MI-E:

83% were spared reintubation (vs 52%)

14% on MI-E and NIV required reintubation vs 65% on NIV alone

6.7 day reduction in average length of ICU stay postextubation*

*$P<.05$.

Reference: Goncalves MR, et al. *Crit Care*. 2012;15:R48.

Philips CoughAssist T70 **mimics a natural cough**

- Clears airways for longer periods than tracheal suctioning[1]
- Patients prefer MI-E over deep tracheal suctioning[2]*

Provides an effective, noninvasive secretion clearance solution.

*Study was performed in a group of ventilator-dependent tracheostomy patients.

References: 1. Toussaint M, et al. *J Nov Physiother*. 2012;2(3):110-112. **2.** Sancho J, et al. *Am J Phys Med Rehabil.* 2003;82(10):750-753.

What potential impact can **CoughAssist T70** have on hospitals and their patients?

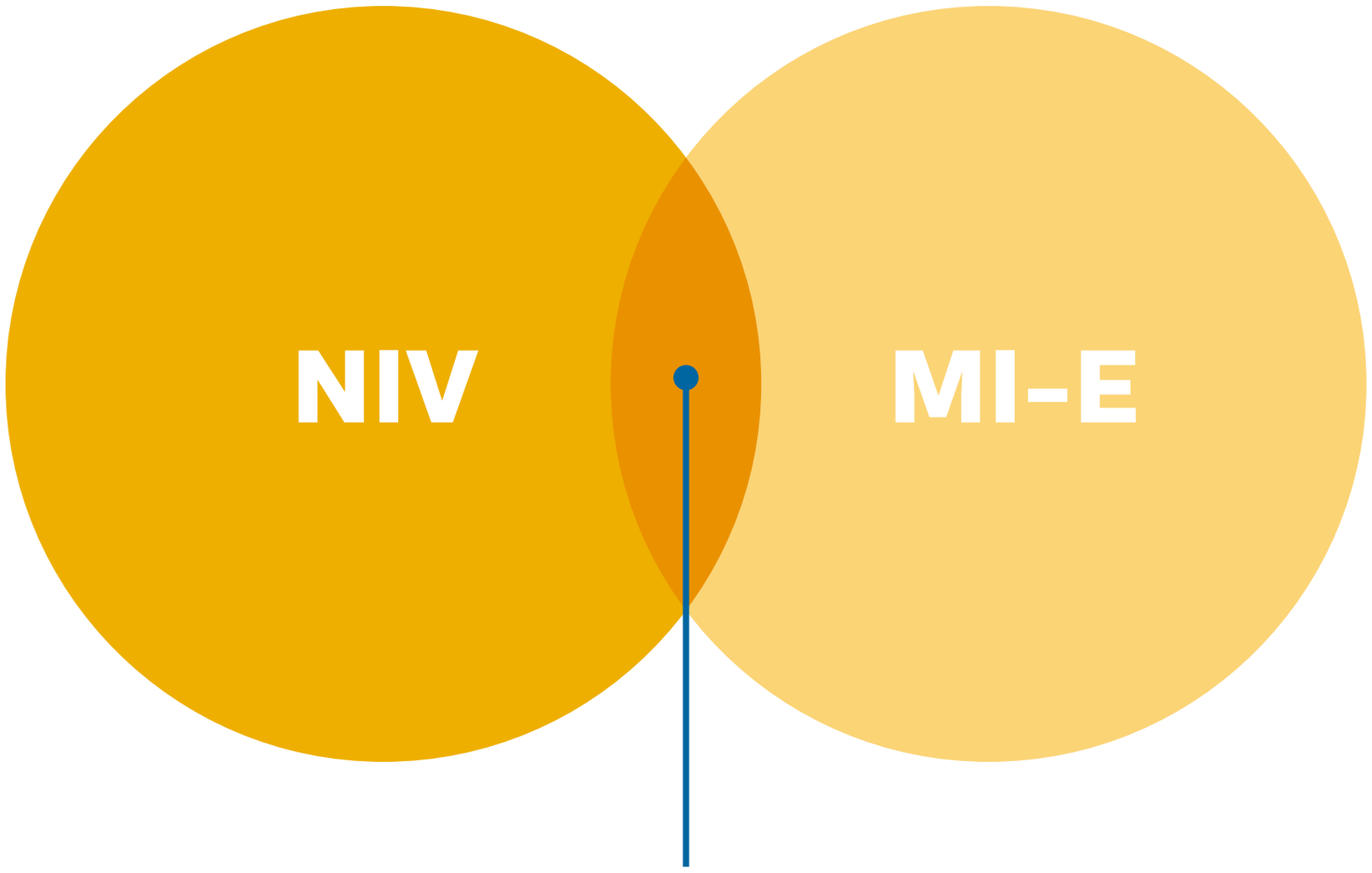
Financial benefit

Clinical benefit

Operational benefit

Reference: Goncalves MR, et al. *Crit Care*. 2012;15:R48.

Does your extubation protocol also address
your patient's ability to cough?



Reference: Goncalves MR, et al. *Crit Care*. 2012;15:R48.

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