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.

Patients are at high risk for reintubation

Reasons include:
- 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

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

Two approaches for patients requiring secretion removal

<table>
<thead>
<tr>
<th>Direct tracheal suction</th>
<th>Mechanical insufflation-exsufflation (MI-E)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mechanism</strong></td>
<td>Vacuum applied through a catheter inserted in an artificial airway</td>
</tr>
<tr>
<td><strong>Area affected</strong></td>
<td>With an endotracheal or tracheostomy tube, the suction is applied only to the central airways</td>
</tr>
<tr>
<td><strong>Outcomes</strong></td>
<td>Ongoing irritation from the suction catheter, short-term increase in airway resistance, clearance of central airways only</td>
</tr>
</tbody>
</table>

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

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.

Philips CoughAssist T70 mimics a natural cough

- Clears airways for longer periods than tracheal suctioning¹
- Patients prefer MI-E over deep tracheal suctioning²*

Provides an effective, noninvasive secretion clearance solution.

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

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

- **Financial** benefit
- **Clinical** benefit
- **Operational** benefit

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