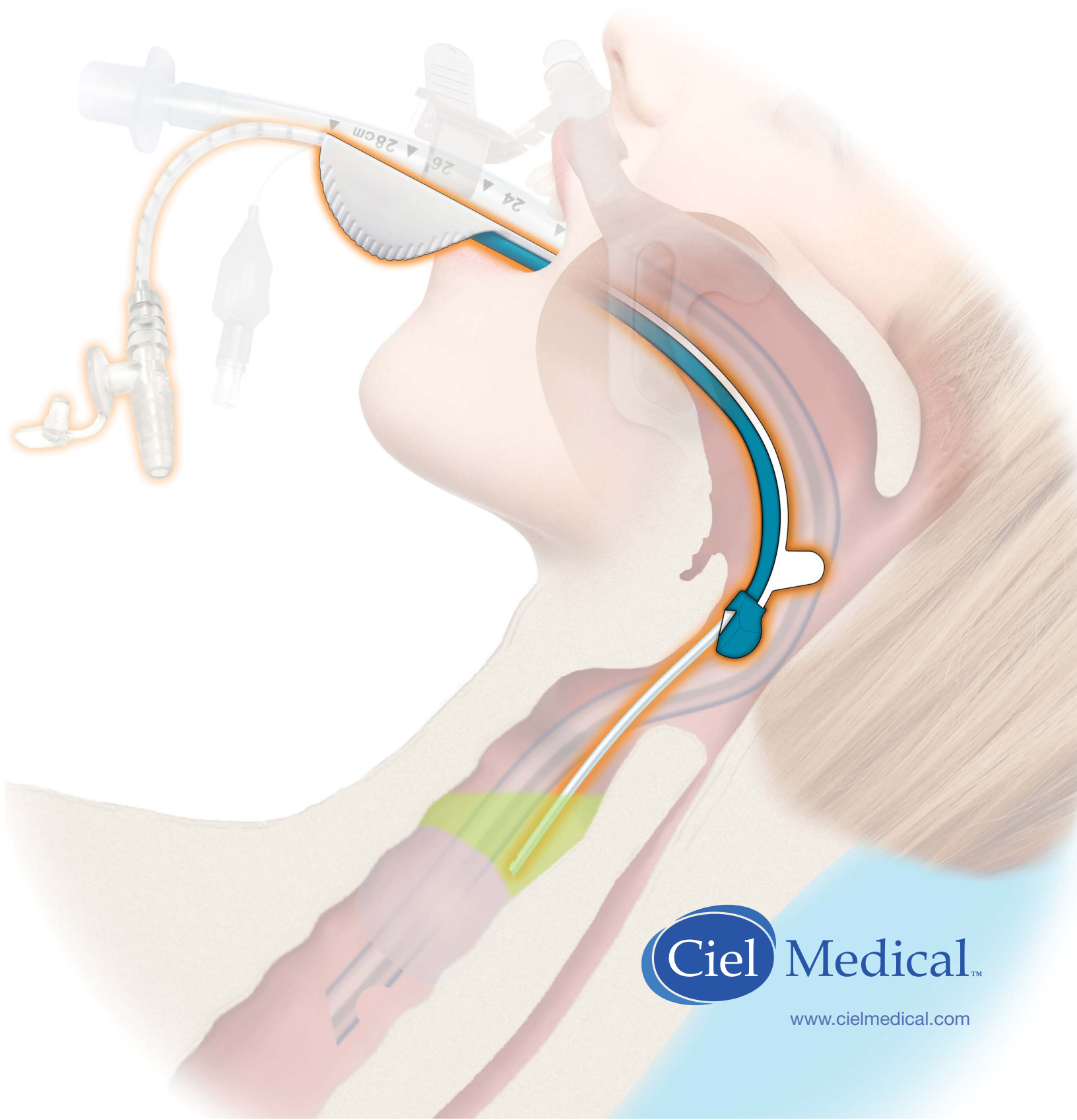


Sherpa Suction Guide™

Confidence in deep oral suctioning

Above-the-cuff suctioning for orally intubated patients



Ciel Medical™

www.cielmedical.com

Sherpa Suction Guide / System

A safe, cost-effective way to achieve above-the-cuff suctioning

Minimizing pooling of secretions above the ETT cuff is recommended as a basic practice to prevent ventilator-associated pneumonia (VAP) and ventilator-associated events (VAEs) in adult patients.

The **Sherpa Suction Guide** allows placement of a suction catheter above the endotracheal tube (ETT) cuff for removal of secretions in orally intubated patients. The Sherpa Suction Guide is used with a standard suction catheter for acute suctioning, such as prior to extubation or cuff leak testing.

The **Sherpa Suction System** packages the Sherpa Suction Guide with a unique suction line, providing a complete kit for above-the-cuff suctioning over an extended ICU stay.

DEVICE FEATURES

- The Sherpa Suction Guide is compatible with standard 10 Fr and 12 Fr suction catheters
- The Sherpa Suction System includes a suction line with removable connector and integrated thumb port and plug for continuous or intermittent suctioning
- The Guide is compatible with ETT sizes 7.0 mm to 8.5 mm, eliminating the need for specialty ETTs
- The Guide's soft tip allows safe insertion into the oral cavity
- The Guide's slim profile allows easy tracking over the ETT
- The Guide's locking feature retains the suction line during insertion
- The Guide's white handle provides a clear insertion depth indicator
- Not manufactured with natural latex rubber



Clinician success at delivery of a suction catheter to ETT cuff:²

99% with Sherpa Suction Guide

0% with suction catheter alone

"Intermittent and continuous drainage of subglottic secretions has been studied in 13 randomized controlled trials. On meta-analysis, the use of endotracheal tubes with subglottic drainage reduced VAP rates by 55%, mean duration of mechanical ventilation by 1.1 days, and intensive care length of stay by 1.5 days."

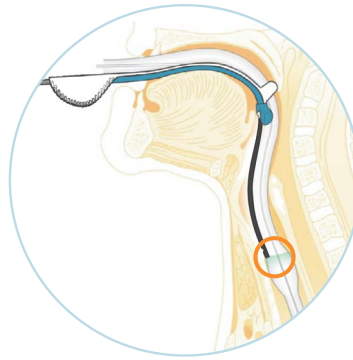
—Infection Control Hospital Epidemiology, 2014¹

"Subglottic secretion suctioning resulted in a significant reduction of ventilator-associated pneumonia prevalence associated with a significant decrease in antibiotic use."

—Critical Care Medicine, 2015⁷

“Micro or macro aspiration of oropharyngeal and/or gastric fluids are presumed to be an essential step in the development of VAP. Pulmonary aspiration is increased by supine positioning and pooling of secretions above the ET tube cuff.”

— American Association of Critical-Care Nurses, 2008³



With the Sherpa Suction Guide

Catheter reaches the cuff, aspiration risk is reduced



Without the Sherpa Suction Guide

Catheter coils in oral cavity, aspiration risk persists

Sherpa Suction System Value Proposition

Now there’s no need to throw away money on patients who don’t need it

It’s difficult to anticipate which patients may need an expensive ETT with an integrated subglottic suction line. With the Sherpa Suction System, there’s no need to guess. The Sherpa Suction System allows the care provider to deliver a separate suction line to the ETT cuff at any time after intubation for selective use in patients that require above-the-cuff suctioning. By taking the guesswork out of the decision, hospitals can achieve substantial savings on supply costs.

Save \$230,000 annually in ventilator associated complications (VAC) and length of stay (LOS)

Above-the-cuff suctioning has been shown in 13 RCTs to reduce VAC and shorten ICU LOS by 1.5 days¹, which can save the average acute care center \$230,000⁶ annually. Every ICU ventilator day costs \$4796.⁵

Consistency in care for all intubated patients

Many facilities find that only a portion of their ventilated ICU patients are intubated with specialty ETTs because intubations occur in many locations throughout the hospital. The Sherpa Suction System provides an above-the-cuff suctioning solution for patients who are already intubated with a standard ETT. The Sherpa Suction System ensures 100% of all ICU-ventilated patients have daily access to above-the-cuff suctioning.

Calculate your facility’s savings!

_____ ICU ventilated patients (per month)	_____ Facility-wide ETT intubations (per month)	_____ ICU patients ventilated > 48 hours (per month)
X <u>12</u> Months in a year	X <u>12</u> Months in a year	X <u>4,796</u> Cost of ICU ventilator day
X <u>\$29.95</u> Sherpa Suction System	X <u>\$17</u> Subglottic ETT	X <u>1.5</u> Average LOS reduction with subglottic suctioning
= _____ Annual cost of Sherpa Suction System	= _____ Annual cost of subglottic ETT	X <u>12</u> Months in a year
		= _____ Annual savings



ORDERING INFORMATION

Ciel Medical products are available from Ciel Medical and our specialty distributors. For the latest product information, visit www.cielmedical.com or email us at info@cielmedical.com.

The **Sherpa Suction Guide** allows placement of a suction catheter above the ETT cuff for removal of above-the-cuff secretions in orally intubated patients.

The **Sherpa Suction System** includes a Sherpa Suction Guide and integrated 12 Fr suction line.

Part number	Product	Quantity
CM20010	Sherpa Suction Guide	10/box
CM20010C	Sherpa Suction Guide	120/case
CM22010	Sherpa Suction System	10/box
CM22010C	Sherpa Suction System	120/case

FREQUENTLY ASKED QUESTIONS

Is suctioning “above the cuff” important?

Yes. Minimizing pooling of secretions above the ETT cuff is recommended as standard practice for VAP/VAE prevention in long-term intubated patients.^{1,3}

What if I have a very low rate of VAP/VAE?

Even if you have a low rate of VAP/VAE, above the cuff suctioning can still have a significant impact on patient outcomes and your hospital's operating costs:

- On meta-analysis above the cuff suctioning has reduced VAP by 55% and ICU length of stay by 1.5 days¹.
- Saving a single case of VAP can save \$30,000 or more in extra costs⁴
- Reducing duration of mechanical ventilation by a single day can save \$4,796⁵

With which suction catheter is the Sherpa Suction Guide/System compatible?

You can use any standard 10Fr or 12Fr suction catheter with the Sherpa Suction Guide. The Sherpa Suction System comes packaged with its own suction line.

On which patients should I use the Sherpa Suction Guide/System?

Above the cuff suctioning is recommended as a basic practice for all patients on a ventilator for more than 48 hours.

How long can the Sherpa Suction Guide/System be used?

The device is intended for single patient use. The Suction Guide is used to deliver the Suction Line to the ETT cuff and the Suction Guide is then removed from the airway. The Suction Line can remain in place for continuous or intermittent suctioning.

How is this different from a Mallinckrodt™ Evac ETT?

Mallinckrodt Evac and other commercially available specialty ETTs have an integrated suction line which leads to a suction port above the ETT cuff. The Sherpa Suction Guide/System is different because it is used to deliver a separate suction line above the ETT cuff, enabling suctioning above the cuff of standard ETTs. Delivery of a suction line following intubation allows for selective and cost-effective use of above the cuff suctioning in targeted patients. Additionally, because the suction line can be delivered as needed with the Sherpa Suction Guide/System, clogs can be easily fixed.

Can the Sherpa Suction Guide be left in the airway?

It is our recommendation that the Sherpa Suction Guide is removed after use to eliminate the risk of pressure ulcers from constant contact with the lips or oropharyngeal tissues. The Suction Line may remain in place for continuous or intermittent suctioning.

Will the Suction Line puncture the ETT cuff?

No. Testing has shown that repeated delivery to the ETT cuff (90 times or more) does not impact cuff integrity.⁸

How effective is the Sherpa Suction System at removing fluid?

These images show an example of residual secretions during a comparative bench test.



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1. Infection Control & Hospital Epidemiology, 2014, 35(8):915-936
2. Clinician experience in simulated test models, data on file at Ciel Medical
3. American Association of Critical-Care Nurses, keyword: VAP Practice Alert
4. American Journal of Respiratory and Critical Care Medicine, 183, 2011:A4122
5. Critical Care Medicine, 2005 June, 33(6):1266-71
6. Assumes 300 vent days per month, 2010 NHSM mean VAP rate of 2.9/1000 ventilator days and a VAP cost of \$30k
7. Critical Care Medicine, 2015, 43(1):22-30
8. Data on file at Ciel Medical

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Patent Pending
APM005_A DCO-0047