



Hillrom™



## The MetaNeb® System and The Vest® Airway Clearance System

Comprehensive airway clearance solutions in acute care

# **A COMPREHENSIVE AIRWAY CLEARANCE SOLUTION IN ACUTE CARE**

**Therapy with both The MetaNeb<sup>®</sup> System and The Vest<sup>®</sup> Airway Clearance System is proven to improve clinical outcomes across the hospital with many patient populations by providing secretion clearance with the addition of lung expansion and aerosol delivery with the MetaNeb System.**



### The MetaNeb® System

provides patients with Oscillation and Lung Expansion (OLE), an effective and consistent therapy to prevent and treat pulmonary atelectasis while delivering operational efficiencies to healthcare providers.

## PATIENT POPULATIONS

- Pulmonary insufficiency
- Neuromuscular diseases
- Mechanical ventilation
- Post-operative
- Trauma
- COPD
- Cystic Fibrosis
- Pediatrics
- Atelectasis
- Cerebral Palsy
- Bronchiectasis
- Cystic Fibrosis
- Burn
- Pneumonia
- Respiratory Failure

## HOSPITAL DEPARTMENTS OR UNITS

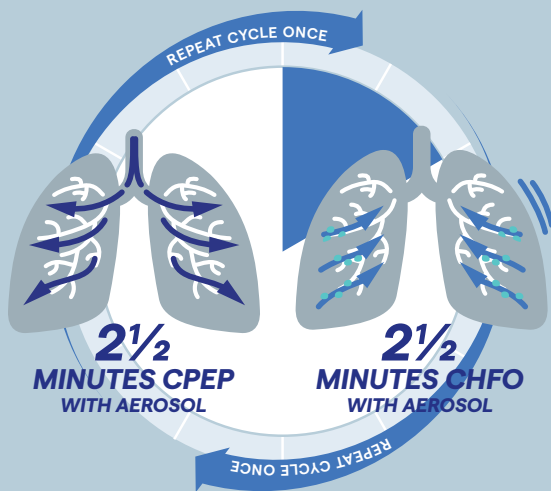
- Nursing
- Critical Care
- Physical Therapy
- ICU
- Sub Acute Unit
- Respiratory Care
- Surgical/Post Surgical Unit
- Emergency Department
- Step Down Unit
- Bariatrics
- Pediatrics

The Vest® Airway Clearance System has been demonstrated to benefit patients in the removal of retained secretions due to both acute and chronic respiratory conditions.



# How does the MetaNeb® System work?

The MetaNeb System is designed to mobilize retained secretions, lung expansion therapy and to deliver medicated aerosol for the treatment and prevention of pulmonary atelectasis.



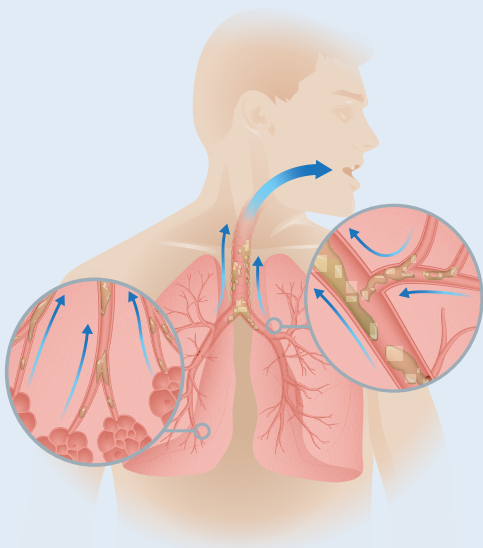
**THE METANEB SYSTEM 10-MINUTE OLE THERAPY CYCLE: ALTERNATING CYCLES OF CPEP AND HFCWO COMBINED WITH AEROSOL DELIVERY HELP MAXIMIZE THERAPY EFFECTIVENESS.**

CHFO Therapy is introduced immediately after lungs have been expanded through CPEP.

Aerosol is delivered in both lung expansion and secretion clearance.

# How does The Vest® Airway Clearance System work?

Through High Frequency Chest Wall Oscillation technology, The Vest Airway Clearance System dislodges mucus from the bronchial walls, and mobilizes secretions and mucus from the smaller to larger airways where it can be cleared by coughing or suctioning.



**THE VEST AIRWAY CLEARANCE SYSTEM HIGH FREQUENCY CHEST WALL OSCILLATION (HFCWO) IS IMPLEMENTED MOST COMMONLY IN 10-20 MINUTE CYCLES.**

During treatment the chest wall is gently compressed and released, creating air flow oscillations and increased air flow to mobilize secretions.

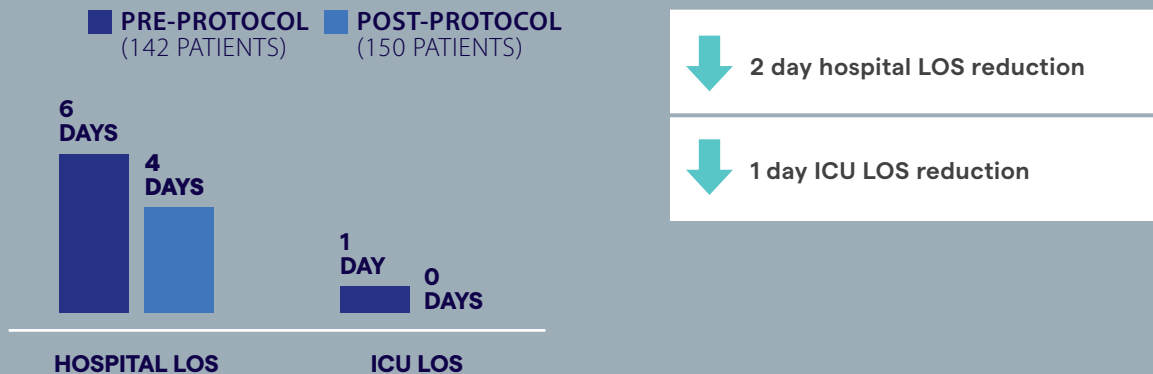
# Combined therapy protocols lead to clinical outcomes for multiple institutions

When our customers combine both The MetaNeb® System and The Vest® Airway Clearance System into one comprehensive airway clearance protocol, we see results across the hospital with multiple patient types.

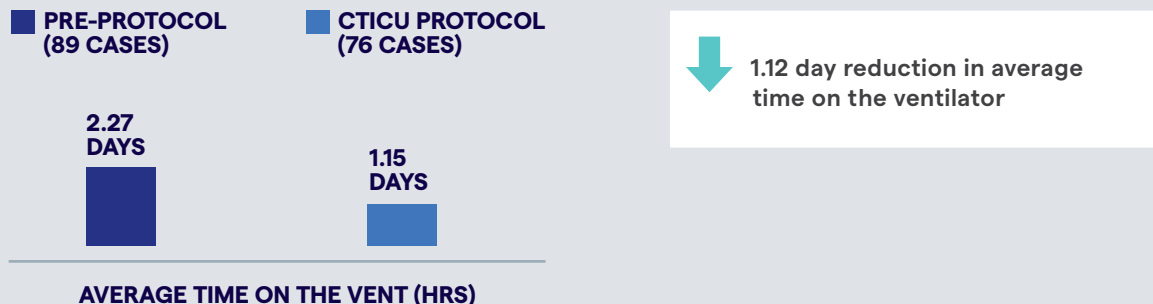
## BRONCHOPULMONARY HYGIENE PROTOCOL WITH PNEUMONIA PATIENTS<sup>1,2</sup>



## VOLUME EXPANSION PROTOCOL WITH TRAUMA PATIENTS<sup>3</sup>



## CTICU PROTOCOL WITH POST SURGICAL CARDIAC PATIENTS<sup>4</sup>



# When to use The Vest® Airway Clearance System or the MetaNeb® System?

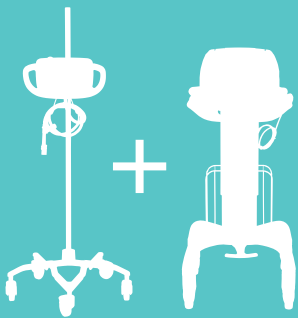
## SAMPLE GUIDELINES FOR AIRWAY CLEARANCE WITH THE METANEB SYSTEM AND THE VEST AIRWAY CLEARANCE SYSTEM

Because of the overlap in indications for use of these therapies, Hillrom has created comprehensive guidelines to aid caregivers in the choice to consider one or both therapies when assessing their individual patient needs.



### SAMPLE GUIDELINE WITH FOUR PATIENT CONSIDERATION CATEGORIES:

- Consider The MetaNeb System
- Consider The Vest System
- Consider The MetaNeb System before The Vest System
- Consider The Vest System, The MetaNeb System or both



In development of the sample guidelines, Hillrom worked with many institutions across the nation to understand current usage and review protocols.

Our customers reported that they like having multiple therapy options available for their staff because it gives the Respiratory Therapists a toolbox for critical decision-making and appropriate care.





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## ABOUT HILLROM

Hillrom is a global medical technology leader whose 10,000 employees have a single purpose: enhancing outcomes for patients and their caregivers by advancing connected care. Around the world, our innovations touch over 7 million patients each day. They help enable earlier diagnosis and treatment, optimize surgical efficiency and accelerate patient recovery while simplifying clinical communication and shifting care closer to home. We make these outcomes possible through connected smart beds, patient lifts, patient assessment and monitoring technologies, caregiver collaboration tools, respiratory care devices, advanced operating room equipment and more, delivering actionable, real-time insights at the point of care. Learn more at [hillrom.com](http://hillrom.com).

**For more information, please contact your Hillrom sales representative at 1-800-426-4224.**

**[respiratorycare.hill-rom.com](http://respiratorycare.hill-rom.com)**

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### References

- <sup>1</sup> Grasley T. The MetaNeb® System in an acute care hospital setting: an assessment of impact on hospital length of stay using a failure mode and effects analysis. Hill-Rom White Paper. 2012.
- <sup>2</sup> CDC/NCHS National Hospital Discharge Survey, 2010.
- <sup>3</sup> Nyland B, Spilman S, Halub M, et al. A preventative respiratory protocol to identify trauma subjects at risk for respiratory compromise on a general inpatient ward. Respiratory Care. 2016. doi:10.4187/respcare.04729.
- <sup>4</sup> Jaye D. Presented at NTI. 2016.

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