



Hillrom™

The Volara™ System

Oscillation & Lung Expansion Therapy

**MAXIMIZE PATIENT OUTCOMES  
FROM HOSPITAL TO HOME**



# HOSPITAL-LEVEL 3-IN-1 THERAPY NOW AVAILABLE AT HOME

Designed with the versatility to support continuity of care from hospital to home, The Volara System combines three treatments in one system.

## CPEP

Continuous Positive Expiratory Pressure treats and helps prevent pulmonary atelectasis by delivering continuous positive pressure, combined with aerosol medication, to help expand and hold the airways open.

## CHFO

Continuous High Frequency Oscillation delivers continuous pulses of positive pressure combined with aerosol medication to mobilize and move retained secretions.

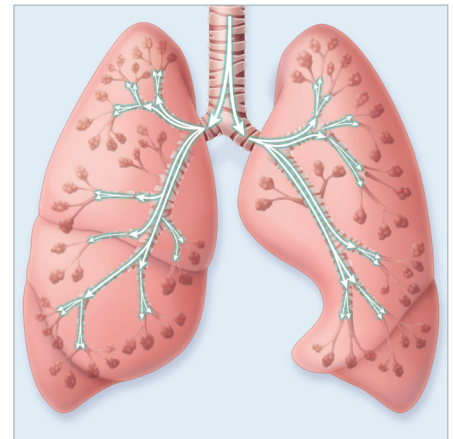
## Nebulizer

Integrated with CPEP and CHFO for maximum treatment efficiency.

## How it works

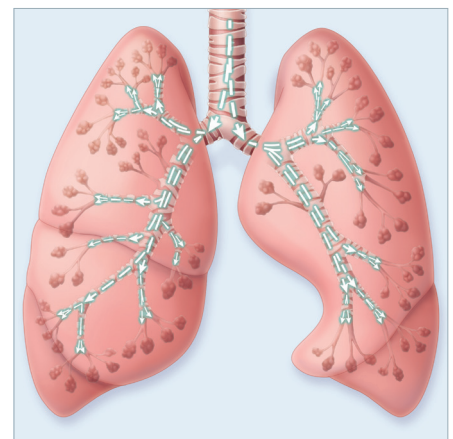
The Volara System assists with two vital airway clearance processes: CPEP therapy expands the lungs, enabling mobilization and evacuation of secretions. CHFO therapy mobilizes secretions to the large airways. Throughout both processes a nebulizer delivers aerosol medication to enhance therapy efficiency.

## EXPANSION



Continuous positive expiratory pressure and increased airflow are combined with aerosol medication

## MOBILIZATION



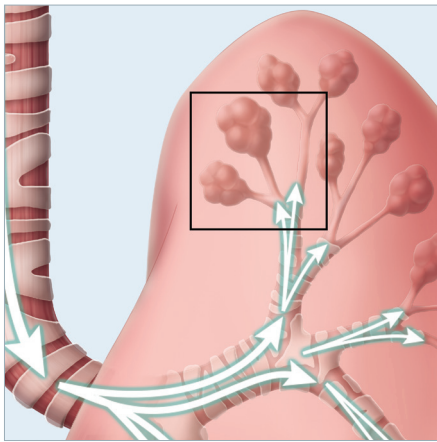
Continuous pulses of positive pressure combined with aerosol medication are delivered to the airways



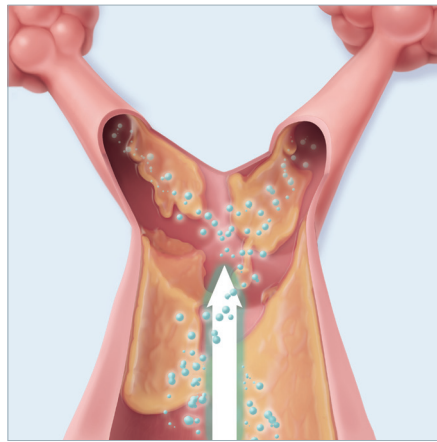


Oscillation & Lung Expansion therapy (OLE) has been proven to deliver outstanding clinical and economic outcomes in acute care settings.<sup>1</sup>

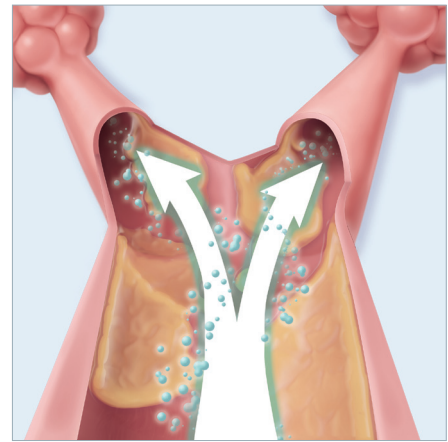
Now, with The Volara System, your patients can benefit from OLE therapy at home.



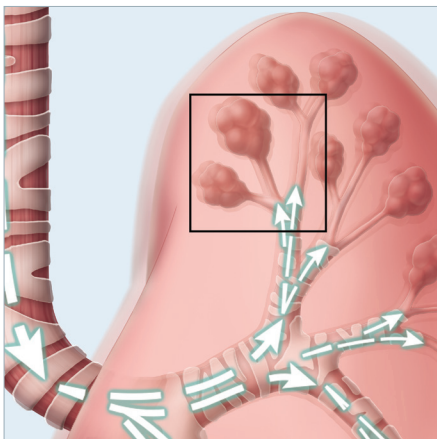
Combined pressure, airflow and medication opens the airways



Airflow during inspiration and expiration prevents or reverses atelectasis



Lung expansion allows air to move beyond retained secretions, aiding in mobilization



Secretions are loosened



Continuous high frequency oscillation during both inspiration and expiration forms a pressure gradient



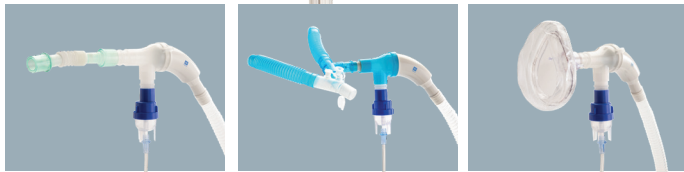
Accelerated expiratory airflow mobilizes secretions to the larger airways, where they can be cleared by coughing or suctioning

# DESIGNED FOR PRECISION AND CONTINUITY OF CARE

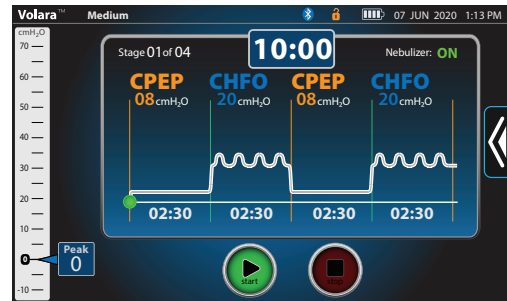
The Volara System promotes accurate, consistent therapy in acute and chronic care settings, helping accelerate recovery and sustain lung health. With a wide pressure range that allows you to treat a broad range of patients, it accommodates multiple delivery modes, including tracheostomy, mask, mouthpiece and inline ventilator.



Patient circuit features ergonomic handle, multiple interfaces and increased nebulizer effectiveness.



The Volara System control unit and patient circuit have been intentionally designed to deliver high performance therapy. The Volara System control unit will not run without sensing the Smart-Filter™ with integrated RFID tag.



Patients simply power up and press START, for easy, repeatable therapy.

Stage	Therapy	Pressure cmH <sub>2</sub> O	Duration minutes	Frequency	Nebulizer
1	CPEP	8	02:30	--	ON
2	CHFO	20	02:30	Med	ON
3	CPEP	8	02:30	--	ON
4	CHFO	20	02:30	Med	ON

Select the appropriate therapy for your patient, from Hillrom presets for pressure, duration, oscillation frequency and nebulization.



A synopsis is displayed after session is completed, including duration of therapy, review of each therapy stage and number of times the circuit is used.



### ONE-BUTTON OPERATION

Gives quick access to frequently used presets, for standardization of therapy across patient groups

### INTUITIVE INTERFACE

Enables real-time visualization of therapy status by patients and caregivers

### PHYSICIAN-PRESCRIBED PRESETS

Enables patients to follow your therapy protocols precisely

## Tested and proven in acute care settings

A 419-patient, two-phase multicenter study<sup>1</sup> showed that pulmonary treatment with OLE therapy, along with standard respiratory therapy, reduced the rate of certain PPCs in high-risk surgical patients who underwent thoracic, upper abdominal or aortic open surgical procedures.

Impact of OLE Therapy on Postoperative Pulmonary Complications (PPCs)

# 31%

**OVERALL RELATIVE REDUCTION IN PPCS**

From 22.9% to 15.8%, Phase 1 to Phase 2

# 47%

**RELATIVE REDUCTION IN PPCS FOR INTUBATED PATIENTS**

Reduction in mean length of stay (LOS)

**HOSPITAL:**

# 1.6 DAYS

**ICU:**

# 2 DAYS

Time on ventilator

# 64% REDUCTION

Average total time on invasive mechanical ventilation



# TREAT PATIENTS' NEEDS FROM HOSPITAL TO HOME

OLE therapy has proven so effective in hospitals, physicians have often asked when this therapy would be available for patients in their homes. Now it is. The Volara System makes hospital-level therapy not only possible, but practical for a full range of care settings.



OLE has been shown to deliver outstanding outcomes, including significant reductions in:

- Hospital length of stay
- Average time on ventilator
- Post-operative pulmonary complications

The Volara System is portable and lightweight, for use throughout the home and beyond

Signature Hillrom™ service supports continuity of care





## Treat a wide range of patients

The Volara System is suitable for patients with a broad range of chronic conditions.

- Cerebral palsy (CP)
- Amyotrophic lateral sclerosis (ALS)
- Duchenne muscular dystrophy (DMD)
- Cystic fibrosis (CF)
- Spinal muscular atrophy (SMA)
- Spinal cord injury (SCI)



Short treatment times help make therapy less disruptive for patients

The Volara System delivers efficient therapy for a wide range of patients, pediatric to adult

The Volara System is easy to carry wherever patients go



**Hillrom™**

## **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](https://hillrom.com).**

**For more information about products or services, please contact your Hillrom sales representative or Hillrom customer service at 1-800-426-4224.**

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

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1. Huynh TT, Liesching TN, Cereda M, Lei Y, Frazer MJ, Nahouraii MR, Diette GB, Efficacy of Oscillation and Lung Expansion in Reducing Postoperative Pulmonary Complication, Journal of the American College of Surgeons (2019)

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