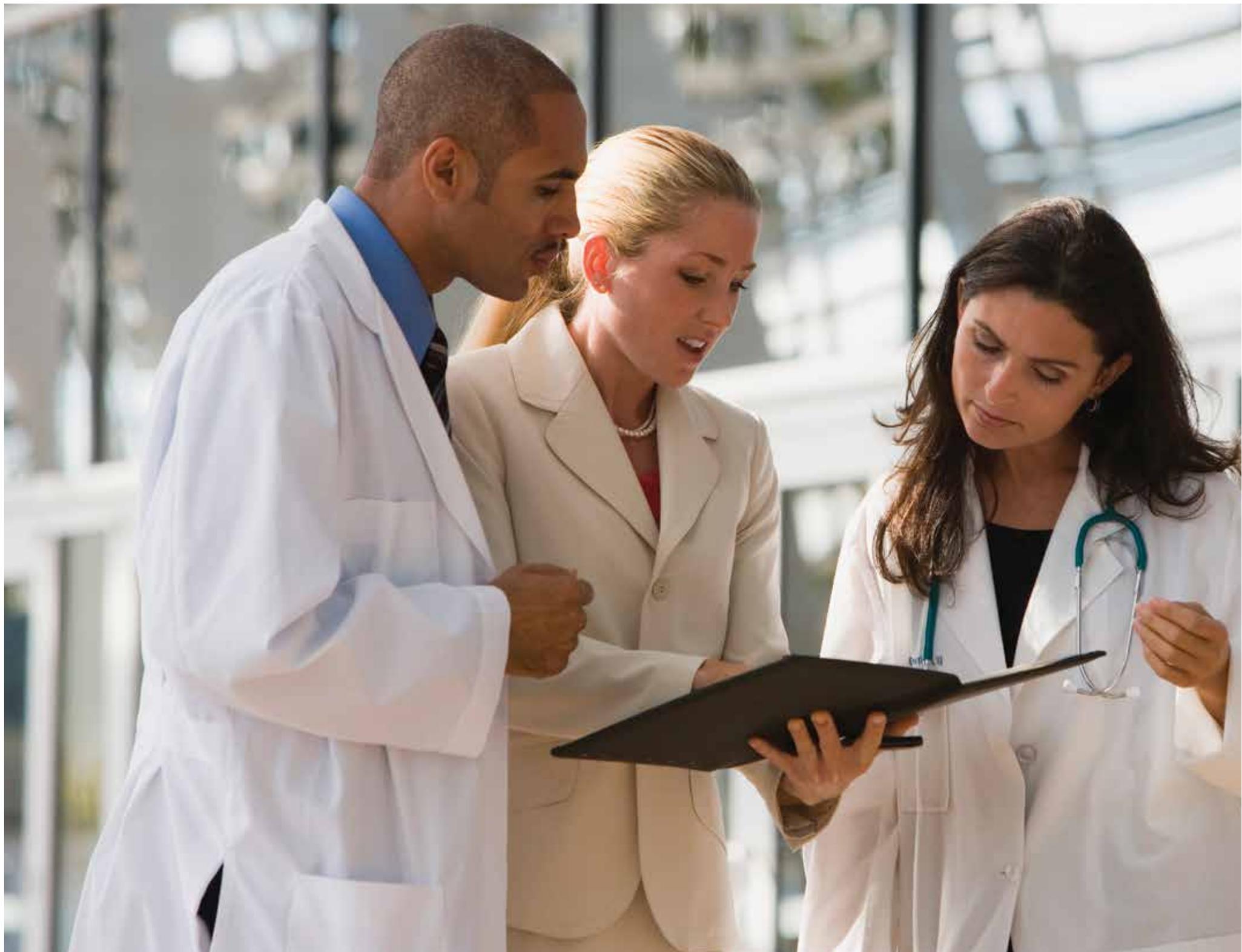


The new approach



to Respiratory Care







# Solutions to Your Challenges



## **Improve patient safety and outcomes. Accomplish cost reductions.**

It is no secret that your institution's success and future is based on controlling costs. At the same time, the very business you are in requires that reducing costs cannot come with a compromise in the quality of the care you provide.

## **CareFusion's approach provides true solutions for today's complex healthcare environment and can help you comply with future regulations.**

Unlike other Respiratory Care companies, CareFusion delivers a system approach that combines our line of ventilators and devices with clinical analytics, markers and retrospective reporting.

Building on the CareFusion Coordination Engine (CCE) used with our Alaris® infusion devices and Pyxis® medication delivery system, we offer connectivity and services between ventilation, the CCE and HIT systems:

- Knowledge Portal: providing intelligence and analytics for clinicians and respiratory therapists; such as weaning and lung protective analytics with retrospective reporting tools
- Respiratory Documentation Application: helping improve clinician workflow and reduce treatment documentation variability

***Our system approach to respiratory care provides true solutions and tools to help optimize the quality of patient care and empower clinicians to improve patient outcomes while helping to control costs.***

# Controlling Costs by Improving Outcomes





## Reducing costs by improving outcomes and patient safety

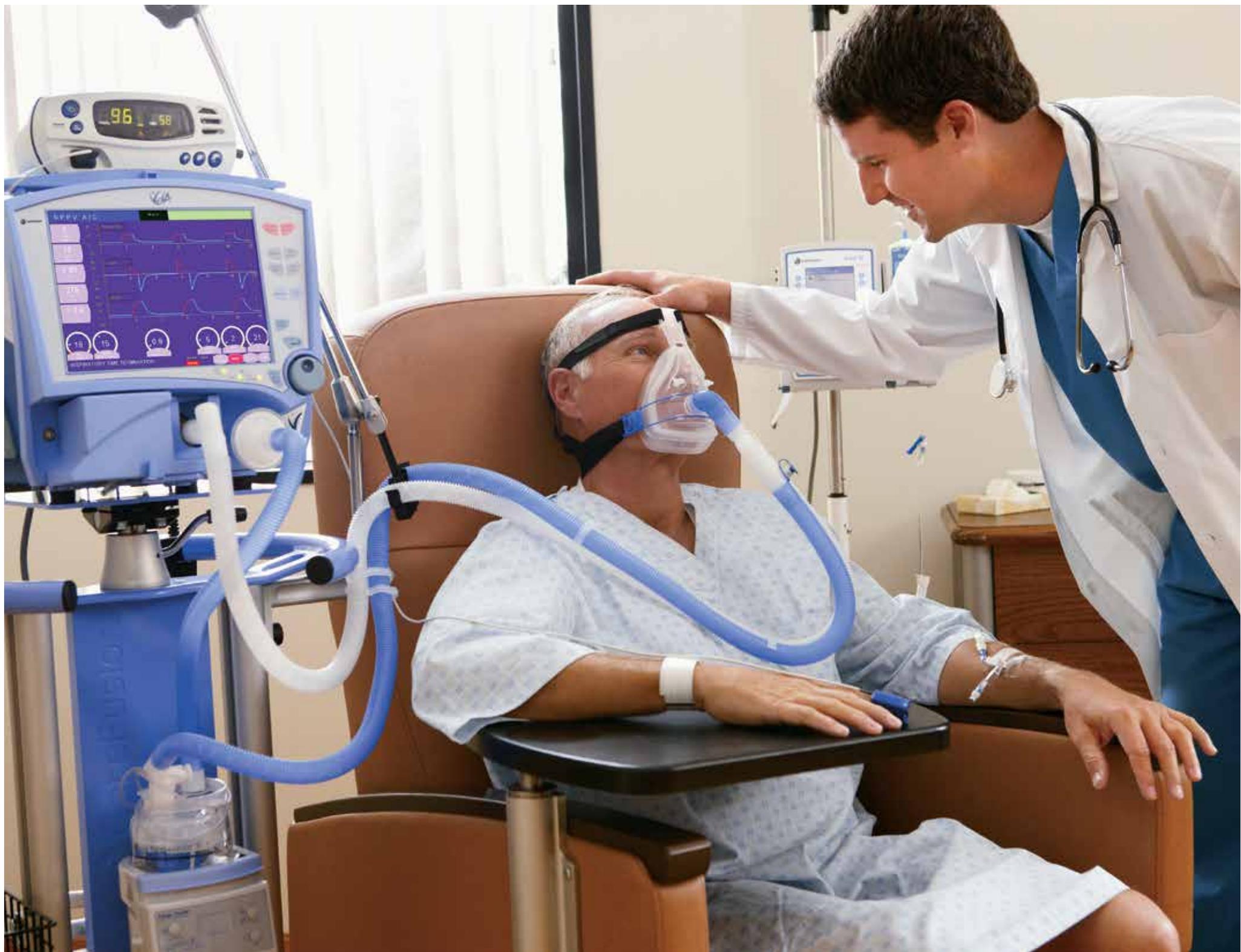
Lowering costs means reducing the need, duration and acuity of treating respiratory disease, as well as using solutions that can help you prevent future complications and costs.

This requires not only focusing on how a therapy works, but also having devices that provide the right treatment at critical points in patient care. It also requires access to actionable intelligence that can help prevent patient acuity from sliding to higher and more costly levels of treatment.

The Respiratory Knowledge Portal for ventilator therapy helps deliver actionable intelligence to the clinician to help better understand a patient's acuity level and readiness for ventilation liberation, plus markers that can be used to measure and improve compliance with lung protective strategies.

**This is the essence of the CareFusion system approach—using advanced respiratory technologies, supported by the power of information to help you improve patient outcomes and reduce costs.**

***Prolonged mechanical ventilation increases median costs by more than \$27,000 per patient and accounts for 64% of the total Mechanical Ventilation costs.<sup>1</sup>***





## Avoiding the need for mechanical ventilation

The first step in avoiding prolonged mechanical ventilation is using noninvasive ventilation to reduce the need for intubation. The CareFusion range of products support neonatal through adult patients with a variety of options and are customizable to each individual patient.

Noninvasive ventilation is also a great tool in the earlier transition of intubated patients to lower levels of respiratory support, helping to protect patients while transitioning to lower acuity therapy and helping to reduce costs.

## Reducing the duration

Having the right information and clinical tools to manage your patient's condition during their care may have a direct effect on length of time in the ICU, hospital length of stay and your cost of care.

Rapidly weaning patients from mechanical ventilation requires time sensitive pieces of key information. The Knowledge Portal can be a critical tool to assist in getting patients off ventilators quickly. The Knowledge Portal provides weaning markers and analytic reports for measuring effectiveness and benchmarking.

**Weaning protocols using esophageal balloon parameters have shown that patients were weaned on the average of 1.7 days faster than when using standard clinical weaning parameters.<sup>2</sup> This can equate to a savings of \$5,100 per stay.<sup>3</sup>**

The AVEA<sup>®</sup> ventilator is the only product that has integrated technology for esophageal balloon placement and automated calculations for easy monitoring and weaning guidance.

## Preventing harm today and lowering costs in the future

It's not just what you do for today, but also the residual effects that impact your costs in the future.

### Lung protective technology

High Frequency Oscillatory Ventilation (HFOV) provides ultimate low-volume, low-stretch lung protective ventilation.

Our 3100A High Frequency Oscillatory Ventilator (HFOV) has clinically demonstrated improved oxygenation and significantly reduced chronic lung disease normally associated with prematurity or mechanical ventilation.<sup>4</sup>

The 3100A has also shown a shortened neonatal intensive care unit and hospital stay, reducing hospital costs.<sup>5</sup>

Use of 3100B HFOV in adult ARDS patients resulted in a 29% relative reduction in mortality compared to conventional ventilation.<sup>6</sup>

***Ventilator induced lung injury has significant short- and long-term implications for patient outcomes and the cost of care.<sup>7</sup>***





*The Infant Flow<sup>®</sup> SiPAP Biphasic has clinically shown that patients require less respiratory support and oxygen compared to conventional nCPAP.<sup>8</sup>*

*For newborns, our Infant Flow SiPAP Biphasic technology is proven to prevent the need for intubation and mechanical ventilation.<sup>9</sup>*

# Seamless Transition of Care



## Protecting patients during transport

Transport and emergency ventilation requires seamless patient care—using solutions developed to meet these demands.

Our EnVe® ventilator was specifically designed as a critical care device to support the movement of patients throughout the continuum of care.

In a variety of situations—from ground to air to hospital, the ReVel™ and LTV® Series ventilators have the portability, compactness, battery capability and flight certifications to provide support in these situations and into the hospital.

***Research shows 52% of ventilated patients are moved at least once; 44% of these ventilated patients sustain considerable deterioration of oxygen following the transport.<sup>10</sup>***



## Managing pediatric and adult patients in and out of the hospital

Higher acuity patients are increasingly being managed in sub-acute and long-term acute care facilities to help reduce the cost of care.

CareFusion has a range of mid-acuity platforms that support a wide range of clinical needs and applications with the VELA®, LTV Series, EnVe and ReVel ventilators without sacrificing important technology that provides timely clinical support information. Our Knowledge Portal's information and weaning analytics can provide actionable intelligence to support the management of these patients.

## From the hospital to the home

Early transition of patients from the hospital to the home is also increasing. The ability to manage higher acuity patients in the home requires a higher performing device and the LTV Series ventilators have been helping the transition from the hospital to the home with a seamless interface for more than a decade.

# Workflow and Clinical Support



## Workflow solutions

The CareFusion system approach to respiratory care includes solutions that help reduce the time caregivers spend on activities that take them away from patient care. For example, our Respiratory Documentation Application eliminates the need for manual collection of ventilation documentation by automating the collection at the point of care. In addition to reducing the time spent on redundant paperwork, this improves the workflow of documenting ventilator therapy and ensures that data populates the EMR more quickly and accurately.

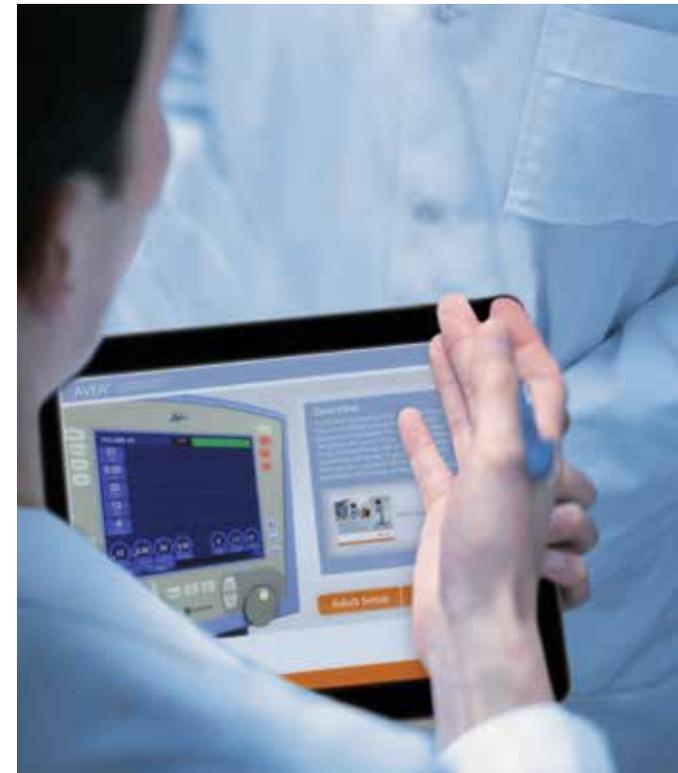
## Connectivity

The CareFusion Coordination Engine (CCE) and ventilator connectivity adapter connect your CareFusion ventilators directly with HIT systems in your facilities.

***Caregivers can spend up to 35% of their time per shift on redundant paperwork<sup>11</sup> and are considered primary contributors to time spent away from patient care.<sup>12</sup>***



Priority	Notification
High	Weaning Candidate - 1
Med	Set Ve low alarm limit
Med	Set Ve high alarm limit
Med	Set Ve high alarm limit
Med	Set Ppeak low alarm
Med	Set Ppeak high alarm
Med	Set Ppeak low alarm
Med	Set Ppeak high alarm
Med	Set Ve low alarm limit



## Clinical training

For the employees of CareFusion, the passion of caring for patients is our business. Our ventilators and other respiratory care products are just how we express that passion. That is why some of the best respiratory therapists and nurses in the world leave their hospital positions to work for CareFusion, helping other clinicians and institutions learn to practice a level of care that affects more patients than each of them could have affected on their own.

CareFusion strives to deliver exceptional clinical training and support for our products. We provide ongoing professional optimization services and education programs, including digital learning materials, online training courses, iPad application training tools and clinical application webinars.

When you select CareFusion as your partner, you will receive the highest level of education, training and support.

## Service and support

- Toll-free, 24-hour clinical support line, including five call centers
- Award-winning Remote Support Services
- Dedicated veteran respiratory therapists for each area of care
- Alternate care and critical care teams
- HFOV rescue program for the sickest patients

# The CareFusion Difference



## A force in the future of respiratory care

Innovation has been a keystone for the success throughout the history of CareFusion.

CareFusion engineers have developed a series of firsts: the first integrated and automated esophageal balloon system, first high frequency oscillatory ventilator (HFOV), first turbine-blower ventilator, first laptop sized ventilator providing not previously experienced mobility for ventilator bound patients and the first SiPAP bi-level neonatal CPAP technology, just to name a few.

These innovations don't come without scientific evidence. Over the last thirty years, CareFusion has written, funded or supported more than 200 clinical or basic science studies that have evaluated and tested our technologic achievements to assure that our products are safe and provide the clinical impact they were designed to deliver.





## Advancing ventilation technologies

Our history of innovation results in significant, clinically differentiated solutions that cover the broadest range of therapeutic modalities across the continuum of care.

Providing invasive and noninvasive technologies to patients from neonates to adults across hospital care, home care and transport, the CareFusion comprehensive portfolio of ventilation products help clinicians improve the quality and outcomes of patient care.

**Neonatal Care:** AVEA ventilator, 3100A HFOV, Infant Flow SiPAP, Bird Blenders

**Pediatric-Adult Care:** AVEA, VELA, 3100B HFOV, EnVe, ReVel, LTV Series ventilators

**Alternate Care:** LTV Series, PTV, VELA ventilators

**Home Care:** LTV Series ventilators

**Transport:** LTV Series, ReVel ventilators

**Ventilation System:** Knowledge Portal, Respiratory Documentation Application with AVEA, VELA and EnVe ventilators

*Learn more about how partnering with CareFusion can help you improve patient outcomes and care, while helping to control your costs.*

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 **Caution**—U.S. Federal Law restricts this device to sale by or on the order of a physician.

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