Carestation 750
Anaesthesia Delivery System

Individualized therapy at your fingertips

1910

Our commitment to you

Quality and patient safety

- A trusted and reliable leader in anaesthesia delivery for over 100 years

Uncompromised ventilation

- Compact Breathing System
- Modular, integrated design
- Advanced ventilation modes*

Enhanced user experience

- Touch screen display*
- Automated procedures*
- Designed to enhance workflows

Low cost of ownership

- Flexible and modular configurability
- Low maintenance costs
- ecoFLOW technology*

* Among GE Healthcare platform consisting of Carestation™ 650 Anaesthesia Machine, Carestation™ 650c Anaesthesia Machine, Avance™ CS² Anaesthesia Machine and Aisys™ CS² Anaesthesia Machine

Unified user experience

Carestation 620

Carestation 650

Carestation 750

Aisys CS²

ANALOG	DIGITAL
BASIC ACUITY CARE	HIGH ACUITY CARE
SCALABLE	UPGRADEABLE

Carestation™ 750
Anaesthesia Delivery System

Carestation 750—Individualized therapy at your fingertips

Advanced Clinical Tools

- Individualized oxygenation for low-flow anaesthesia
- Automated lung recruitment maneuvers
- Customizable case profiles

Intuitive User Interface

- Direct access to main procedures
- Flexible user interface
- Clear status indication
- Consistent user interface
- Intelligent lighting

Efficient, Ergonomic Design

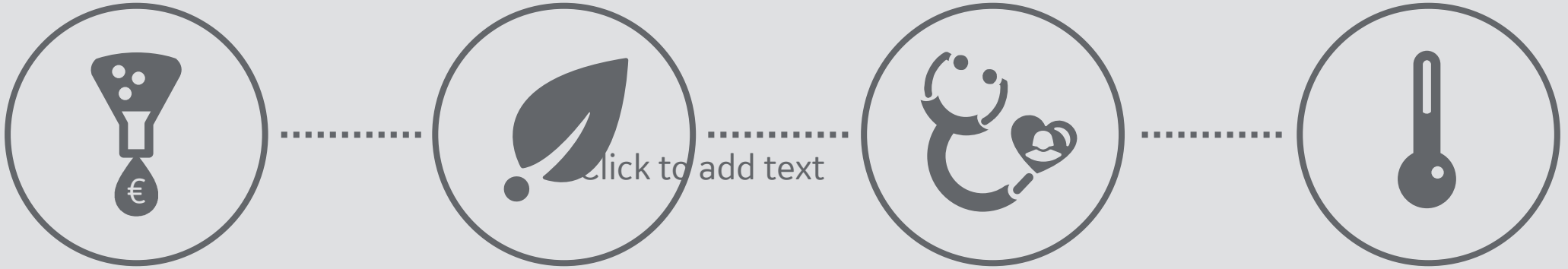
- Ergonomic convenience
- Streamlined cable management
- Fast, guided and complete checkout
- Streamlined care pathway

Advanced Clinical Tools

- Individualized oxygenation for low-flow anaesthesia
- Automated lung recruitment maneuvers
- Customizable case profiles

Reducing fresh gas flows

Patients metabolize only a small percent of the gas an anaesthesia machine delivers.
Every patient is different and low flows make precision oxygenation and the avoidance of hypoxic mixtures complex.



ecoFLOW
15-30%
savings in anaesthetic agents equal...[1]

...**350**
cars/year
in environmental impact[2,3]

Optimal patient humidity can be maintained at lower fresh gas flows

Low-flow anaesthesia helps preserve patient temperature during surgery[4]

1) Hospitals can be spending an extra 15%-30%1 for anesthetic agents in an OR due to high flow Estimates derived from GE's Healtcare ecoFlow Calculator https://gehealthcareamer.my.salesforce.com/sfc/#version?selectedDocumentId=069a0000004eOn7
2) Global Warming Potential of Inhaled Anesthetics: Application to Clinical Use, Susan M. Ryan, MD, PhD, and Claus J. Nielsen, CSc International Society for Anaesthetic Pharmacology www.anesthesia-anelgesia.org July 2010; v111 #1.
3) Environmental Protection Agency. Emissions facts: greenhouse gas emissions from a typical passenger vehicle. Available at: http://www.epa.gov/oms/climate/420f05004.htm#key
4) Bengtson JP, Bengtson A, Stenqvist O. The circle system as a humidifier. Br. J. Anaesth.63,453-457 (1989).

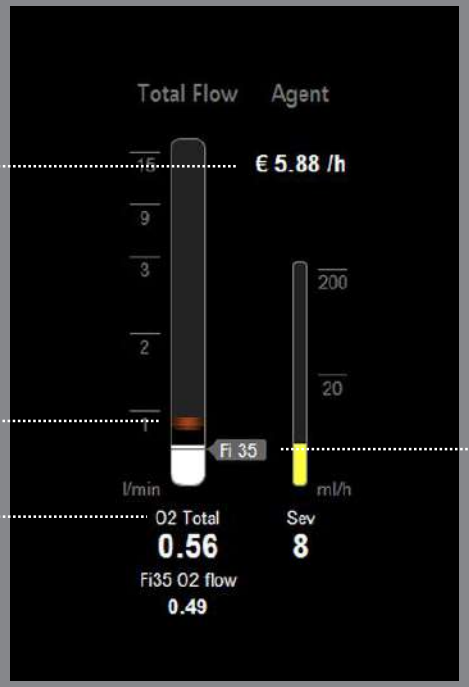
ecoFLOW Software

Every patient consumes oxygen differently. ecoFLOW software may help mitigate the risk of hypoxic delivery or avoid excess Fresh Gas Flow (FGF) delivery.

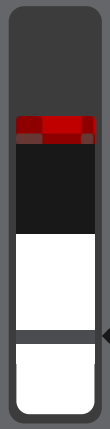
Agent cost
Determined by multiplying agent flow and liquid agent cost (set by user)

Flow bobbin represents the total fresh gas flow delivered to the patient

O_2 total
If air is the balance gas, this is set O_2 flow plus 21% of the air flow



The FiO_2 flag



Area above FiO_2 marker represents oxygen flow in excess to set patient requirement

Fi 35

The marker on the flow tube equals FiO_2 flow value

ecoFLOW benefits

By choosing minimal total FGF, the environmental impact of anaesthetic vapors and gases can be minimized.

POTENTIAL FOR REDUCED AGENT USAGE

A busy midsize US hospital might purchase

1000 litres

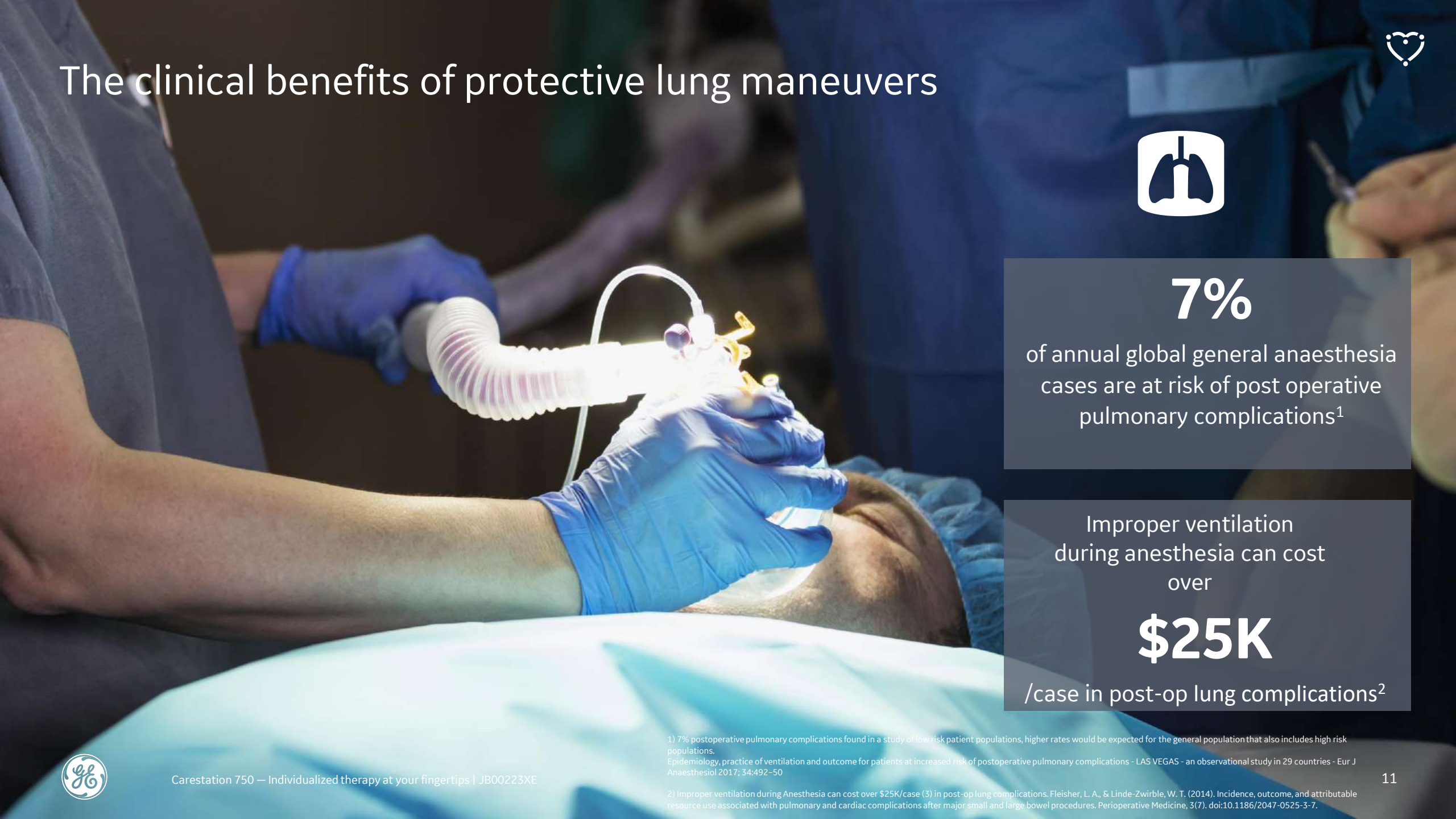
of inhaled anaesthetic per year[1]

Savings with reduced agent emissions[2]

FLOW RATE /litre	USAGE ml/hr liquid agent		SAVINGS %
6	32.30		
3	16.20	▶	**50%**
2	10.80	▶	**67%**
1	5.40	▶	**83%**

1) Global Warming Potential of Inhaled Anesthetics: Application to Clinical Use Susan M. Ryan, MD, PhD, and Claus J. Nielsen, CSc International Society for Anaesthetic Pharmacology www.anesthesia-anelgesia.org July 2010 v111 #1
2) Reduction and savings depends on clinical practice. Data shown is for illustrative purposes only.

The clinical benefits of protective lung maneuvers



7%

of annual global general anaesthesia cases are at risk of post operative pulmonary complications[1]

Improper ventilation during anesthesia can cost over

$25K

/case in post-op lung complications[2]

1) 7% postoperative pulmonary complications found in a study of low risk patient populations, higher rates would be expected for the general population that also includes high risk populations.
Epidemiology, practice of ventilation and outcome for patients at increased risk of postoperative pulmonary complications - LAS VEGAS - an observational study in 29 countries - Eur J Anaesthesiol 2017; 34:492–50

2) Improper ventilation during Anesthesia can cost over $25K/case (3) in post-op lung complications. Fleisher, L. A., & Linde-Zwirble, W. T. (2014). Incidence, outcome, and attributable resource use associated with pulmonary and cardiac complications after major small and large bowel procedures. Perioperative Medicine, 3(7). doi:10.1186/2047-0525-3-7.

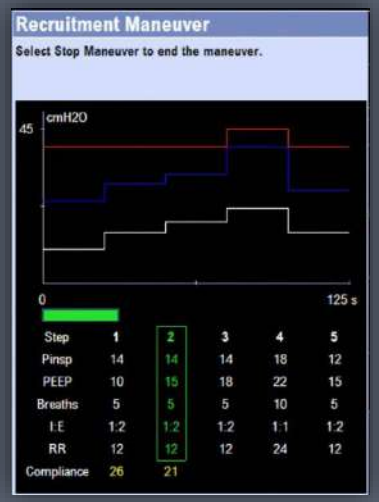
The clinical benefits of protective lung maneuvers

Single-step recruitment maneuver

Automates the manual bag squeeze and hold. PEEP can be programmed at the end of the procedure to help sustain an open lung.[1,2]

Multi-step recruitment maneuver

Allows you to configure a lung recruitment maneuver. Programmable steps allow for increasing and decreasing PEEP levels and other parameters during mechanical ventilation. PEEP can be programmed at the end of the procedure.



Real-time compliance results during automated lung ventilation procedures

1) Tusman, G., Bohm, S. H., Tempra, A., Melkun, F., Garcia, E., Turchetto, E., . . . Lachmann, B. (2003). Effects of recruitment maneuver on atelectasis in anesthetized children. Anesthesiology, 98(1), 14-22.
2) Reinius, H., Jonsson, L., Gustafsson, S., Sundbom, M., Duvernoy, O., Pelosi, P., . . . Freden, F. (2009). Prevention of atelectasis in morbidly obese patients during general anesthesia and paralysis: a computerized tomography study. Anesthesiology, 111(5), 979-987.

Adapted from JB45773US

Advanced ventilation with a personal touch

Delivers tidal volumes as low as 5 ml in PCV mode[1]

Monitors and responds to changes in patient airway pressure up to 250 times/sec

Precision volume and pressure delivery to patient wye, breath by breath, helps reduce challenges in managing neonatal and pediatric patients

Real time compliance results during automated lung ventilation procedures

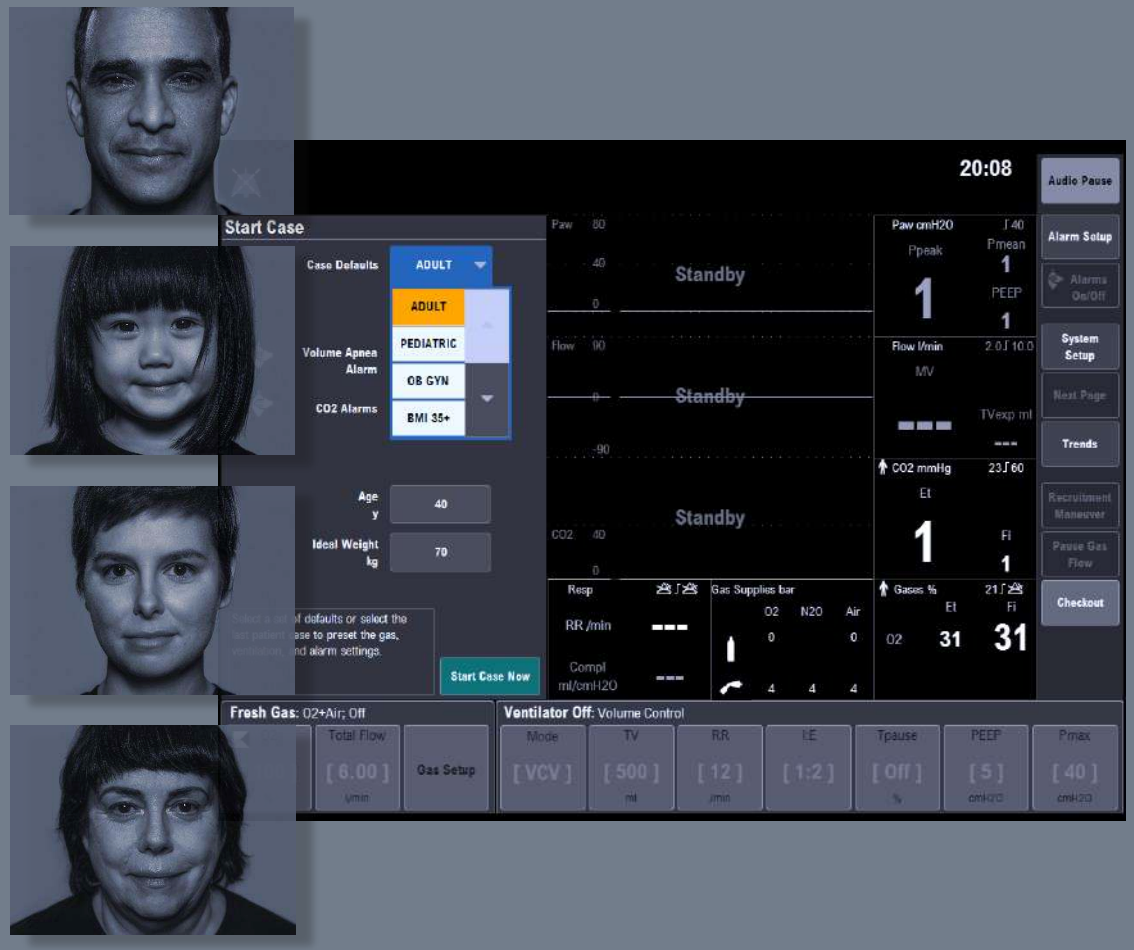
1) GE benchmark studies from 2011: GE Healthcare PCV to Tidal Volume Data Collection Test Results. Actual results may vary and are dependent on the patient. DOC0933949/DOC0970424

Customize for different patients and procedures

For each profile—available at one touch —you can preset:

- Starting ventilation parameters
- Alarm limits
- Apnea time
- Screen layout

and many other essential parameters



Intuitive User Interface

- Direct access to main procedures
- Flexible User Interface
- Clear status indication
- Consistent user interface
- Intelligent lighting

Immediate access to key features

Intuitive touchscreen. Instinctive touchpoints.

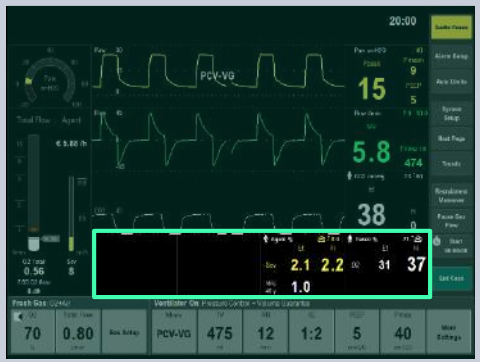
A **ecoFLOW display option** Press to toggle between ecoFLOW display and traditional flow tube display.

B **Direct access to recruitment maneuvers**

C **Direct access to pause gas**

D **Hard key and comwheel**

Tailor interface to clinician preference



Intelligent workflow on display

Clear on-screen status indicators to help clinicians confidently navigate the system.

Standby screen

ACGO

Aux O_2+Air

ecoFLOW display option

Paw display: during case

Quick pick

Consistent user interface

A standard user interface across the Carestation anaesthesia machine and CARESCAPE™ Patient Monitor portfolio helps reduce training time, so you can focus on patient care from transport to bedside.

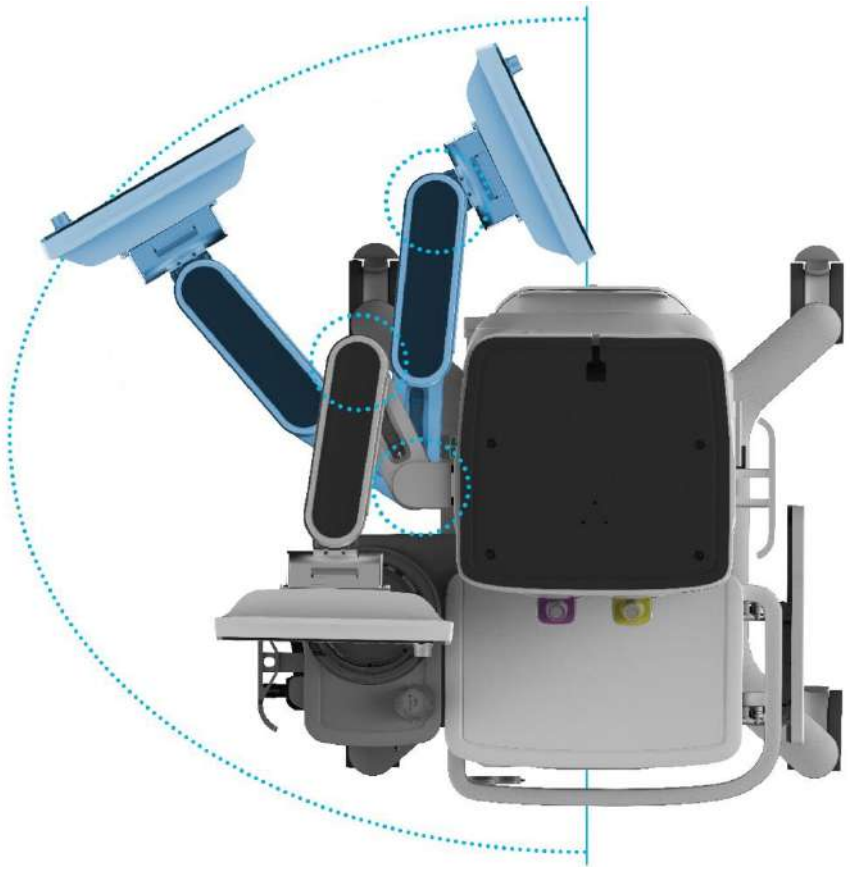
Intelligent lighting

Whenever auxiliary ports are in use, lighting indicates the active flow controls.

Efficient, Ergonomic Design

- Ergonomic convenience
- Streamlined cable management
- Fast, guided and complete checkout
- Streamlined care pathway

Ergonomic convenience



Premium display arm

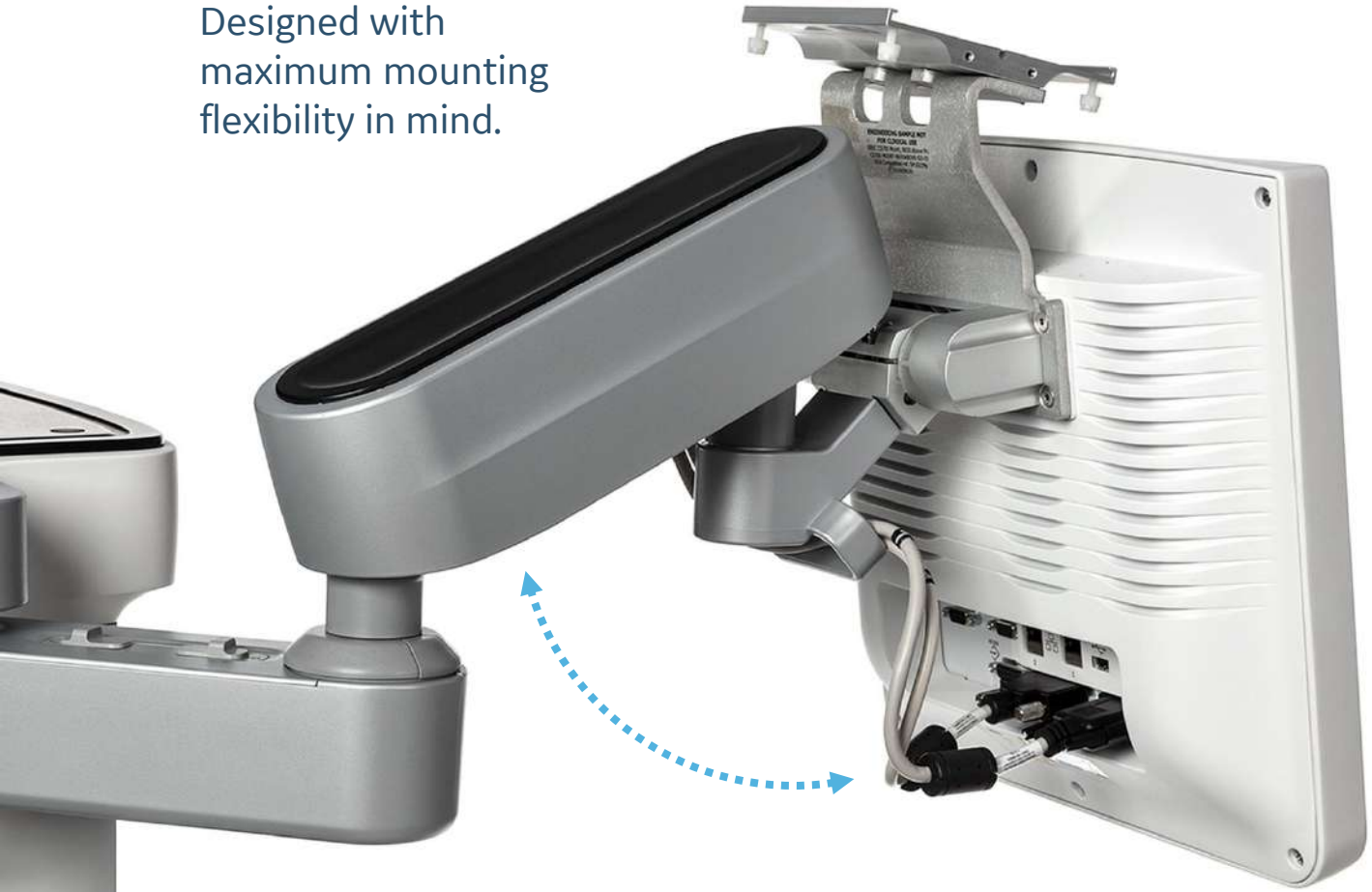
An optional, fully articulated arm places the display where you need it.

The display can be positioned for optimal viewing even if you need to step or move into an alternative position without compromising your view.

Not available in all markets.

Premium display arm

Designed with maximum mounting flexibility in mind.



Maximum flexibility to stay close to the patient:

- **Extend**
- **Tilt**
- **Raise/lower**
- **360° swivel**

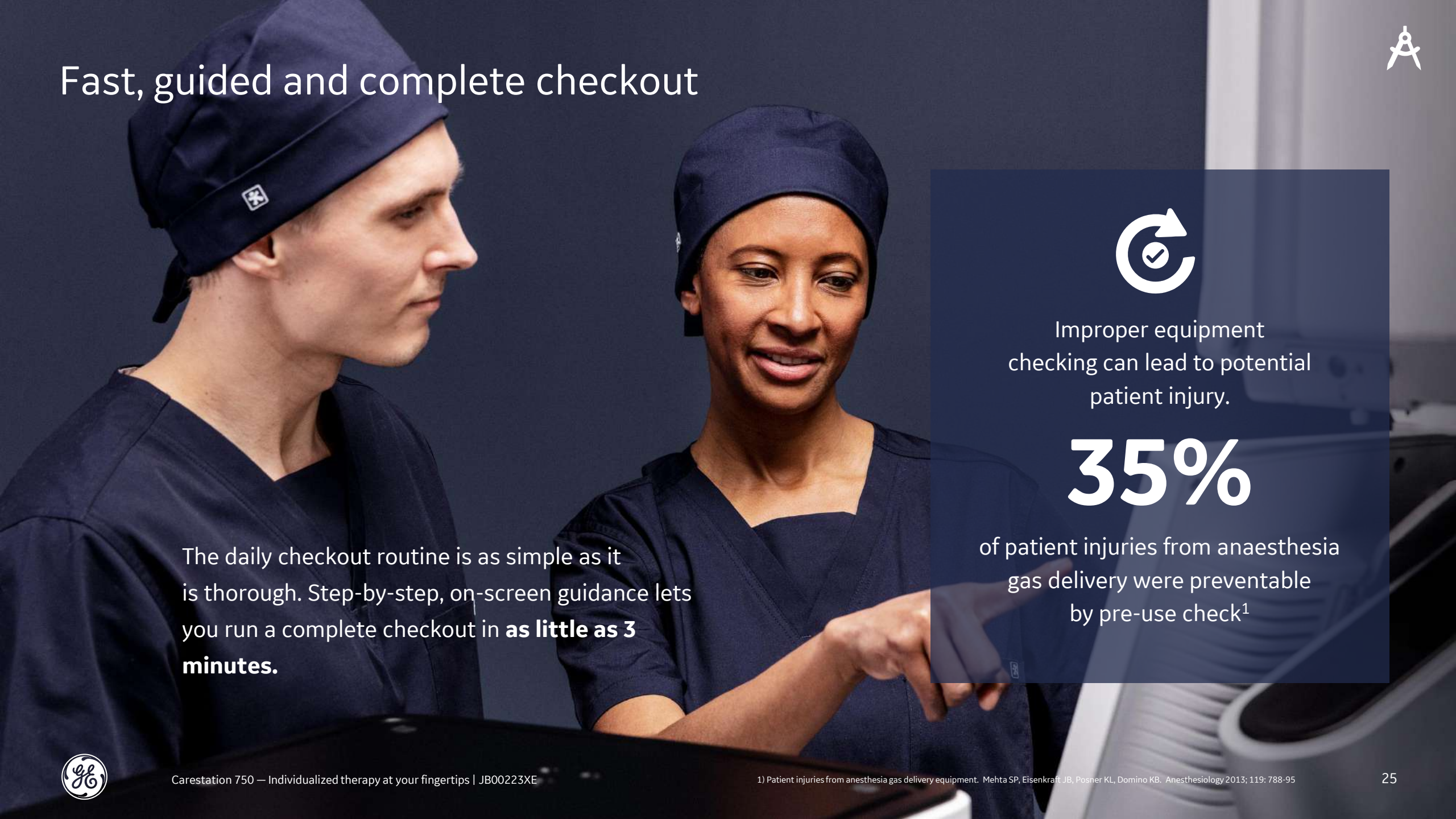
Not available in all markets.

Simplified cable management

No hassle, better workflow

A specially designed rear door covers all cables and hoses, yet still allows easy access to gas cylinders, gas connectors and circuit breakers. Cables and hoses are shielded from dust, and the smooth exterior simplifies surface cleaning.

Fast, guided and complete checkout



The daily checkout routine is as simple as it is thorough. Step-by-step, on-screen guidance lets you run a complete checkout in **as little as 3 minutes.**

Improper equipment checking can lead to potential patient injury.

35%

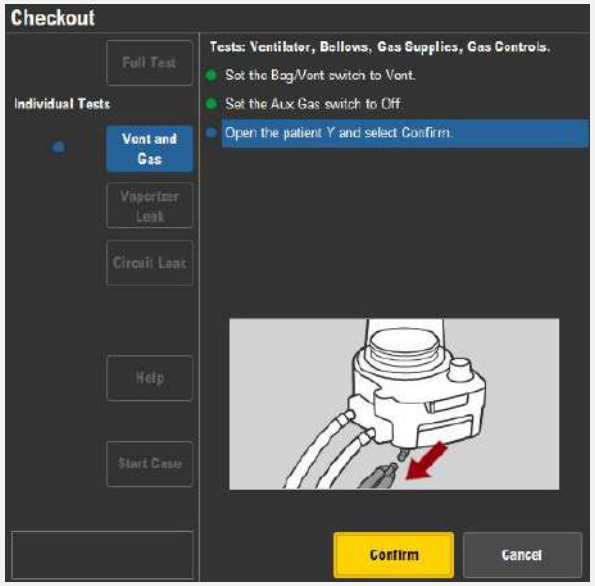
of patient injuries from anaesthesia gas delivery were preventable by pre-use check[1]

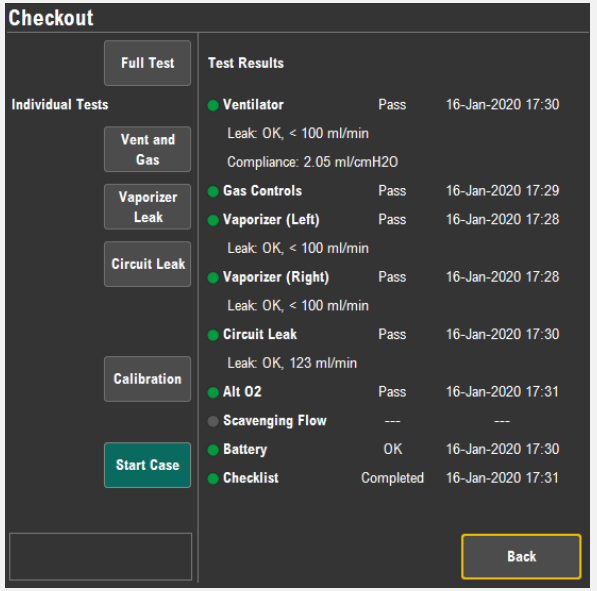
1) Patient injuries from anesthesia gas delivery equipment. Mehta SP, Eisenkraft JB, Posner KL, Domino KB. Anesthesiology 2013; 119: 788-95

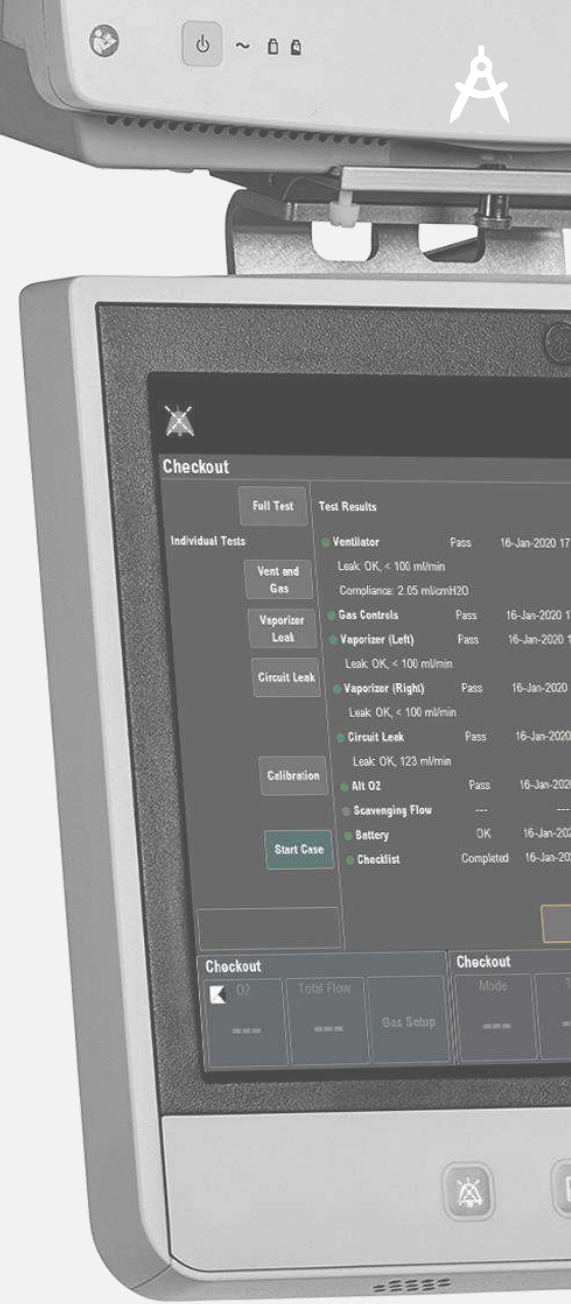
Fast, guided and complete checkout

Complete, ASA-recommended checkout in under three minutes.
Guided for ease of use.

- Clear status icons
- Leak test results
- Compliance of patient circuit
- Date and time stamping
- Vaporizers







Streamlined care pathway

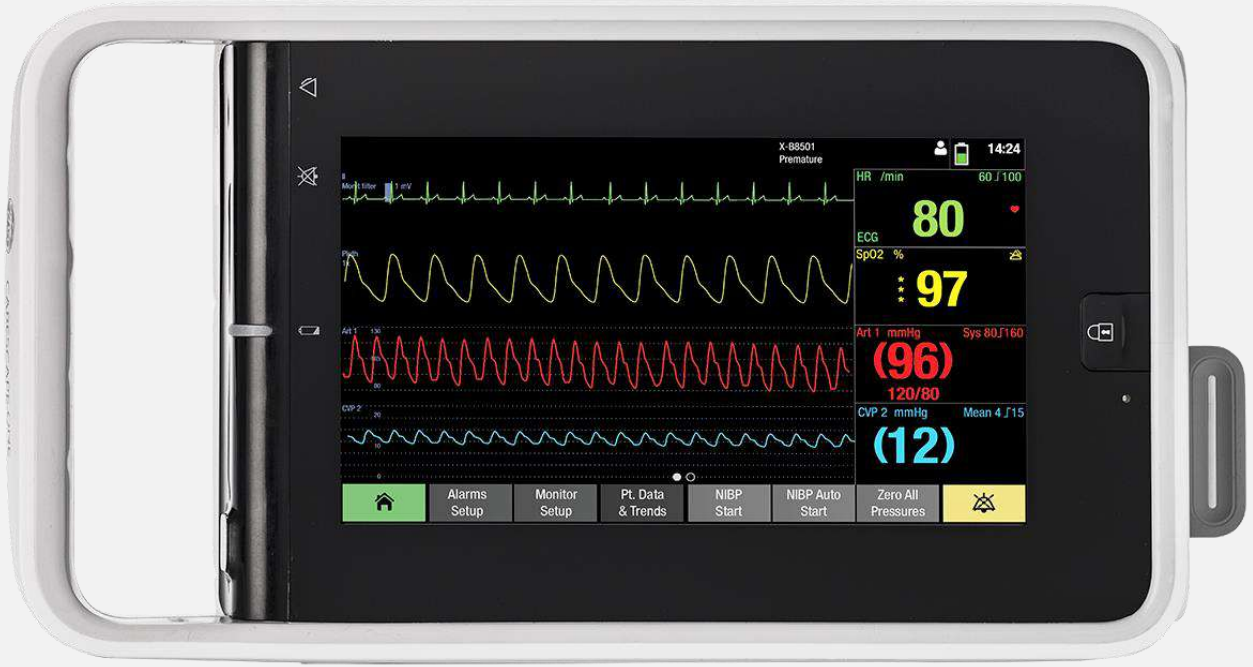
The intuitive design of the **CARESCAPE ONE** monitor connects therapy and recovery, so patient care becomes seamless. This helps reduce total transport time and user errors, enhancing efficiency.

60%

reduction in user errors[1]

26%

reduction in transport time
(based on simulated usability study) [1]



1) Revolutionizing Patient Transport Monitoring, GE Healthcare usability study JB58083XX. The comparative usability study was conducted in a simulation center whereby intubated OR patients were transported to the ICU by transport nurses

Carestation 750 Anaesthesia Delivery System

Individualized therapy at your fingertips

Familiar touchscreen user experience

Small volume, low-flow modular breathing system

Integrated gas analysis

ICU-inspired ventilation technology

Carestation 750 Anaesthesia Delivery System

Individualized therapy at your fingertips

Advanced clinical tools that help you deliver individualized therapy

Intuitive user interface and intelligent features for visual guidance during a case

Ergonomic design for seamless workflow and ease of service

Appendix

Compact, modular breathing system

- ☑ Autoclavable to 134°C —no tools disassembly
- ☑ Not made from natural rubber latex
- ☑ Visible rising bellows helps indicate leaks
- ☑ APL valve and manual switch facilitate move from manual to mechanical ventilation—regardless of system failure

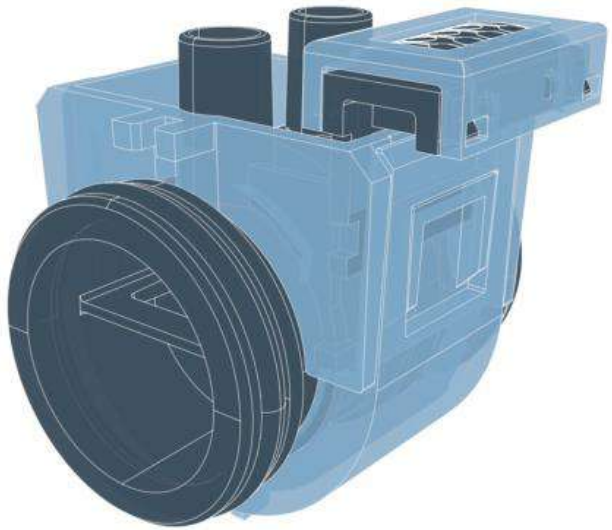
Easy disassembly and cleaning

The compact and modular breathing system allows for quick removal without tools to simplify cleaning and maintenance.

An intuitive and easy to access absorber canister with built in EZ-Change technology facilitates rapid removal and replacement, even during ventilation. Integrated electronics detect when the absorber or breathing system is disengaged.

Compact Breathing System

We manage water, others move water



Low Flow
More moisture, CO_2 reaction and water production.

Innovative Flow Sensor design
Slopes in both directions to direct water away from sensor.

CANISTER + CONDENSER = **WATER MANAGEMENT**

INTEGRATED WORKFLOW

gehealthcare.com

JB00223XE