EV1000 Clinical Platform

What you need.
When you need it.

Edwards

EV1000 Clinical Platform

The EV1000 clinical platform from Edwards Lifesciences presents the physiologic status of the patient in an intuitive and meaningful way. Designed in collaboration with and validated by clinicians, the EV1000 clinical platform offers you scalability and adaptability for both the OR and ICU.

The EV1000 clinical platform enables you to choose the parameters needed to monitor your patients and may be used with a variety of Edwards advanced hemodynamic monitoring tools for an integrated Edwards Critical Care System.

EV1000 Clinical Platform

ClearSight Finger Cuff

FloTrac Sensor

Edwards Oximetry Central Venous Catheter

VolumeView Set

Edwards Critical Care System

Choice

The EV1000 clinical platform provides the choice of the parameters you want to view and how you want to view them. The platform may be used with the Edwards advanced hemodynamic monitoring portfolio as outlined below. Further, the platform provides a choice of screens so that you may view the parameters in a manner most meaningful to your clinical situation for visual clinical support.

ClearSight Finger Cuff

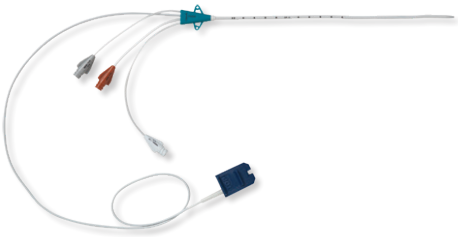
(Noninvasive)

The ClearSight system extends the benefits of hemodyanmic monitoring to moderate and high-risk surgery patients and noninvasively provides continuous hemodynamic monitoring including SV, SVV, SVR, CO and continuous blood pressure.

FloTrac Sensor

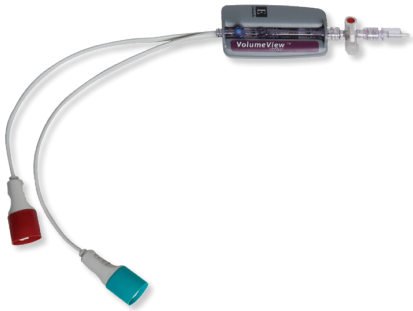
(Minimally-Invasive)

The FloTrac sensor easily connects to any existing arterial catheter and automatically calculates key flow parameters (CCO/CCI, SV/SVI, SVV, SVR/SVRI) every 20 seconds, making it the practical and reliable solution for hemodynamic optimization in moderate to high-risk surgery.



Edwards Oximetry Central Venous Catheter

The Edwards oximetry central venous catheter continuously monitors central venous oxygen saturation ($ScvO_2$), which may be useful for the treatment of sepsis.



VolumeView Set

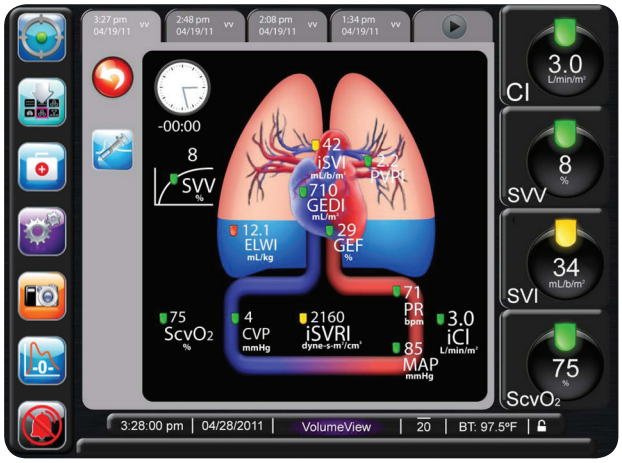
(Transpulmonary Thermodilution)

The VolumeView set provides volumetric parameters (EVLW, GEDV, GEF, PVPI, ITBV) and continuous, calibrated hemodynamic parameters (CCO/CCI, SV/SVI, SVV, SVR/SVRI).

Visual Support

Visualized Physiology
The EV1000 clinical platform presents patient hemodynamic information clearly and simply. Color-based indicators communicate patient status at a glance, and visual clinical support screens allow for immediate recognition and increased understanding of rapidly changing clinical situations to help you make more informed decisions.

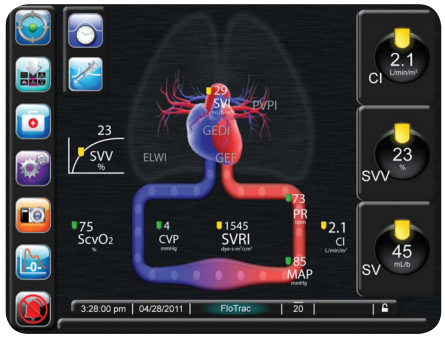
Real-time Physiology Screen
The animated physiology screen visually depicts the dynamic changes occurring in your patient. By delivering parameters visually as well as numerically, the EV1000 clinical platform allows you to more easily determine the root cause of a particular situation, further assisting and guiding your clinical decisions.



Heartbeat reflects current heart rate

Flow of blood cells represents cardiac output

Replicated patient position on Frank-Starling curve

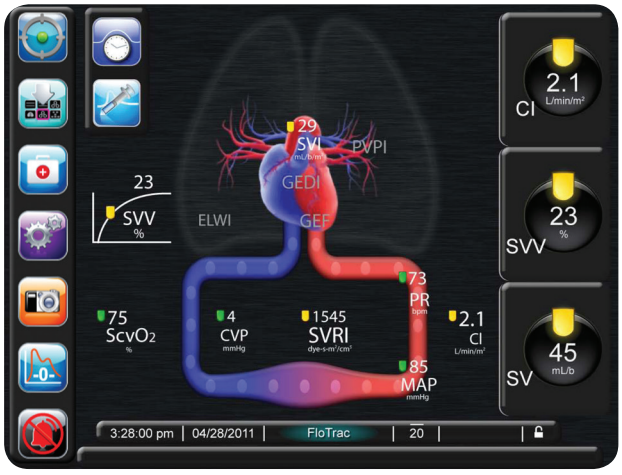


Heart size reflects patient volumetric status

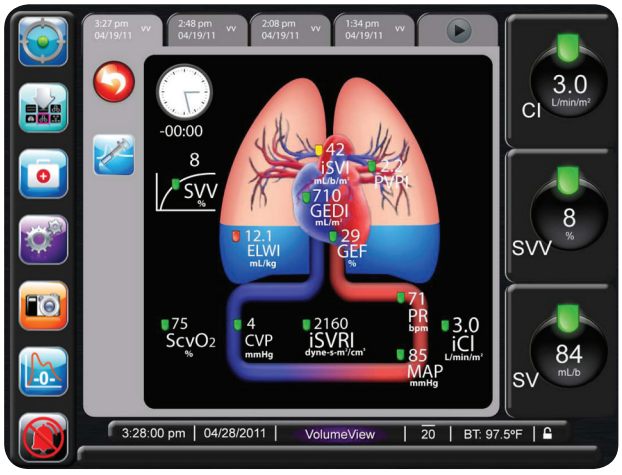
Vasculature can depict vasoconstriction or vasodilation

5 levels of lung water shown in lungs

Continuous Physiology Screen



Intermittent Physiology Screen



Clinical Support

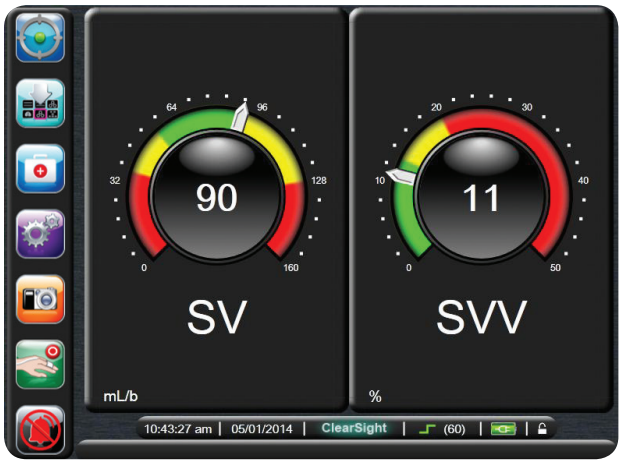
Hemodynamic Optimization
Monitoring and optimizing Stroke Volume (SV) by fluid challenges during the surgical procedure is a strategy that may reduce postoperative complications.

Stroke Volume Variation (SVV) measured can be used to tailor fluid therapy.[2] Cardiac output measured continuously can be used (in combination with SaO_2 and hemoglobin) to monitor and calculate DO_2.[3,4]

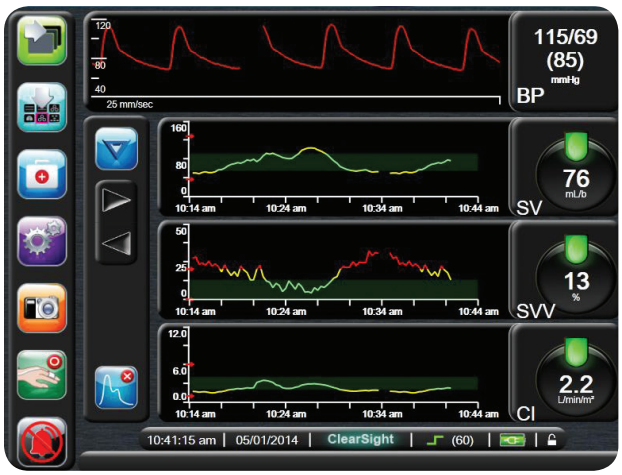
These advanced hemodynamic parameters, when combined with a Perioperative Goal-Directed Therapy (PGDT) protocol, are key to maintaining the patient in the optimal volume range.[2]

Perioperative Goal-Directed Therapy Screens
The EV1000 clinical platform guides volume administration to reduce variability and help you keep your patients in the optimal volume range.

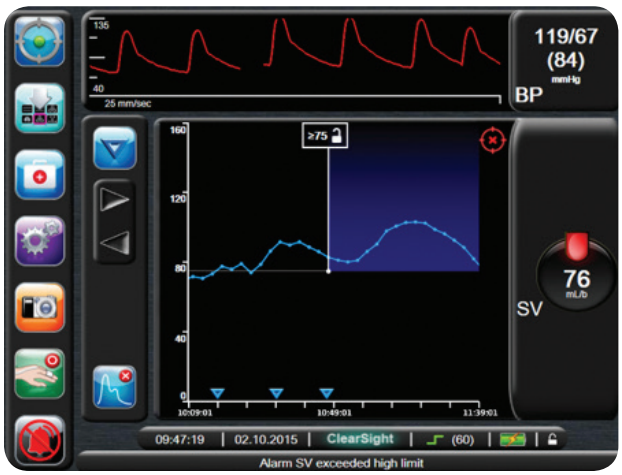
Time-in-Target indicator facilitates Perioperative Goal-Directed Therapy (PGDT) compliance, helping the user to track and manage key parameters, and create and monitor customized protocols. The Time-in-Target indicator represents the accumulated percentage of time a parameter has been maintained within target range during an active tracking session.



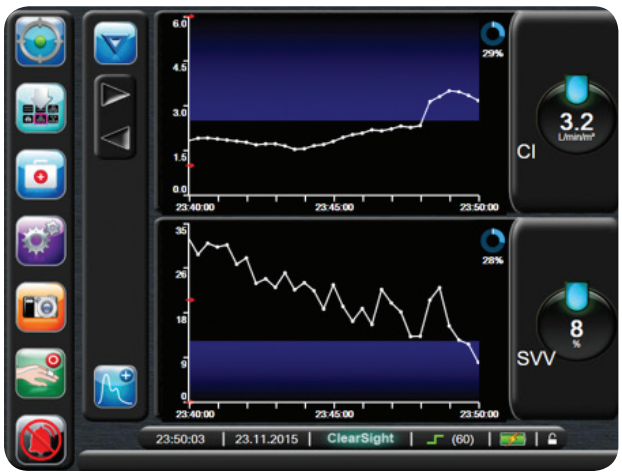
Graphical Trend Screen – Continuous Blood Pressure



Perioperative Goal-Directed Therapy Screen – Stroke Volume Optimization



Perioperative Goal-Directed Therapy Screen – Cardiac Index and Stroke Volume Variation



Choice

Guiding Platform

The EV1000 clinical platform provides a choice of screen options to provide immediate insight to aid your therapeutic interventions. Presenting the physiologic status of the patient in an intuitive and meaningful way enables you to focus on your patient. Screen options include the real-time physiology screen (both intermittent and continuous), the cockpit screen, the goal positioning screen, graphical trend screens and the physio-relationship screen.

Graphical Trend Screen

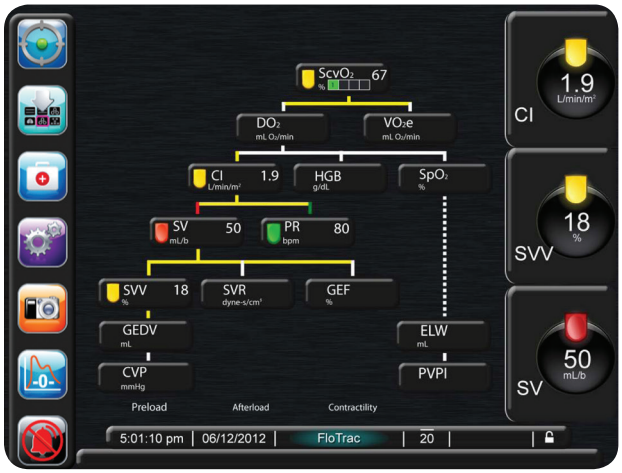
The graphical trend screen allows you to select, place, and track interventions over time while providing key parameter trending data. The percent change indicator provides additional insight into the patient's condition.

Physio-relationship Screen

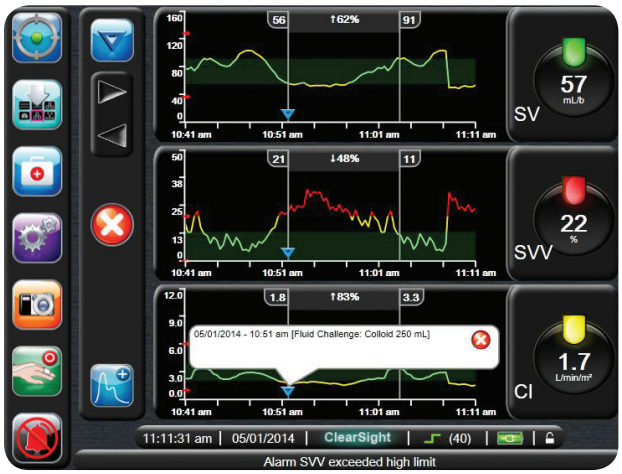
The physio-relationship screen depicts the balance between oxygen delivery and consumption, allowing you to identify the root cause of the imbalance and the most appropriate intervention.

Graphical Trend Screen – Select Intervention

Continuous Physio-relationship Screen– Hypovolemia



Graphical Trend Screen – View Intervention Detail



Intermittent Physio-relationship Screen – Pulmonary Edema

Connectivity

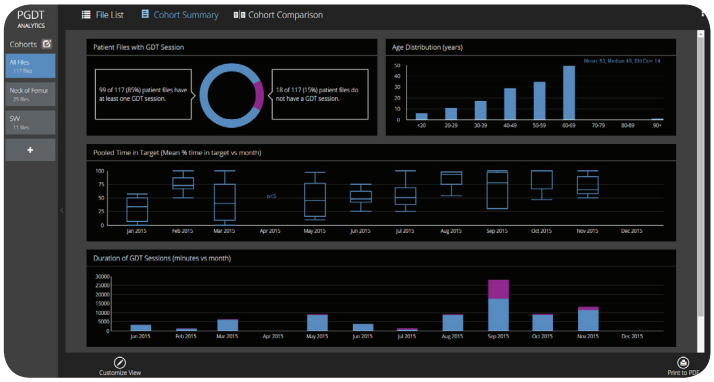
Connecting to Your Hospital Information System

Connectivity within the EV1000 clinical platform enables you to optimize your clinical workflow. Edwards provides options for connecting the platform within the clinical environment that include IFMout through a serial connection and HL7 (Health Level 7) through an Ethernet port. HL7 is a standard for exchanging information between medical applications.

PGDT Analytics

PGDT analytics is a PC only desktop application that organizes and visualizes data download files from the EV1000 clinical platform. It can be used with the ClearSight, FloTrac and VolumeView systems.

Single Cohort – PGDT Analytics



For over 40 years, Edwards Lifesciences has been helping you make proactive clinical decisions to advance the care of acutely ill patients across the continuum of care.
Through continuing collaboration with clinicians, ongoing education, and a never-ending quest for innovation, Edwards continues to develop smart hemodynamic management solutions that enable proactive decision support.

Visit Edwards.com/EV1000 to learn more

The EV1000 clinical platform NI and ClearSight finger cuff are indicated for patients over 18 years of age in which the balance between cardiac function, fluid status, and vascular resistance needs continuous assessment. The EV1000 clinical platform may be used for the monitoring of hemodynamic parameters in conjunction with a perioperative goal directed therapy protocol. In addition, the noninvasive ClearSight system is indicated for use in patients with co-morbidities for which hemodynamic optimization is desired and invasive measurements are difficult. The EV1000 clinical platform and the ClearSight finger cuffs noninvasively measures blood pressure and associated hemodynamic parameters.

The EV1000 clinical platform is indicated for use primarily for critical care patients in which the balance between cardiac function, fluid status and vascular resistance needs continuous or intermittent assessment. The EV1000 clinical platform may be used for the monitoring of hemodynamic parameters in conjunction with a perioperative goal directed therapy protocol. Analysis of the thermodilution curve in terms of mean transit time and the shape is used to determine intravascular and extravascular fluid volumes. When connected to an Edwards oximetry catheter, the monitor measures oximetry in adults and pediatrics. The EV1000 clinical platform may be used in all settings in which critical care is provided.

For professional use. CAUTION: Federal (United States) law restricts this device to sale by or on the order of a physician. See instructions for use for full prescribing information, including indications, contra indications, warnings, precautions and adverse events.

Edwards Lifesciences devices placed on the European market meeting the essential requirements referred to in Article 3 of the Medical Device Directive 93/42/EEC bear the CE marking of conformity.

References

1. Rivers E, et al. (2001) Early goal-directed therapy in the treatment of severe sepsis and septic shock. N Engl J Med 345:1368–1377.
2. Bellamy MC. Wet, dry or something else? Br J Anaesth 2006;97(6):755-757.
3. Boyd O, et al. A randomized clinical trial of the effect of deliberate perioperative increase of oxygen delivery on mortality in high-risk surgical patients. JAMA. 1993;270(22):2699-2707.
4. Wilson J, Woods I, Fawcett J, et al. Reducing the risk of major elective surgery: randomized controlled trial of preoperative optimization of oxygen delivery. BMJ. 1999;318:1099–103.

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