Clear decisions at the point of care

Philips IntelliVue patient monitoring solutions
Philips monitoring provides you with innovative ways to acquire, analyze, interpret, and present patient data wherever you care for patients. Philips helps allow for continuity of care through Clinical Decision Support tools, along with wired and wireless solutions as fit your needs.

**Monitoring and decision support anywhere in the hospital**

Philips IntelliVue solutions bring together the critical components to aid effective clinical decision-making at the patient’s side. Clinical Decision Support tools feature intuitive displays, smart alarms, and predictive algorithms to bring subtle changes into focus – helping clinicians recognize those changes and implement therapy earlier. Philips is committed to advancing technologies that help clinicians collect, combine, and cross-reference physiologic data for a coherent picture of their patients’ status.

**We have you covered**

Look to Philips to offer solutions in ways that work for you. The IntelliVue Clinical Network offers a choice in wired and wireless infrastructures. IntelliVue interfacing solutions provide a broad range of collaborative possibilities with medical devices and clinical systems. These solutions are designed to fit easily into your existing IT infrastructure and take you where you want to go in the future.

**Clinical Decision Support tools clarify choices**

Philips Clinical Decision Support tools provide solutions to important issues your organization faces every day, solutions such as ProtocolWatch-Sepsis, which brings the relevant evidence-based care protocol to the bedside, providing a clear path to identify and treat patients with sepsis.

Evidence suggests that early, timely, and aggressive resuscitation for patients with septic shock can have a significant impact on both morbidity and mortality. However, even with widespread awareness of Surviving Sepsis Campaign (SSC) guidelines, adherence varies widely. Initial research suggests that ProtocolWatch-Sepsis can simplify clinician workflow and help improve patient care, significantly increasing compliance with SSC guidelines and reducing time to administration of antibiotics by more than one hour.¹

¹ Using Clinical Decision Support to improve the care of patients with sepsis. Critical Care Medicine. 2008, 36(12); (Suppl):A170.
Supporting you at each step

- **Step-Down/Telemetry**
  - IntelliVue MP2
  - IntelliVue MP5/MX400
  - IntelliVue MX550/600/700
- **ICU/CCU**
  - IntelliVue MP2
  - IntelliVue X2
  - IntelliVue MP5/MX400
  - IntelliVue MP20/30/MX450
  - IntelliVue MP40/50/MX500
  - IntelliVue MX550/600/700
  - IntelliVue MX800
  - IntelliVue XDS
- **Maternity**
  - IntelliVue Info Center
- **PACU**
  - OBT
  - HeartStart MRx
  - Tablet
  - Patient worn device
  - WLAN Access Points (APs)
  - IntelliVue Smart-hopping APs
  - Short-range Radio to in-room Monitor
- **NICU**
- **Operating Room**
- **Emergency Department**
- **Out-of-Hospital**
- **Philips IntelliVue Monitors**
  - Maternity
  - Emergency Department
  - Step-Down/Telemetry
  - NICU
  - PACU
  - Operating Room
  - Out-of-Hospital
Monitoring transformed

IntelliVue patient monitors give care teams the information they need presented in clear and meaningful ways. All share a common user interface and outstanding industrial design.

**IntelliVue MX800**

Featuring an integrated, concurrent and independent PC, for one view with clear patient status and relevant clinical information at the bedside. The MX800 is fully compatible with the IntelliVue family of patient monitors. It has the same intuitive interface, and via the integrated PC, can blend into your existing IT infrastructure, helping you to make the most of time, talent, and resources.

**IntelliVue MX600/700**

Combining world-class monitoring with clinical informatics through the hospital network, to offer immediate access to comprehensive patient information at the bedside with no compromise to physiologic monitoring.

**IntelliVue MX550**

Pairs powerful bedside monitoring with the reassurance a battery backup can bring, with a 15”-wide touchscreen, for sub-acute floor; an ICU, and possibly even the OR.

**IntelliVue MX500 and MX450**

Combining powerful monitoring with portability and measurement flexibility in one compact unit, with a 12”-wide touchscreen, for the ICU, on a sub-acute floor or to withstand the rigors of in-hospital transport.

**IntelliVue MX400**

Providing powerful monitoring in a highly compact, highly transportable unit, with a 9”-wide touchscreen, for the Emergency Department, NICU and other areas where a compact monitor is needed, or to withstand the rigors of in-hospital transport.
IntelliVue MP5
The compact networked MP5 provides a clear connection to your patients, delivering IntelliVue monitoring power and functionality in a rugged housing to match the demands of a wide range of care environments in and out of the hospital.

IntelliVue X2
Small in size and big in capability, the IntelliVue X2 multi-measurement module and transport monitor transmits data wired or wirelessly to the IntelliVue Information Center. When the IntelliVue X2 is disconnected from the host monitor, it turns into a self-contained compact patient monitor, allowing patient transfer with virtually seamless monitoring* and transfer of the monitoring data history.

Measurement modules
A suite of monitoring measurements to meet your patient care needs.

* Requires wireless networking

Leading measurements
We are committed to providing best-in-class standard measurements, such as oximetry with the Philips FAST SpO2, Masimo® SET®, or Nellcor® OxiMax™ algorithms, and the Philips ST/AR algorithm to support the clinician’s decision at the patient’s side. We maintain and advance the performance of existing, widely used standard-of-care measurements, and also invest heavily in research, development, and clinical validation of new, innovative parameters and algorithms.

Philips also works with world-class partners to integrate next-generation measurements and technology, and we offer interfaces to more than 90 third-party specialty measurement devices through the Philips IntelliBridge module. IntelliBridge is a plug and play interface module that provides communication to specific external devices and acquires and incorporates real-time information from external devices into Philips IntelliVue patient monitors.
Trusted everywhere

IntelliVue patient monitoring solutions provide actionable, care-specific information when and where it’s needed to make a meaningful difference for clinicians and patients.

**Acquire with ease**
We start by transforming monitoring, so that you can monitor wherever care is delivered. Reliable, high-quality patient accessories and sensors connect to IntelliVue devices to acquire your patients’ physiologic data quickly and easily.

**Analyze and interpret with confidence**
With IntelliVue, critical data are assessed and analyzed by intelligent algorithms, and presented in relevant ways to support confident clinical decisions. Philips Clinical Decision Support tools set the standard in assisting healthcare teams with tasks that demand cross-referencing, presentation, and analysis of clinical information.

**Present with clarity**
With IntelliVue, enterprise information is available in a single view. Clinicians have access to cross-departmental document sharing, enabling point-of-care access to information from monitoring views and IT applications to help improve care every day.

---

**IntelliVue MX40**
The IntelliVue MX40 is small enough to be comfortably worn by your ambulatory patients for continuous wireless monitoring of ECG, SpO₂, impedance respiration, and other vitals in real-time. MX40 features color touch navigation harmonized with the IntelliVue patient monitoring product line, including up to two real-time waves or all numeric screens. View patient demographics, alarm settings, histories, and trends — you can even hear alarms or silence alarms at your patient’s side. Each MX40 device supports your choice of either disposable or its own special rechargeable batteries.

**IntelliVue Short Range Radio**
IntelliVue patient monitors with short-range radio provide connectivity and communication among devices, aiding workflow at the point of care. It facilitates increased patient mobility by removing barriers to care, allowing connection without cables. IntelliVue MX40 with Short Range Radio expands monitoring capabilities to provide untethered in-room access to ECG/SpO₂ data in near-real time. Wirelessly connect the IntelliVue MX40 to the IntelliVue MP5, X2, or MP2 to view patient data along with other parameters.
Philips IntelliVue supports 802.11 infrastructure

This solution provides bedside and transport monitoring on an industry-standard 802.11 a/g infrastructure. By using industry-standard protocols and network components, Philips is able to offer a cost-effective solution for flexible patient monitoring. Philips IntelliVue clinical network supports and enables two-way wireless communication of all waveforms and parameters between IntelliVue patient monitors and the IntelliVue Information Center iX.

IntelliVue Information Center iX

The Philips IntelliVue Information Center iX (PIIC iX) combines the surveillance of a central station with sophisticated Clinical Decision Support tools – such as ST Map – and the ease of touchscreen operation. See a consolidated view of alarm data in the Alarm Audit Log. Capture complete waveforms, trends, alarms, and numerics from wired and wireless networked IntelliVue patient monitors and telemetry systems, as well as the HeartStart MRx monitor/defibrillator.

IntelliVue Smart-hopping Network

The IntelliVue Smart-hopping Network is a patented wireless network designed for in-building use. It is optimized for low latency and low power consumption on mobile IntelliVue devices. From small to a large enterprise deployments, the IntelliVue Smart-hopping Network is a dependable solution for continuous physiological monitoring.

IntelliBridge device-interfacing module

IntelliBridge device-interfacing module gives a clear and combined picture of overall patient status at a glance, clearly presenting important information from ventilators, anesthesia machines, and multi-parameter measurement devices, such as infusion pump systems. The new plug and play IntelliBridge module provides communication to specific external devices and simultaneously acquires and integrates real-time information from a bedside external device for display on Philips IntelliVue patient monitors.

HL7 output

HL7 output provides a standards based framework for the exchange, integration, sharing and retrieval of electronic health information. This allows healthcare organizations to easily share clinical information.

Your path to interoperability

Interoperability allows enterprises to select the best network to meet their needs, simplifying deployment and training while assuring the seamless transmission of mission-critical data.

Data from IntelliVue monitors can be sent via the IntelliVue Information Center iX, to a nursing documentation solution or directly to a patient electronic health record, such as those from Cerner and Epic.
Emergency intervention

Help patients and data travel together: from the home to the ambulance, to in-hospital care. Integrating wired and wireless technologies help you provide early assessments and speed discovery-to-treatment time for better care.

In-hospital wireless connectivity during transport enables clinicians to be aware of changes in the patient’s condition and develop a care plan to prepare for patient arrival. At the hospital, wireless connectivity of IntelliVue patient monitors, including the IntelliVue X2, allows clinicians to be aware of – and quickly respond to – changes in the patient’s condition.

The IntelliVue MP5, MX40, and MX450, like all IntelliVue monitors, offer an intuitive touchscreen with clinical measurements, easy-to-see display, and one-touch commands. When connected to the IntelliVue X2, MP2, MP5, MX400, or MX450, the IntelliVue XDS Large Display application software supports expanded screen size and alternative patient views.

* The MP2 patient monitor with ECG/Resp, NIBP, SpO2, Pressure, Temp, CO2 (only Mainstream Sensor M2501A), LAN and battery can be used in a transport environment such as road ambulance, airplane, or helicopter. U.S. Army Airworthiness Certification and Evaluation (ACE) program of the U.S. Army Aeromedical Research Laboratory (USAARL). Tests performed in accordance with the following standards: MIL-STD-461E, MIL-STD-810F, MIL-STD-1472F, ANSI/AAMI HE68-1993 HF, ANSI/AAMI ES1. EMC and environmental requirements may vary from country to country according to local regulatory standards and directives.
The IntelliVue X2 is a combined multi-measurement module and transport monitor, ingeniously lightening the load when it comes to patient transport. At just 1.2 kg (2.7 lbs), it’s small enough to go anywhere and powerful enough to go everywhere. It’s a rugged transport monitor that’s also a measurement module, offering continuity of patient data, even during patient transport, across all levels of patient monitoring.

Small in size and big in capability, IntelliVue X2 allows you to unplug and go in a single step, helping to reduce error and improve patient care. Gain great clarity through exclusive integrated Clinical Decision Support tools that make it easy to focus on the patient at every point.
Philips patient monitoring and information management solutions are designed to support your perioperative workflow by fostering enhanced patient care from preop through surgery and postop recovery, including transport to and from the ICU. The IntelliVue family of anesthesia patient monitors have been designed to match the pace and unique needs of even the highest-acuity care environment of the operating room.

IntelliVue anesthesia patient monitors offer a comprehensive menu of measurements to match the needs in all acuity levels of anesthesia care. The monitors also offer highly flexible anesthesia-specific screen configurations. The IntelliVue MX800, for example, supports up to three completely independent, configurable displays.

IntelliVue monitors also have built-in tools to help you make informed clinical decisions. For example, Pulse Pressure Variation (PPV) is an indicator of the patient’s fluid responsiveness, Horizon Trends give you a quick and easy view of the patient’s current status and recent changes, ST Map provides a graphic presentation of ST segment changes in a patient’s ECG.

Our open systems approach means IntelliVue monitors can be easily integrated with major anesthesia machine brands and models for a complete anesthesia workspace. Philips IntelliBridge interface modules conveniently incorporate data from the anesthesia machine, infusion pumps, and other stand-alone devices for presentation on a single patient monitor display and inclusion in the trend database, using standard communication protocols to make data available to the IntelliSpace Critical Care and Anesthesia (ICCA) information system or other clinical or hospital information systems, such as the electronic medical record system (EMR).
Real-time support for anesthesia care

Philips advanced measurements for anesthesia patients include the Anesthetic Gas Module to identify and measure anesthetic agents, N₂O and respiratory gases, Bispectral Index (BIS®) to assess the level of consciousness, Pulse Pressure Variation (PPV) to determine the patient’s responsiveness to the administration of fluids, and QT/QTc to monitor changes in the patient ECG’s QT interval. Clinical Decision Support tools such as Horizon Trends, or ST-MAP provide patient status information in a clear, easy-to-grasp presentation.
Philips helps support family-centered care in the NICU with solutions that encourage bonding between parents and babies, and allow efficient deployment of NICU nurses. The IntelliVue MX550/600/700 patient monitor, for example, is easy to use, and can be configured to department protocols and specific procedure requirements for your smallest patients. The IntelliVue MP40, MP50, MX450, and MX500 provide portability and measurement flexibility, while the IntelliVue X2 is one of the lightest, smallest, and most rugged transport monitors available.

IntelliVue is designed specifically to meet the needs of your NICU, with specific measurement algorithms adjusted to the physiology of neonates, including tcpO₂/tcpCO₂, dual SpO₂, and Microstream CO₂, as well as compatibility with positioning devices and other Developmental Care solutions for neonates and preemies. Philips supports family-centered care by providing a clear view of multiple patients’ status from IntelliVue monitors throughout the unit. Patients in individual family rooms can be observed from elsewhere in the NICU with the Philips “window within a window” view, allowing virtually seamless care from clinicians while families are bonding.

Philips VueLink provides an interface to many incubators and neonatal ventilators, providing an integrated view of data. Our specialized Clinical Decision Support tools for the neonatal environment include Oxy-CRG, Neonatal Event Review, and car seat testing (CAR). Our highly configurable alarming allows you to optimize settings by individual patient, and we provide an ideal infrastructure to support family-centric care models, including personalized alarm distribution to caregivers through the IntelliSpace Event Management (IEM). We also offer training, education, and home monitoring solutions to ease the transition from NICU to home.
Supporting goal-oriented neonatal therapy

IntelliVue Neonatal Event Review detects and documents apnea, bradycardia, and desaturation and provides information for diagnosis and management of neonatal intensive care patients. Clinicians can designate any combination of apnea, bradycardia, or hypoxia as a significant neonatal event.

Oxy-CRG (oxy-cardiorespirography) combines the compressed trends of a neonate’s beat-to-beat heart rate, respiration, and oxygenation levels in an easy-to-interpret display on IntelliVue patient monitors, offering an indication of breathing efficiency and brain maturity.

Car seat testing, recommended by the American Academy of Pediatrics, helps clinicians to assess neonates’ ability to safely tolerate the car trip home.
The need to unlock the power of information at the point of care to speed decision making and activate early intervention has never been greater. Our critical care solutions leverage advanced physiologic monitoring and clinical informatics, to provide flexible capabilities for caregiver mobility, data sharing, and clinical decision support.

A comprehensive, easy-to-use clinical information system such as IntelliSpace Critical Care and Anesthesia (ICCA) can provide the care team with relevant data at the right time, including clinical summaries and administrative overview throughout the continuum of care.

In the step-down unit, the IntelliVue MP20, MP30, MP40, MP50, MX400, MX450, MX500, and MX550 patient monitors provide powerful monitoring capability and essential measurements in a compact package for intermediate care.

All ICU and step-down unit beds can be connected through a wired or wireless network to the IntelliVue Information Center iX, allowing for efficient monitoring from a central or remote location.

IntelliSpace Event Management (IEM) provides clinical communications to improve workflow and efficiencies, extending the functionality of your Philips patient monitoring system by delivering complementary event notification directly to your clinical staff. IntelliVue device alarm messages can be routed to the appropriate caregiver, providing staff with alerts related to critical and non-critical alarms and events.

With our caregiver mobility solutions – including our suite of patient monitoring apps optimized for smart phones and tablets – you can connect caregivers to patient information, anytime and virtually anywhere. This helps support caregiver work patterns, facilitate collaborative decision making, and provide more consistent, effective care across your enterprise.
The use of Horizon Trends is helping to improve the clinical management of critically ill patients during vasoactive blood pressure support at **Concord Hospital** in Concord, New Hampshire. The Horizon Trends Clinical Decision Support tool was developed to provide meaningful and intuitive displays of actual clinical status to desired goals, simplifying clinician workflow and helping to improve patient care.

In a clinical study of 74 critically ill patients*, subjects in the Horizon Trends group had higher mean arterial blood pressures and spent more time within their target blood pressure ranges as compared to subjects in the group without Horizon trends. Clinicians report, “The use of Horizon Trends helps us visually see how we are doing with IV medication titration in keeping our blood pressures at goal. It is nice being able to see trends with one quick look.”
