





Haemodynamic Monitoring

# Haemodynamic monitoring at its most effective

Accurate patient monitoring minute by minute, beat by beat

Mostcare Up is a haemodynamic monitor for use in both adults and children and can be used in a wide range of clinical environments from the ICU and high-risk surgery to A&E. With its intuitive, simple to use and customisable interface, you can set up and monitor a patient's cardiac output in 60 seconds, with no need for calibration.

Mostcare Up uses a robust patented algorithm known as the Pressure Recording Analytical Method (PRAM), giving real time data to help you make the right decisions at the right time. Our endless system has unlimited patient usage and does not require consumables, ensuring you can optimise its usage without additional cost and helps improve sustainability. Mostcare Up can also connect to your patient information systems to help you stay more efficient.





Fast
60 second setup



Simple

No calibration required Intuitive, customisable interface



Accurate

Robust PRAM™ algorithm
Patented dynamic filter to enhance signal quality



Lifetime value

Unlimited patient usage No consumables required, improving sustainability



Data management
HL7 compatible to enable data transfer



Better, faster decisions...





# Mostcare Up at a glance

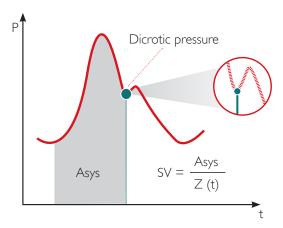
	Mostcare Up	Device A	Device B	Device C	Device D	Device E
Set up time (minutes)	1	1	4 +/-	3 +/-	10 +/-	10 +/-
Invasiveness	Minimal	Minimal	Minimal	Minimal	Invasive	Invasive
Connections	Arterial	Arterial	Arterial & CVC	Arterial	Arterial, CVC & spec. catheter	Arterial, CVC & spec. catheter
Able to move between departments	<b>✓</b>	<b>~</b>	-	<b>~</b>	-	-
No additional consumables required	<b>✓</b>	-	-	-	-	-
Validated for paediatric patients	<b>✓</b>	-	-	-	-	<b>✓</b>
Compatible with WiFi enabled devices	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>~</b>	<b>✓</b>
Compatible with HL7 information system	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>~</b>	<b>✓</b>
No calibration required	<b>✓</b>	<b>✓</b>	-	<b>~</b>	-	-

## A patented algorithm

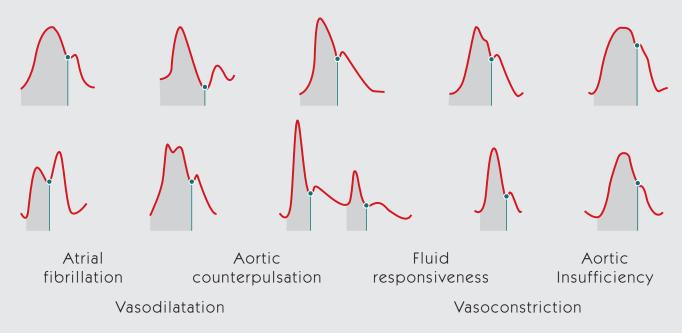
PRAM (Pressure Recording Analytical Method) is an innovative method to analyse the pressure wave.

It allows for constant and sensitive monitoring in real time of the slightest haemodynamic variations because it is based, heartbeat by heartbeat, only on the morphology of the arterial pressure wave.

- Sampling at 1,000Hz
- Beat-by-beat analysis of the waveform
- Does not depend on pre-estimates
- No external calibration required.



### Representational differences in patient waveforms



All of your patients are unique and their individual haemodynamic condition can evolve rapidly and in different ways. The shape of the arterial pressure wave is the result of a complex balance that depends on both the coupling of the cardiac function with the vascular system and their interaction with the respiratory system.

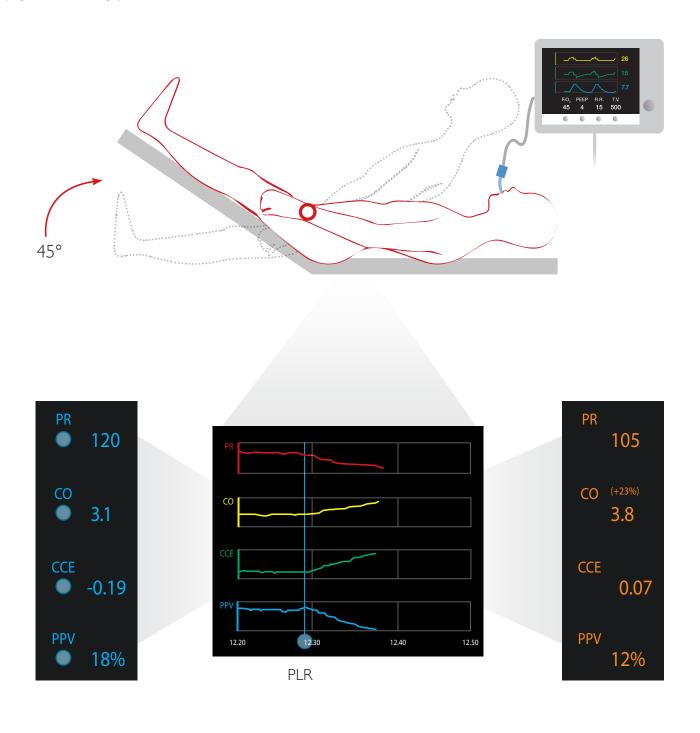
The precise analysis of the shape of the wave removes the need for calibration and pre-estimated data about the patient. It also identifies the dicrotic pressure and the Z(t) impedance of the cardiovascular system, even in cases of unusual pressure waveforms, which is a key part of the algorithmic calculations to determine the stroke volume.



## Markers & trends

Mostcare Up can display trends for many haemodynamic variables simultaneously.

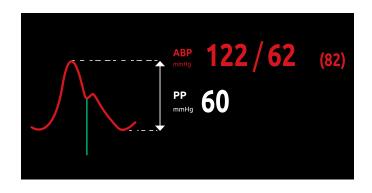
It is also possible to insert personalised markers during specific events (e.g. start treatment). Designed specifically to help you when monitoring haemodynamic variations following specific treatments (e.g. fluid challenge).



## Haemodynamic variables

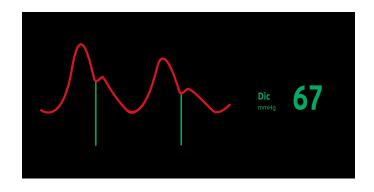
#### Pressure

Systolic, diastolic, mean and Pulse Pressure (PP) are measured with every heartbeat.



#### Dicrotic Pressure (Dic)

The value of the Dicrotic Pressure (Dic), gauged with precision at 1000Hz, provides information about the vascular condition and the ventricular-arterial coupling.



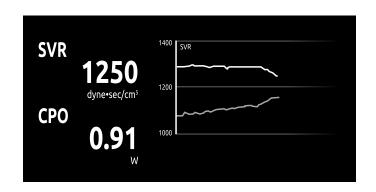
### Cardiac Output (CO)

The Stroke Volume (SV) is measured beat-by-beat and allows for the Cardiac Output (CO) to be calculated.



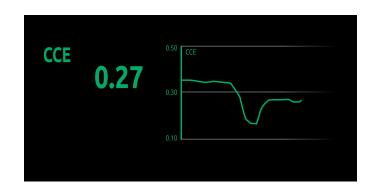
### Derived variables

Systemic Vascular Resistance (SVR), Cardiac Power Output (CPO) and Oxygen Delivery (DO<sub>2</sub>) are examples of the derived variables provided by Mostcare Up.



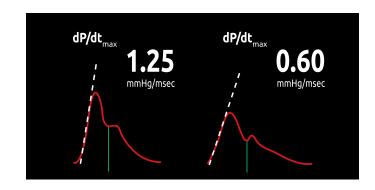
#### Cardiac Cycle Efficiency (CCE)

Cardiac Cycle Efficiency (CCE) is an exclusive variable which describes haemodynamic performance in terms of energy expenditure in the patient being monitored.



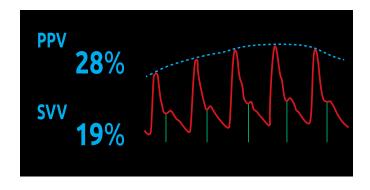
#### dP/dt max

The maximum pressure variation compared to time  $(dP/dt_{max})$  is linked to the hearts contractility and also to the condition of the vascular system.



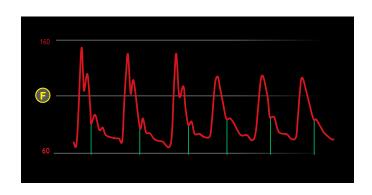
### Dynamic variables

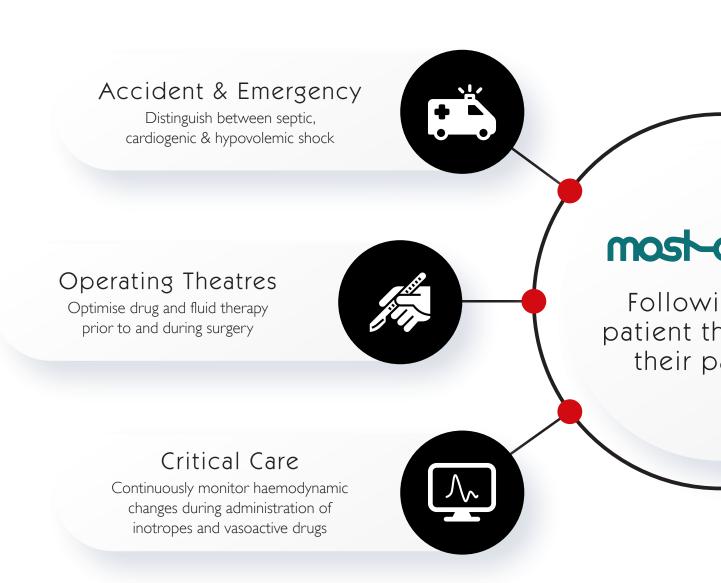
Pulse Pressure Variation (PPV) and Stroke Volume Variation (SVV) during the respiratory cycle can be viewed simultaneously.



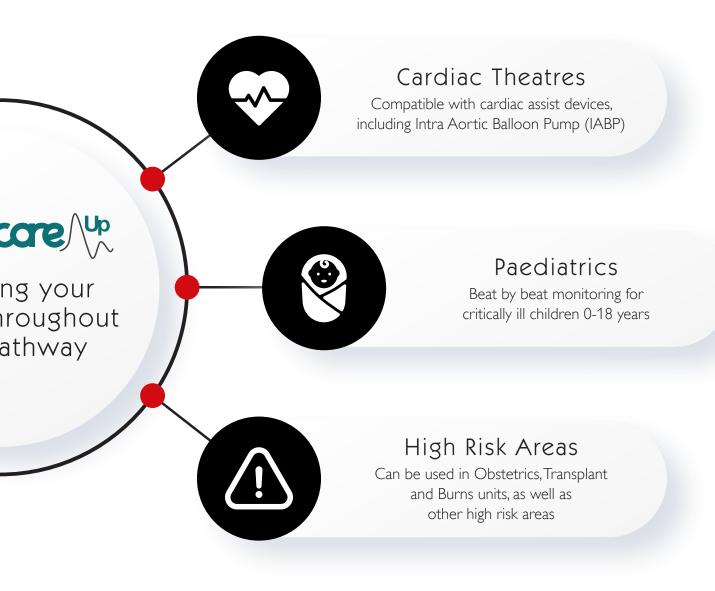
## Dynamic filter

The shape of the pressure curve can be affected by resonance phenomena. The exclusive, dynamic filter in Mostcare Up has been designed to automatically optimise the quality of the wave and to reduce these phenomena.













# Patient care is at the heart of what we do

We Value Life through the innovation of our medical devices and their impact on improving and ultimately, saving lives.

Mostcare Up provides minimally invasive continuous monitoring for the patient, meaning the experience is not only less traumatic for the patient but due to the real time, continuous data there will be a rapid response to any variations, thereby improving patient outcomes.

In high-risk surgery patients, Mostcare Up optimises the flow of fluids which reduces complications and improves the recovery time. Haemodynamic monitoring is also particularly prevalent with sepsis patients by establishing if the patient is fluid responsive.

Patient safety is incredibly important to us when it comes to the solutions we provide and the after-sales service we offer. We believe education is vital to patient safety and we have developed online education to support you, which you can access 24/7. We achieve success by partnering with NHS teams and providing effective learning opportunities tailored to your needs. Our support is there on an ongoing basis throughout the length of your service contract. We deliver training and education on-site and remotely when you need it most.

## Flexibility of use

We have flexible financial models to suit your needs; whether that may be capital or revenue, we can provide a solution. Mostcare Up does not require additional consumables, so you can use it as much as you want to and it will never go over your budget.



### Endless system

Allows an unrestricted use of the system without additional cost. This is beneficial for hospitals with a large number of patients who need continually monitoring.

#### Unlimited usage

Offering unlimited patient usage for 365 days, with annual card reactivation giving you flexibility to optimise your patient usage with a fixed annual cost.

## Vygon at your service

When you need support, we're there.



#### Live phone support

Talk through your issue with our Technical & Service Team.



#### Service requests

Making it simple to request warranty support when you need it.



#### Personalised training

We deliver a personalised ongoing training package to support your needs.



#### Real-time support

Remote support video and messaging support via WhatsApp.



#### Educational portal

Videos, user guides and education which is accessible 24/7.

Our dedicated Sales Team is on hand to answer any questions and guide you through our product ranges. As specialists in their field, simply contact your Vygon representative to arrange a product demo and let us show you how our Mostcare Up haemodynamic monitoring solution improves your bottom-line performance and patient care.

Our Technical Support Team is home to the experts when it comes to answering questions related to the finer technical detail of our range of medical devices, procedural advice, and regulatory device issues, as well as thorough product testing and solutions to help the ongoing use of our products. We understand the devoted and consistent level of service that our customers need so that they can feel confident that any enquiry is dealt with swiftly and professionally.

To deliver an excellent service there is no substitute for first-hand experience and knowledge of the issues and pressures healthcare professionals face when treating and caring for patients. That's why we are proud to have Haemodynamic Specialists in the Vygon Critical Care team. As highly accomplished specialists in their fields, our Haemodynamic Specialists offer a premium level of valuable support. The level of detail and skill in our implementation training packages ensures that our Haemodynamic Specialists are able to guide clinicians and clinical teams from evaluation to adoption and beyond.

96% of first-time users agree or strongly agree that Mostcare Up is easy to use.



#### For further information, please contact: info@vygon.co.uk

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