

Mindray: Revolutionary Patient Monitor

Global medical device company Mindray partnered with our EPAM Continuum team to enable better care delivery through a revolutionary patient monitor.

Challenge

For nurses and clinicians to provide effective patient care, they must be able to access clear and comprehensive patient data at all times. Unfortunately, patient rooms are often crowded with disparate and antiquated systems that were not designed with the caregiver in mind.

Global medical device company Mindray partnered with our EPAM Continuum team to enable better care delivery through a revolutionary patient monitor, one that would provide the most critical information to healthcare professionals with clarity and ease, even in the most chaotic clinical environments.

Research & Insights

Vertical Configuration

Patient monitors used to feature horizontal displays, and most were fixed in position. Our team collaborated with Mindray to orient the monitor vertically, a breakthrough design that allowed for more vital information to be displayed on the screen, in a way that was clear and easy to read. This configuration also ensured that the monitor took up less room in the crowded critical care space.

More Direct Access

Many hospitals are built with side-by-side patient rooms, so the spatial configurations of neighboring rooms mirror each other. Recognizing this, we designed the parameter modules to rotate 180 degrees, so cables can be run from either the left or right side of the device. By improving cable management, we ensured that, regardless of the room's layout, the monitor doesn't impede a caregiver from directly accessing the patient at all times.

Contrast for Visibility

The encasing for most hospital equipment is white, making it difficult for a nurse to distinguish, with a quick glance,



The Mindray V Series patient monitoring system was designed to provide critical information and easy access to healthcare professionals in the most chaotic environments.

one device from another. In order to provide greater contrast and help the screen to stand out visually in the clutter of patient rooms, we designed in a thin, dark front bezel. Unique to its product category, the dark bezel also serves to increase the perceived size of the display's alarms and enhances readability.

Ease of Use

Nurses often need a portable patient monitor to complement the bedside unit. Finding a separate transfer monitor, swapping out parameter modules, and redressing cables can create stress for both the caregiver and patient. To address this pain point, Mindray's monitor fulfills both functionalities by easily undocking for transport, and then just as easily snapping back into place.

Solution

EPAM Continuum collaborated with Mindray to create the V Series patient monitoring system. Designed to provide critical information and easy access to healthcare professionals in the most

chaotic environments, this series of monitors, both the V12 and V21, are breakthrough products, offering a user experience unrivaled by other products on the market.

Results

The Mindray V Series patient monitoring system was released to critical acclaim, winning a Gold Medical Device Excellence Award (MDEA), a Gold International Design Excellence Award (IDEA) for Medical Products, and a Good Design Award in 2011.

In the same year, I.D. Magazine named the V Series the "Best of Category" for improving patient care. One of the magazine's judges noted that the designers of the V Series "really studied what happens in the patient room and in terms of transporting it and portability." Another judge noted, "there is nothing superfluous on the design itself," adding: "I think the cartridge aspect seems pretty revolutionary for the category." ■