

At a Glance

Improving patient safety through standardized monitoring and new processes. Like many hospitals today, the University Hospital Zurich in Switzerland is continually looking for ways to increase quality of care while simultaneously improving workflow.



By replacing diverse patient monitoring systems from a variety of manufacturers with the Infinity Omega Solution from Dräger, the hospital has been able to move to next-generation technology and improve clinical workflow. The results: the average time for monitoring de- and reconnection has been reduced by 52% and the time without any patient monitoring to 0.

The University Hospital Zurich (UHZ) had been using a variety of patient monitors from diverse manufacturers to meet the needs of different departments. Having a diverse group of monitors with different operating philosophies was time consuming for the staff and represented complex material management. It was time to standardize on one platform hospital-wide.

The hospital selection team had clear criteria. The new system should:

- Provide in-hospital transport
- Ensure continuous monitoring
- Be open for future data management systems
- Simplify the monitoring process
- Enable standardization

Carbamed, the Sales and Services organization of Dräger in Switzerland, answered UHZ's request with an integrated Monitoring and IT Solution based on the Infinity Omega Solution. Infinity Omega integrates an Infinity Delta/Delta XL monitor with a medical-grade workstation running Infinity Explorer software at the point of care.



Dr. Martin Brüesch,
Chief Physician, Anesthesiology, about the new
monitoring system:
„Continuous monitoring of our patients - from emer-
gency admission to intensive care - is an integral
part of our safety concept. Ease of use prevents
errors and time savings benefit the patient. The
monitoring process now fits our treatment process.”

TESTING IN THE REAL WORLD

UHZ tested prospective monitoring systems on actual patients during a four-week test phase, installing four competitors' products in different departments.

At the end of the trial, the doctors and additional clinical staff assessed the monitoring systems for usefulness, quality and design. An interdisciplinary project team – consisting of executive staff of anesthesia department, medical technicians, bio engineers, caregivers, IT specialists and hygienists – also assessed the price/performance ratio possible for the systems' entire lifecycle.

Dr. Martin Brüesch, Chief Physician, Anesthesiology, who headed the interdisciplinary project team, and his colleagues were impressed by the Infinity Omega's practicability and networking capabilities. “The new system has enhanced the hospital's ability to monitor patient data in real-time,” he says. “The new monitors can show trends in more detail than the old ones. We also have the ability to see data from different patients at a glance. Staff members no longer have to run to each bed when an alarm sounds, but can simply acknowledge it from wherever they are. In effect, Infinity Omega connects the bedside with the entire hospital.”



Connecting the bedside with the entire hospital:
the Infinity Omega Solution.



Mobile: Patented Pick and Go® technology for continuous monitoring - even during transport.

UHZ Transport SOP: Equipment is exchanged 1:1 at the point of patient hand over while the monitor remains with the patient.

PICK AND GO® TECHNOLOGY ENABLES PROCESS IMPROVEMENT

Another Infinity Omega strength is Dräger's patented Pick and Go technology for continuous monitoring – even during transport. Unlike other systems that require a separate transport monitor when the patient moves within the hospital, the Infinity system moves with the patient – ensuring continuous monitoring and saving time spent de- and reconnecting patient. Additional costs for transport monitors are eliminated.

Another feature of the Infinity Omega system that appealed to the decision making team was its flexibility due to the Infinity Docking Station. The docking station stores configuration information, so when the monitor is docked, it automatically displays the waveforms, parameters and screen configuration preferred by that department. This ability makes hospital-wide standardization possible.

Dräger experts worked with the project team to define new processes: Under the old process, specific monitors and cables belonged to a certain department – both from a cost center and maintenance perspective. With the new process, only a certain number of monitors and cables belong to a certain department. When a patient is handed over from the anesthesia department to the ICU, for example,

the patient comes into the department with the monitor and a certain number of cables, etc. Before the ICU caregiver receives the patient, he/she has to give a similar monitor and cables, etc. to his/her colleague from the anesthesia department. So the same number of monitors and accessories stays in each department, but not the same equipment. With the new process, device cleaning takes place in the ICU, since it is at the end of patient pathway. "Continuous monitoring of our patients – from emergency admission to intensive care – is an integral part of our safety concept. Ease of use prevents errors and time savings benefit the patient. The monitoring process now fits our treatment process," says Dr. Brüesch.

THE BOTTOM LINE: IMPROVING PATIENT SAFETY

In the past, it was not possible to monitor patients at all times given the different monitors in various departments. As a result, patient safety was compromised during these gaps in monitoring and long patient transports. "Now, with our new Dräger monitoring solution, we have been able to reduce the average time for monitoring de- and reconnection by 52%. We have also reduced time without any patient monitoring to 0," states Dr. Brüesch. "The uniform and standardized monitoring system creates greater efficiency and strongly supports our hospital's patient safety goals."



About the hospital

University Hospital Zurich is one of the largest and most important teaching hospitals in Europe. With its 41 departments and institutes, the hospital is renowned for its achievements in health care, research and teaching, as well as for compassionate care. It offers state-of-the-art treatment for a broad range of illnesses, provided by a dedicated team of leading consultants of the highest international standing.

ABOUT INFINITY OMEGA SOLUTION

The Infinity Omega Solution integrates an Infinity Delta/Delta XL monitor with a medical-grade workstation running Infinity Explorer software at the point of care. It allows multiple caregivers to view information on two screens and control monitoring functions from either device. The Infinity Explorer software allows patient data to be integrated at the bedside, where the clinicians need it. All patient data collected at the bedside and on transport is made available to the Infinity CentralStation via the Infinity Network.

The Infinity Delta monitor provides traditional functions such as data capture, vital signs monitoring and alarming. Because of its patented Pick and Go technology, the Delta doubles as a transport monitor – ensuring continuous monitoring. The workstation displays comprehensive patient data at the bedside on a 17" touchscreen display. Infinity Explorer software enables intelligent communication between the Delta and the workstation – bridging the gap between patient monitor and the IT infrastructure of the hospital.

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