

# Helping to increase process efficiency and patient care in anesthesia

Hirslanden Klinik Aarau is one of 16 sites run by the Hirslanden group of private hospitals. Each year, some 10 000 inpatients receive treatment here. The clinic focuses on specialist medicine, offering 155 inpatient and 17 outpatient surgery beds, as well as two separate surgical departments with three to four operating suites each.

When the patient monitoring equipment in all operating theaters was completely replaced, the hospital was able to benefit in two ways, thanks to its collaboration with Philips: The amount of turnover time required for anesthesia-related tasks in between surgical cases was reduced by five and a half minutes, while a previous gap of 15 minutes in patient monitoring during critical patient transport was eliminated, helping to increase patient care.

Turnover time required for anesthesia-related tasks in between surgical cases reduced by **5.5 minutes** 

15-minute gap in patient monitoring during critical patient transport is eliminated, helping to increase patient care.

# **Customer's need**

More efficient processes in anesthesia without compromising quality of care.

## **Our solution**

With the help of Philips, measurable efficiency gains were achieved, helping to increase patient care by replacing the existing fixed monitors with portable monitors.

#### The results

- The amount of turnover time required for anesthesia-related tasks in between surgical cases is reduced by five and a half minutes.
- A gap of 15 minutes in patient monitoring during critical patient transport was eliminated, thereby helping to increase patient care.

#### Hirslanden Private Hospital Group

The Hirslanden Private Hospital Group operates 16 hospitals, many of which have an integrated outpatient centre and emergency department, as well as three outpatient clinics, twelve radiology institutes and four radiotherapy institutes. It is the largest medical network in Switzerland.







#### Helping to increase patient care by closing gaps in monitoring

In summer 2013, the patient monitoring equipment in all anesthesia-related rooms at Hirslanden Klinik Aarau was due to be completely replaced. The scope of the switchover included operating theaters with induction rooms, recovery rooms and the intensive care unit. Hirslanden Klinik Aarau hoped to improve the clinical workflow by replacing the conventional, wall-mounted patient monitoring equipment in the surgical department with modern, modular Philips IntelliVue X2 patient monitoring equipment.

Instead of attaching and removing the monitoring devices in the induction room, in the operating theater, and then once again in the recovery room, this process would only need to be performed once after the swop. As the portable monitor would accompany the patient, all of the subsequent steps in the workflow could take place without the need to remove and reattach the monitor cables. However, it was unclear how much time could actually be saved through this improved workflow.

Philips not only supplied the new equipment, including installation, customer-specific configuration and user training, but also sent a team of experts to record the improvements achieved in the workflow thanks to the switchover.

Perioperative process times were monitored during two three-day visits to the surgical departments at Hirslanden Klinik Aarau (in line with the joint recommendations from the German Society of Anesthesiology and Intensive Care Medicine, the Association of German Anesthetists, the Association of German Surgeons and the German Society of Surgical Management). Process times were monitored immediately before and three months after the patient monitoring equipment was switched over in both surgical departments at Hirslanden Klinik Aarau.

## A smooth switchover and improved workflows

The outdated fixed monitors were replaced without any service interruptions. Thanks to effective preparation and the user training that was provided, staff were able to use the new devices efficiently from the very start.

The IntelliVue X2 monitor—a small, portable device that only needs to be attached to the patient once and then accompanies the patient all the way from the induction room to the operating theater, right through to the recovery room—eliminates up to two sensor attachment and removal procedures.

### Close collaboration brings sustainable success

Quantitative analyses of the process times that were monitored showed that the elimination of workflow steps, helped save an average of five minutes 30 seconds per case.

However, the reduction in process times was not the only measurable effect of the new portable monitoring equipment. Whereas patients previously had to go without physiological monitoring during transfer from the induction room to the theater and, most notably, to the recovery room immediately after the procedure, the portable X2 monitor now ensures that patients are monitored without interruption during these particularly delicate stages. Analyses of the situation before and after the switchover demonstrated that the gaps in monitoring that have now been closed amounted to just under fifteen minutes.

"The equipment swop has simplified workflows considerably and has also improved patient care during transfer from the theater to the recovery room."

Andreas Wenger, Operations Manager, General Manager, Anesthesia Department

#### Key to success

A shared vision to achieve increased patient care, while improving process efficiency.

