

The Philips logo is displayed in a white rounded rectangle on a blue background. The word "PHILIPS" is written in a bold, blue, sans-serif font.The word "Cardiology" is written in a white, sans-serif font on a dark blue background.A photograph of a modern hospital building with a glass facade and a large "R3K" sign on the side. The sun is shining brightly, creating a lens flare effect. In the foreground, there are some bushes and trees.

Improved workflows.
Better outcomes.

Philips Azurion with IntraSight

The medical center

The Robert Bosch Hospital is a 1000-bed hospital in Stuttgart, Germany. In the interdisciplinary, scientifically-oriented heart center located here, cardiologists and heart surgeons treat patients from far and wide.

The challenge

Cardiology is of central importance to the hospital. However, the number of older patients and multimorbid patients is growing. Treating patients is now considerably more complex than it was ten or twenty years ago. This made it necessary to implement a new multimodality imaging system that could continue to ensure a high level of care into the future.

The solution

Philips Azurion with IntraSight enables complex imaging. The integration of the different applications brings them all together in one location. This also makes workflows more efficient, since the Azurion is easy and intuitive to use. As a result, staff can dedicate more attention to their patients. Treatment times are reduced and the quality of care has improved.

The result

After the new Azurion platform was introduced, diagnostic reliability increased. The time required per patient decreased considerably. This takes pressure off the treatment staff, improves patient safety and boosts the cost-effectiveness of the cardiology department in Stuttgart and makes it sustainable for the future.

Cardiology has always been a challenging discipline. Now, however, heart patients are getting increasingly older and developing comorbidities over the years. This puts cardiology departments under a lot of pressure. New solutions are required to meet rising demand in a cost-effective way.

Prof. Dr. med. Raffi Bekeredjian, senior physician and head of cardiology at the Robert Bosch Hospital, and his team of 36 doctors perform around 3600 operations in their cardiac cath lab per year, including over 900 coronary interventions, 400 aortic valve procedures and 150 atrioventricular valve procedures. "Trending upward," adds Bekeredjian.

For this reason, the team in Stuttgart decided it was time to explore new pathways. "We needed an innovative heart catheterization platform that enabled very high-quality multimodality imaging, not least due to the growing number of procedures being performed," says Prof. Dr. Bekeredjian. With this in mind, the cardiology department opted for the Azurion from Philips.

The advantages of Azurion



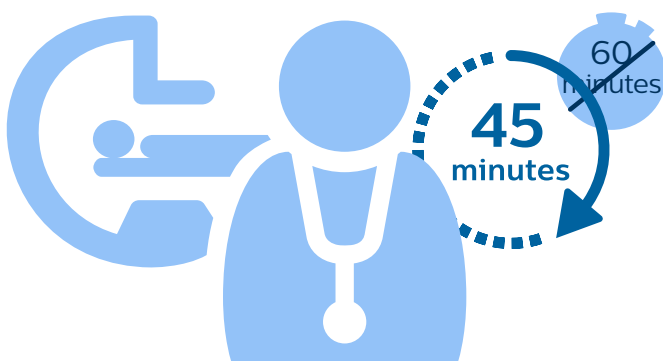
Everything at a glance with IntraSight

The key advantage of Azurion lies in the integration of the different applications covered by the IntraSight module. All the applications meet in one place, where they can be controlled and results can be read. Furthermore, the functions can be selected easily and intuitively using a touch screen. Individual work steps no longer have to be supervised. This saves medical staff a lot of time, particularly with more complex diagnostic tasks.

The time saving is critical

Even more time can be saved, because external devices don't have to be fetched from a nearby room, plugged in and turned on while the patient is already on the examination table. This is key because the length of the procedure is often critical. "Many people, often older people, come to us who cannot or should not be on the table for too long due to poor pumping of the heart," explains senior physician, Dr. Alexander Becker, head of the cardiac cath lab.

His colleague senior physician, Dr. med. Peter Ong gives an example: "Before we had the new system, when we examined a patient with main stem stenosis or three-vessel disease, we would need a good hour to perform the diagnostic surgery. Today, with the Azurion and IntraSight, we can usually do it in 45 minutes."



“Coronary physiological measurements help us protect patients from the risks of performing a complex procedure unnecessarily.”

Dr. med. Peter Ong, senior physician

The patient benefits as well

Julia Frank, healthcare nurse and deputy head of the cardiac cath lab, is the acting functional manager of the cath lab. She reports that the dose, frame rate, changing the individual programs – can all be set directly on the system – simply and highly intuitively. "This makes our jobs considerably easier and more efficient." She says she can now fully focus on assisting. "And on what matters most, the patient."

Optimized patient care

The interplay of imaging, physiology, co-registration* and software helps the care teams provide patients with optimized care, because their stenoses can be examined with regard to their hemodynamically relevant effect on the patient. This allows doctors to make data-based decisions about which stenoses need to be treated and which ones do not.

Coronary physiology leads to greater patient safety

This assessment is made possible by the field of coronary physiology. These functions are available in the new Azurion platform thanks to the integration of IntraSight, and are complemented by intracoronary imaging using IVUS. This enables staff to create an optimal treatment concept for patients, focused on achieving the best for them and their illness, while minimizing risk and working cost-effectively. This is precisely where the new capabilities of the Azurion are critical.

* Co-registration tools available within IntraSight 7 configuration via SyncVision



“Getting the best for the patient – the Azurion is critical in this regard.”

Dr. Alexander Becker, senior physician and head of the cardiac catheterization laboratory

Intuitive, first-class imaging, modern design

Out of all the tools that the Azurion offers, medical professionals are already starting to choose their favorites. For Julia Frank, her favorite is StentBoost, which enables correct stent positioning in the vessel. Dr. Becker enjoys working with this application, because it lets him recognize when the stent has expanded, without any accompanying imaging. In this way, he can spot problems before they occur. Overall he values the imaging quality of the entire system. He says it is so great that he can also work with radiation at “very low levels.” He adds, “This is a big advantage, particularly for our many elderly patients.”

A system for the future

“The Azurion offers us exactly what we need to handle the increasing number of complex coronary procedures in our facility,” Dr. Becker sums up his experience adding: “It’s a modern heart catheterization platform that enables excellent and complex multimodality imaging, works with low radiation levels and lets us perform both intracoronary imaging and physiological examinations without any time delay.” With the Azurion, he and his colleagues feel their hospital is well equipped for the future and the growing number of complex cases.



Conclusion

- Fast, intuitive workflow thanks to high diagnostic reliability with Azurion
- The new cath lab platform enables fast, evidence-based decision-making for a number of routine and complex interventions
- The patient benefits from an optimized treatment concept with the best results and low risk
- The hospital is now well equipped for complicated cases thanks to Azurion