PHILIPS

SmartPath

Transform

Charité Berlin

**Who? Where?**
**Dr. Michael Gross,**
Chief Cardiology Consultant,
Charité Berlin, Germany

**Challenge?**
To simultaneously upgrade multiple interventional X-ray suites without reducing patient throughput.

**Solution?**
A Philips SmartPath Catalyst conversion provided state-of-the-art clinical functionality without the previously associated costs or downtimes during re-fit.

# Giving your interventional lab **a new life**

Philips SmartPath is our long term commitment to giving you access to the latest innovations throughout the life-cycle of your interventional suite. Our dedicated SmartPath Catalyst conversion is the practical and cost effective way to transform your current system into the state-of-the-art Philips AlluraClarity interventional suite.

**Maximizing your capabilities, minimizing your costs**
There are clear economic, operational, and environmental benefits to converting your Philips Interventional fixed X-ray system into a Philips AlluraClarity platform – the bottom line being that you can now achieve enhanced Philips system performance at lower cost and levels of disruption than associated with a brand new purchase.

By reusing the key structural elements from your existing system architecture we are able to reduce the time and money you would otherwise spend installing a brand new iXR platform.

Instead, we focus on updating your system's technology to the level used in our new system deliveries. This includes all software, imaging and control circuitry, and the latest flat detector and 3D imaging technologies – ensuring you are equipped with best-in-class imaging and diagnostic capabilities, without the associated downtime or financial commitment of a new installation.

# The SmartPath to modernization

In today's healthcare landscape, patients increasingly demand treatment using technologies which are at the cutting-edge of medicine. However, acquiring such advanced systems can be a financial and operational challenge, even for a leading international facility.

Finding innovative and sustainable ways to reduce the cost and disruption of system modernization is emerging as a key competitive advantage for top performing hospitals. We examine how a German institution with an international reputation for excellence has benefited from adopting the **SmartPath Catalyst program**.

# Giving your interventional lab **a new life**

Charité Berlin is one of the largest university hospitals in Europe. It houses 3,700 doctors and scientists across four campuses, who heal, conduct research, and teach at the top international level. In 2010 Charité Berlin celebrated its 300-year anniversary.

For many years, Dr. Michael Gross was responsible for interventional cardiology and angiology in the Charité's catheterization laboratories. Since 2009 he has been Head of Cardiovascular Medicine and Structural Heart Disease at the Cardiology and Pulmonology Clinic, located on the Charité's Benjamin Franklin campus.

Every year the department conducts 3500-4000 diagnostic catheterizations, resulting in 1400-1600 interventional procedures which include roughly 120 connected to acute heart attacks. "In addition to dealing with coronary problems we deal with structural heart disease in adults" explains Dr. Gross, with a focus on catheter-based implantations and the reconstruction of heart valves. The department is a certified competence center for mitral valve repair, conducting around 120 such interventions each year.

**Maximizing your capabilities, minimizing your costs**
Charité Berlin's Cardiology and Pulmonology Clinic has established a longstanding relationship with Philips, who supplies Interventional X-ray systems, support, and advisory services to the department. At the end of 2013, Dr. Gross and his team took the decision to simultaneously upgrade two (of their four) Allura Xper cardiovascular X-ray systems using AlluraClarity Catalyst conversions.

**High quality imaging at low dose levels**
Dr. Gross explains that the upgrade allowed the department and its patients to benefit from a full range of high quality clinical procedures at low dose levels offered by the upgrade, "It was significant for us to see the improvements in the quality of the acquired images. And with this ultramodern equipment we can also carry out complex procedures with low dose levels for our patients."

This ability to provide high quality imaging at low dose levels was a significant breakthrough for Dr. Gross and his team. For example, older patients with kidney failure can now benefit from AlluraClarity's low dose levels. While the XperSwing feature can be used on thinner patients to rule out significant disease with a single, smooth two-axis motion and injections for both the left and right coronary vasculature. As Dr. Gross surmises, "Our biplane system now allows us with only a few settings to take many anatomy and pathology scans. The dose levels were decreased significantly when compared to previous systems at the same image quality."

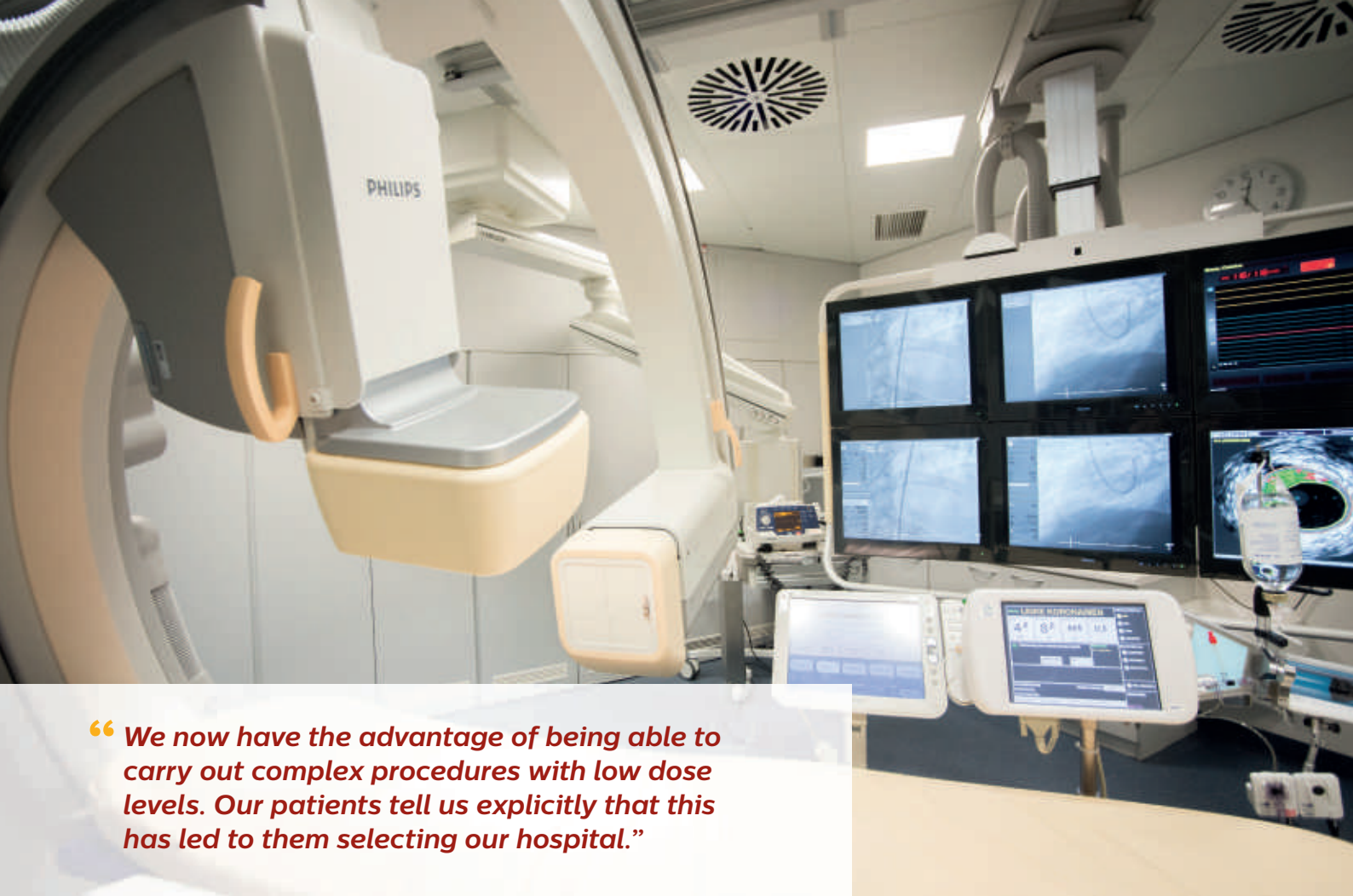
These dose savings were achieved by converting, rather than replacing the two Xper systems. By opting for conversions, Philips was able to re-use several core structural elements of the existing space, including the ceiling, enabling Dr. Gross to achieve Philips state-of-the-art functionality without purchasing a brand new system.

> *"The dose levels were decreased significantly when compared to previous systems at the same image quality."*
>
> **Dr. Michael Gross**, Chief Cardiology Consultant, Charité Berlin

**System overhaul without the disruption**
Alongside the clinical benefits brought by their Catalyst conversion, the department also saw a reduction in the downtime experienced by the two labs during the upgrade process; "We couldn't believe it was possible to upgrade two cath lab suites within 6 weeks without reducing the number of invasive procedures of either." But it was, and these operational benefits meant that during the conversions, it was business as usual for Dr. Gross, his team, and their patients.

**A sustainable solution**
So what were the results of the dual AluraClarity Catalyst conversions at Charité Berlin? Very positive according to Dr. Gross; **"We now have the advantage of being able to carry out very complex procedures with very low radiation exposure. Our patients tell us explicitly that this has led to them selecting our hospital."** And this decrease in radiation exposure hasn't just benefited patients, "Our staff has also taken the reduction extremely positively."

Dr. Gross finishes by explaining the future implications of the AlluraClarity upgrades; **"The upgrade will potentially enable us to carry out more complex procedures, and increase patient throughput due to reduced cycles brought by the high quality imaging."** In summary, "We recommend this upgrade to our colleagues at other hospitals."




*“We now have the advantage of being able to carry out complex procedures with low dose levels. Our patients tell us explicitly that this has led to them selecting our hospital.”*

For more information about how our Catalyst program is breathing new life into interventional X-ray systems across the globe, visit our dedicated website and take your first step on the SmartPath to premium technology: **www.philips.com/catalyst**

© 2015 Koninklijke Philips N.V. All rights reserved.
Specifications are subject to change without notice.
Trademarks are the property of Koninklijke Philips N.V. (Royal Philips) or their respective owners.

www.philips.com/catalyst

452299110951 * May 2015