

Smooth switch to Philips Azurion improves workflow and allows to perform additional procedures

Who/Where

Institute and Policlinic for Diagnostic and Interventional Radiology at the University Hospital Carl Gustav Carus in Dresden, Germany.

Challenge

Increase efficiency and enhance quality in day-to-day clinical practice.

Solution

System switch to the new Angiography platform Philips Azurion with numerous software and hardware innovations: intuitive, tablet-like user interface, large screen with high-definition display, dose management technology, parallel preparation and follow-up in the control room during a procedure.

In February 2017, Philips introduced the angiography platform Azurion. It was the largest and most important launch of Image Guided Therapy and expectations were accordingly high. Three months before the official launch of Azurion, a complete system was installed at the interventional radiology department of the University Hospital Carl Gustav Carus in Dresden. The Director of the Institute Prof. Dr. Hoffmann and his team share their experiences of the first 11 months.

Prof. Dr. Hoffmann and his team agree that the decision for the new angiography platform Azurion has paid off. "I am very excited about the system. After the first three months, I was convinced that it is reliable and very easy to use. During the first 11 months, we were able to treat 200 patients additionally. Well, I am very satisfied," Prof. Dr. Hoffmann concludes. Andrea Spank, leading functional nurse, who has been working at the hospital for many years, explains: "It's really nice to work with the new Azurion system. It is centered in the room and it's the center of our work. Each and every day, we are happy to work with the new system." X-Ray Technician Antje Senftleben, who even returned from her vacation for this interview, is also very satisfied: "It was rewarding and very exciting to be part of the introduction process right from scratch. I am particularly enthusiastic about the tablet-like user interface."

As with every major system change, familiarization, training and routine building are the most important success factors. Regarding all these aspects, the team led by Prof. Dr. Hoffmann is convinced of Azurion. "Coming from a competitor system, we initially had serious doubts and fears regarding the new system," explains X-Ray Technician Antje Senftleben and continues: "But those were eliminated quickly; the introduction and training by Philips worked really smooth." Nurse Andrea adds: "Yes,



"The switch to the new system was astonishingly easy and it was very, very convenient to get used to it."

Prof. Dr. Hoffmann

a very effective initial training. And when necessary, the application specialist from Philips was available for us at any time, after the introductory phase by telephone."

Prof. Dr. Hoffmann sees the system change and familiarization in a positive light: "The switch to the new system was astonishingly easy and it was very, very convenient to get used to it. We are a team of more than 30 radiologists. Six colleagues are always on call-duty 24/7, covering emergencies that require angiography treatment. My colleagues were also able to get familiar with the new platform very quickly. After one week of intensive training by Philips, we were confident that we could operate Azurion in every situation."

Concerning the training of young doctors and new staff, Azurion is also convincing: "The basic functionality can be easily passed on internally—the entire handling and what is needed during night and emergency service. The tablet-like touch screen module is very straightforward and easy to use, right from the start. This particularly facilitates the training of our youngsters, who are trained on the new system in the course of their medical specialist training," explains Prof. Dr. Hoffmann. Intuitive and easy operation of the system was one of the main focuses in the development of Azurion. "I don't need to think anymore about which button to press next and can fully concentrate on the intervention," says Prof. Dr. Hoffmann and Nurse Andrea adds: "For example, setting up Roadmap is faster and less complicated than with the old system—as a result, I can focus more on the patient."

Interview with Prof. Dr. Hoffmann, Nurse Andrea (r.) and X-Ray Technician Antje Senftleben (l.)

The system was a first-of-kind installation even before the actual launch of Azurion. What are your experiences regarding the reliability of the system?

Prof. Dr. Hoffmann: On January 16th, 2017, we started interventions with the new Azurion system. During the first 11 months, we treated around 900 patients, including night and emergency service. That's 200 patients more compared to the old system. Everything is perfect—we are highly satisfied.

What is your favorite feature? And which feature is the biggest support for your work?

Prof. Dr. Hoffmann: The large FlexVision Pro monitor in the exam room with its excellent image quality. We are excited about this every day. I am also a fan of the possibility to return to the same table position and the ease with which the C-arm and table position can be stored and recalled. You can store an unlimited number of projection positions and recall them in every procedure. During complex tumor interventions, this is very helpful.





"The large FlexVision Pro monitor in the exam room with its excellent image quality. We are excited about this every day."

Prof. Dr. Hoffmann

Could you please elaborate on the improved image quality and where do you see further advantages of Azurion compared to other systems?

Prof. Dr. Hoffmann: The image quality of Azurion allows us to display even the smallest vessels in high-definition without the need of magnifications. Overall, the user interface is much easier to use and understand.

Nurse Andrea: We don't want to miss the big monitor anymore. In addition, the new system is extremely quiet, even in the control room. It is not just the technology, but the entire room setting, the whole atmosphere. Patients feel very comfortable.

X-Ray Technician Antje Sentfleben: FlexSpot is one of the biggest advantages for me (FlexSpot = all relevant Information on two widescreen monitors with flexibly adjustable layout, instead of different workstations, each with its own keyboard and mouse). I'm working from one single workstation and can operate several monitors simultaneously.

Just like small apps, I can split the two large monitors into several small screens and control everything at a glance: the patient's monitoring screen, the ECG, the live-examination-image and our planning PC. Now, I can schedule patient appointments at the same time. Before, I always had to switch between different workstations, it was really bothersome. This really saves a lot of time.

How does the capability to display the live ultrasound image from the iU22 on the FlexVision monitor during a procedure influence your way of working?

Prof. Hoffmann: This is a good feature and helps us a lot. We performed a relatively large number of PTCDs, and also about 40 TIPSS procedures this year. During these procedures, we rely on ultrasound guidance. With the old system, we always had to twist our heads to see the small ultrasound monitor. Now, we just display the ultrasound image on the large FlexVision Pro screen and can see everything perfectly.

"It's not just the technology, but the entire room setting, the whole atmosphere. Patients feel very comfortable."



"This saves us quite some time and allows us to perform up to one additional procedure per day."

Prof Dr Hoffmann

And the preparation of procedures—is it really more efficient now?

Prof. Dr. Hoffmann: We no longer have any idle time between procedures and can start directly with a new patient. This saves us quite some time and allows us to perform up to one additional procedure per day.

From your perspective as the X-Ray Technician, how do you experience Instant Parallel Working (e. g. the possibility to prepare data of the next patient in the control room while the previous patient is still being treated inside the operating room)?

X-Ray Technician Antje Senftleben: Image processing, activity and data recording are easier and faster because we can do everything at the same time now. I can mark the series by name and label images on the side. This was not possible before and had to be done afterwards. For a series of 50 images this sometimes could take up a whole examination period. All in all, a big time saver.

What do you think about the support the system is giving you for choosing the right X-ray protocols with ProcedureCards and selection on the TouchScreen Monitor?

X-Ray Technician Antje Senftleben: Together with Philips we adjusted which epx settings we wanted to use. For example, if you are examining a liver the correct setting of 80 KV is given and moving to other body zones is just a matter of a few clicks.

Did misunderstandings and miscommunication decrease since the introduction of the new system?

Prof. Dr. Hoffmann: An important feature is that you can indicate an area on the image from the control room as well as from the exam room. This particularly supports patient comfort during a training session as I can wordlessly draw attention to something without making the patient feel insecure. My colleague can see that I point at something and can act accordingly. For education, the pointer function is very helpful and also facilitates communication with patients, who like to know exactly where we are.

Your department regularly adds new procedures to the portfolio. What are your experiences with procedure extensions regarding operation of the system?

Prof. Dr. Hoffmann: In the last two to three years, we've added quite a few procedures, including an endovascular dialysis fistula system and new radioembolization products—both no problem with Azurion. In addition, we have also started with prostate embolization and benefit from the very good image quality.

In conclusion: how did you experience the switch to this new system?

Prof. Dr. Hoffmann: Initially, I was very sceptical about the system switch because I spent my previous career working interventionally on a system of a different manufacturer. But now I'm really enthusiastic about our new Philips system.



Results are specific to the institution where they were obtained and may not reflect the results achievable at other institutions.

© 2018 Koninklijke Philips N.V. All rights reserved. Specifications are subject to change without notice. Trademarks are the property of Koninklijke Philips N.V. or their respective owners.