

# Wireless detector helps hospital address efficiency goals

Small device delivers big benefits including cost savings, seamless integration into workflow and sharing options for flexible use

**INTERVIEWEES** Priv.-Doz. Dr. Alexander Kluge, Director of the Institute for Diagnostic and Interventional Radiology · Jutta Juilfs, Head Technologist



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Pius Hospital, located in the northeast region of Germany, serves a wide geographical area, providing both general medical services and highly specialized expertise. Over the last 10 years, Pius Hospital has gone through a process of complete refurbishment, including the hospital building as well as its medical technology. The introduction of a DX-D

**Retrofit solution fits into the hospital’s goal of streamlining processes across the facility, especially in the ER.**

The 400-bed hospital’s major focus is on oncology, and it offers centers dedicated to breast, lung, colon and pancreatic carcinomas. Because of these specialty centers, the hospital performs more

imaging and pathology exams than other hospitals of this size, which means productivity is paramount. Advanced imaging technology and PACS play a key role here in creating an efficient workflow for physicians’ reports and study comparisons, and enabling a smooth interchange with clinical departments and referring physicians.

Previously, a cassette-based imaging system was in place, used for mammography and in the emergency department. “We decided to upgrade from imaging cassettes to a wireless detector, which would make workflows more convenient and faster, and also save on cassette costs,” says Dr. Alexander Kluge, Director of the Institute for Diagnostic and Interventional Radiology.

The DX-D Retrofit solution allows healthcare facilities to upgrade to the benefits of Direct Radiography, without having to replace their existing equipment. The solution consists of a flat panel detector, a retrofit box and an NX workstation with Agfa HealthCare’s gold standard MUSICA<sup>2</sup> image processing software, which provides excellent contrast detail and exam-independent, consistent image quality.

## **FAMILIARITY WITH AGFA HEALTHCARE SOLUTIONS, INTERFACES AND IMAGE QUALITY**

Hospital staff were already familiar with imaging solutions and user interfaces from Agfa HealthCare, having worked with them for many years. After analyzing DR detectors in the market with regard to image quality, workflow and cost, Pius Hospital decided in favour of the WLAN-enabled DX-D Retrofit. “This solution has the added benefit of not requiring any significant training for our staff,” explains Dr. Alexander Kluge. “Software and interfaces are from a single source, which is a great plus.”

“Since September 2012, we’ve used the DX-D Retrofit to perform exams on approximately 30 patients daily on weekdays, and approximately 10-15 patients during weekends,” says Head Technologist Jutta Juilfs. These patients had to be examined in a very short amount of time. Therefore, quick turnaround was a requirement. “The detector has significantly reduced staff workload for each patient.”

Because it is wireless, the DX-D Retrofit offers enhanced flexibility. Demographic data is automatically fed to the detector from the PACS, and acquired images are transmitted directly onto the detector, streamlining workflow and speed of exams. Within seconds after the acquisition, technologists can pre-check the image, approve the technical quality, and transmit it wirelessly to the PACS. The detector fits into any standard bucky tray, and can be used in multiple X-ray modalities, meaning it can be shared among several rooms or modalities as needed, maximizing efficiency and keeping costs low.

As part of the re-organization, the CR system from Agfa HealthCare that was already in place was moved from the ER to the radiology department to be used for mammography, and to provide backup to the department. Featuring a team of 25 radiologists and technologists, the department carries out approximately 40,000 exams annually, including X-ray, 64-slice CT, MRI, high-end ultrasound, as well as mammography exams. Radiologists also work with PET/CT in the nuclear medicine department, and provide

services for the ER, ICU, and the intermediate care department.

### TECHNOLOGY INVESTMENT KEY TO HOSPITAL'S POSITIONING IN MARKET

“Investing in an infrastructure of advanced medical technology is a strategy fostered by our CEO, who clearly sees the necessity for this in the context of our positioning in the market. Our staff and our technology stand for diagnostic and therapeutic competence in complex cases,” says Dr. Kluge.

In working with the DX-D Retrofit, radiologists at Pius Hospital typically aim to reduce dose by approximately 20 to 30 percent. “Our staff is very satisfied with this detector, they appreciate the quality of the images as well as the significant workflow improvements,” states Dr. Kluge. Agfa HealthCare has been very responsive in regard to questions and with support, he says. “Patients profit from the investment by reduced queuing and more time spent with them by technologists,” adds Jutta Juilfs.

### INVESTMENTS THAT PROVIDE IMAGE QUALITY AND WORKFLOW IMPROVEMENTS NOW AND INTO THE FUTURE

Both the CR solution and the wireless detector technologies are economically forward-thinking investments, concludes Dr. Kluge. “DR detectors require a certain minimum number of exams to make sense financially, based on resource economies and productivity. In Oldenburg, a city with three hospitals providing in-patient care, Pius Hospital is well-positioned with its general scope, plus its focused expertise on oncology,” he says. “Innovative, and still affordable, medical technology supports us in managing this mix of patients, which includes many complex cases, by providing advanced image quality and enabling swift turnaround times. The DX-D Retrofit is an excellent illustration of a solution which supports our goals.” •



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#### SOLUTION

##### DX-D Retrofit

- » Offers the workflow and image quality benefits of DR
- » Easy and quick to set up
- » Wireless for enhanced flexibility
- » Seamlessly connects to HIS, RIS, and PACS
- » Single detector can be shared across different rooms, different modalities, maximizing efficiency and reducing equipment costs

#### AGFA HEALTHCARE'S CONTRIBUTION

- » Enables cost savings and efficiency improvements
- » Makes workflows more convenient and productive with technology that fits in seamlessly at all steps in the workflow process
- » Develops technology that improves staff and patient satisfaction

#### DID YOU KNOW...

- » Founded in 1871 as a charitable refuge for the poor, Pius Hospital has grown into an acute-care hospital with more than 400 beds, 1,000 employees, and 13 specialty departments.
- » The European Medical School, newly established by Oldenburg University, integrates Pius Hospital as well as the two other hospitals in Oldenburg and local care providers into its research and teaching activities.

