



PHILIPS

DigitalDiagnost

Customer Story

Advanced radiology unit in Mölndal, Sweden enhances clinical confidence and advances the quality of care

Who/where

- Aleris' radiology department is in Mölndal, Sweden.
- The new radiology department in Mölndal plans to take up to 8,000 radiology patients per year and perform 3,000 MR scans per year.

Challenge

Create a radiology unit equipped with state-of-the-art technology, easy and flexible to operate for the staff and where patients feel they are being treated in a special, caring health environment.

Solution

Aleris opted for Philips DigitalDiagnost system to provide clinical excellence to their patients and streamline their workflow. DigitalDiagnost offers a high degree of flexibility focusing on ergonomics, efficiency and image quality. Automatic positioning and system motorization contribute to fast exams.

The new and advanced radiology department at Aleris in Mölndal is equipped with the latest technology.

The new care facilities were commissioned in March 2015.

Unit Manager Ulrika Ask states, “patients here for a radiology examination tell me that our department feels more like a health spa than a hospital.

This point is particularly appreciated by cancer patients and others who need to repeatedly come for treatments.”

And that was also the idea. Aleris wants patients to feel that they are being treated in a special, caring health environment. The newly-built facility has won awards for best indoor climate and the visitor facilities are designed for quiet acoustics and relaxation. The patient areas are light and airy, thanks to large windows.

“Many patients are also often surprised and ask if their examination is over already. They find the process flexible, quick and comfortable,” says Ms Ask. She goes on adding that they plan to handle up to 8,000 radiology patients per year, and 3,000 MR scans. However, it takes time to change established routines, and they expect it will take around a year before the department is running at full capacity.



“What’s important for the radiology technologist is that the system is flexible and reliable, and that it is automated as much as possible, which in turn can lead to patient safety.”

Radiology technologist Magnus Karlsson

Easy to operate radiology

The modern design of Philips DigitalDiagnost radiology system blends in well with the rest of the airy radiology room. With its wall and ceiling mounts as well as wireless portable detectors, DigitalDiagnost is a highly functional unit offering a high degree of flexibility focusing on ergonomics, efficiency and image quality. The ceiling mount is a large, mobile swing arm with full manoeuvrability for the radiology technologists and can be programmed for a wide range of positions thanks to its auto-positioning system which considerably improves the workflow.

Radiology technologist Magnus Karlsson explains that they have three different detectors: one in the examination table, one for standing examinations and a portable unit that can be used anywhere. He shows how light and usable the portable and wireless detector is, and says that it is ideal for examinations of hands and feet, as the patient can be placed almost anywhere. “It is light-weight and there is even a small version of the detector which is also easy to use. However, we chose to stay with this large version of the detector.” Despite the detector being wireless, data transfer is quick and efficient.

“The user-friendliness of the system means a lot to us. Philips is a world leader when it comes to user-

friendliness, and that becomes obvious when we learn how to use their systems. This is highly advanced, but we quickly learned how to use it. Philips pre-programs different default settings according to the guidelines and requirements our radiology personnel gave them, and then DigitalDiagnost automatically sets itself up in different positions”, says Mr. Karlsson, while demonstrating how user-friendly the equipment is. Unit Manager Ulrika Ask adds that the system is quick and easy for new users to learn, making staff rotation possible if required: “We only need to give a quick introduction and a simple checklist, and there is a manual that can be used.”

Continuous operation

Continuous workflow is important, to ensure that examinations are performed quickly and easily for the patient. The rooms are designed to enhance flow, and Philips’ system is also designed to cope with high patient workload. “Exceptional image quality results in benefits that include enhanced workflow efficiency, and may lead to a drop in the number of retakes”, comments Ms. Ask.

“Reliability is essential to us. Because we only have one lab, it needs to be always functional. That’s why it is just great that Philips DigitalDiagnost is so reliable”, comments Ms. Ask. Collaboration between



technologists and doctors is also important. “As a manager, I am really proud of the work we do here. We counsel patients on the way technology is integrated into the care we provide. A carefully considered combination of technology and attention gives the best possible care for the patient. Keeping the technology working smoothly and as advanced as possible without losing human contact is a challenge”.

UNIQUE image processing software designed to deliver more personalized care

Radiology technologist Magnus Karlsson shows us the images from the detector on a screen, and explains that DigitalDiagnost’s image quality is superb, aiding

diagnostic confidence for the radiologists. “Images are excellent, in contrast and depth”, says Mr. Magnus.

UNIQUE is application-driven image processing which adapts to the output medium and detects the appropriate region of interest. The special image processing technique supports every link of the imaging chain, harmonizing contrast and enhancing details. It offers substantial benefits for everyone involved: less scheduling work for the radiographers, diagnostic confidence for the radiologists, and fewer retakes for the patients, which may result in shorter and less stressful examinations, and finally, more personalized care based on time saved through enhanced workflow.



“Exceptional image quality results in benefits that include enhanced workflow efficiency, and may lead to a drop in the number of retakes”.

Unit Manager Ulrika Ask

Flexible examinations using pre-programmed positions

Auto-positioning refers to the automatic movement of the ceiling mount to pre-programmed positions. These are divided according to the various organ programmes and automation relieves the personnel of a lot of manual work. “The mobility of the equipment means above all improved ergonomics for the personnel. All they have to do is press a button instead of having to drag heavy equipment around. The system is also more flexible than manual manoeuvring”, says Ms. Ask.

The equipment is motorized, and can be moved almost anywhere in the room, which is important as many patients in the building have just undergone operations and therefore in a bed or wheelchair. Radiographic examinations of the skeleton and lungs are usually simple to perform, and completed quickly. To get the best image of the skeleton and lungs requires that the images be taken from different angles. A radiology technologist performs the examinations, and the acquired digital images are then interpreted by a radiologist. This only takes a few minutes and the objective is for the referring doctor to have the results of the examination within two working days, when referred electronically even faster. Acute examinations need results immediately.

A great system for clinics and patients

Unit Manager Ulrika Ask sums up the three major benefits of the DigitalDiagnost system that directly affect the facility's outcome: 1. Workflow for the technologists. 2. High quality images. 3. Flexible system which leads to high throughput. She recommends the system to other radiology departments: “This is a very user-friendly system that is easy to learn and to use. The images it produces are also very high quality. That means it is an excellent system to the benefit of the patient, technologist, doctor and facility.”

Magnus Karlsson agrees: “What's important for the radiology technologist is that the system is flexible and reliable, and that it is automated as much as possible, which in turn can lead to patient safety. The radiation dose varies depending on the type of examination and is automatically adjusted. It's an intelligent and flexible system, making it possible to do a lot automatically, which is highly efficient!”



Aleris' radiology department is in Mölndal. The unit is located at Krokslätts Fabriker in purpose-built premises.

The new radiology department in Mölndal plans to take up to 8,000 radiology patients per year and perform 3,000 MR scans per year. The department also performs ultrasound examinations.

Aleris runs 17 radiology units in locations such as Gothenburg, Jönköping, Karlstad and around Stockholm.

The Mölndal department has two radiology nurses. Aleris has about 180 staff members around Sweden, whereof 90 of them are radiology technologists.

