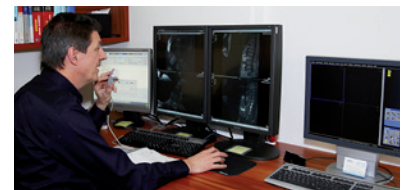# IT as Backbone of a successful Imaging Center

Since May 2015, the RIS of the company medavis supports the imaging center in Franken-Hohenlohe, Germany, in providing excellent service in addition to high-quality medicine. Connected across four sites, the team of nine physicians and 60 employees does not only care for their own patients, but also carries out the external radiological evaluation for three hospitals and the teleradiological CT emergency care for the region.

Highest Quality due to the Correct RIS

The experienced team of radiologist and physicians specialised in the field nuclear medicine of the imaging center Franken-Hohenlohe place great importance to a high-quality radiological and nuclear medical diagnostic on the basis of current device technology. For the physicians quality signifies short waiting times, the best possible therapy and smooth collaboration with external colleagues. This is why the team with 9 members cooperates with referrers and the inpatient care hospitals in the region - the hospitals in Öhringen and Künzelsau and the Vulpius clinic in Bad Rappenau. In order to better organise the cooperation between the four sites in Neckarsulm, Öhringen, Künzelsau and Bad Rappenau, we invested in the IT by installing medavis RIS in 2015. "With our simple and DOS based system we could no longer fulfill the demands of a modern imaging center", Jörg Marz, partner in the imaging center and responsible for the computer systems and the use of medical devices, supports this step. "In addition to my work as physician, it is my job to ensure the technical basis for the joint imaging center. Our old system was made for a imaging center of lone fighters. However, if you treat your own patients at several sites and do the evaluation for colleagues working in the hospital, you need a system that can manage the complexity of our imaging center." Connecting our colleagues at the different sites and generating statistics for our financial accounting and the health insurances are only two concerns where Mr. Marz and his colleagues expect support from the IT. "RIS must support several processes, have masks for different kinds of service entry and billing and give the opportunity to make comments and manage the documents of several sites case-relatedly," Mr. Marz completes the requirements. "When we merged five years ago, there was a legacy system in Öhringen and Neckarsulm was about to buy the system we previously used. The newly bought system was used for both imaging centers", Mr. Marz explains. It was not planned that two additional sites in Künzelsau and Bad Rappenau would be added. "In order to manage the 80 km distance between the imaging centers and to generate advantages from the merger, we needed a new IT system and the matching infrastructure." Since May 2015, the employees of the joint imaging center work at 51 workstations with medavis RIS and especially the physicians realised quickly which great advantages the new system offers.

New System, better Processes

For example the fully INTEGRATED SPEECH RECOGNITION. With the medavis RIS workstation, the physicians document everything on the spot. They dictate the reports and letters directly into the system and replaced therefore the classical analogous evaluation

process with correction loops and printing on paper as well as detours via the typing pool. This saves time when writing almost 6500 reports per month: "Due to the deeply INTEGRATED SPEECH RECOGNITION in medavis RIS, the most resources could be gained. We create reports promptly, so that the patient can take it home. In some cases, the report is already in the referring imaging center before the patient leaves the radiology. This is an important marketing effect. The positive external effect raises the benevolence of referrers and patients", Mr. Marz gladly explains.

But not only the report creation is quicker and easier with medavis RIS. The new system improved the collaboration of the physicians at the four sites. Since the sites are connected technically, all processes run via the main server with a very good speed. A central installation enables scheduling across sites and combined worklists. The physicians can carry out the orders from the hospital or ask a colleague specifically to carry out the evaluation for a patient according to capacity. Getting a second opinion from the colleagues in the imaging center is very easy.

After the evaluation process and the collaboration across sites have been newly organised and optimised with RIS, the CALL CENTER function of RIS will be connected with the new telephone system in the next step. The telephone operators and the employees at the registration desk will then work at separate spaces, which leads both to improved data protection and to a smooth registration process. "If the telephone is ringing constantly, we cannot work calmly at the registration desk. With our RIS, we will soon be able to solve this problem and even offer home-based work to some of our employees", Mr. Marz illustrated the new possibilities.

Successful System switch despite complex Requirements

"The system offers many possibilities to structure processes." In order to use the full potential from the beginning, Mr. Marz recommends to imaging centers with a similar challenge to start early with a project group and defined key users. In the radiology Franken-Hohenlohe, the basis for the system change, master data and the provided services of the imaging center were drafted in a small group. "The workstation is so easy to use that physicians manage very well in the classical imaging center daily business." A greater challenge is billing the services carried out as external service provider or the connection to the Hospital Information System of the clinics. "In order to do this, you need a good concept and the IT responsible on site have to be taken on board early on", Mr. Marz warns in order not to underestimate the interface projects. It was very important that the exchange with the clinics worked, as the radiology Franken-Hohenlohe provides the CT emergency care around the clock, 365 days a year since January 2010. For these examinations, it is necessary to create cases and for critical reports it is important to transfer them to the colleagues in the hospital via HIS/RIS interface. The patient's optimal care can only be ensured in this way. In addition to the HIS connection, the connection of other common modalities via DICOM worklist in the imaging center was routine and quickly accomplished.

Functionality creates Acceptance

As the processes run smoothly now and better than before, the system is fully accepted by all users. "The medavis Sales department presented the program excellently and took the time to get to know our joint imaging center and understand the requirements. They showed us, what is possible with RIS", Mr. Marz mentions a reason why the partners opted for medavis. Concerning the system change, he concludes clearly: "It is impossible to discuss everything with everyone. One person has to be the leader and possess the authority to decide. A healthy pragmatism and more time than one might think - these are the factors for success for a system change this complex. But it was well worth it."

medavis
Medizinische Informations Systeme GmbH
Bannwaldallee 60 ▪ 76185 Karlsruhe ▪ Germany
Tel.: +49 721 92910-360
marketing@medavis.com ▪ www.medavis.com

Radiologie Franken-Hohenlohe
Hohenloher Straße 1 ▪ 74172 Neckarsulm ▪ Germany
Tel.: +49 7132 9616-0
www.radiologie-franken-hohenlohe.de