XXL RIS: More economic Efficiency and better Quality of Care in the radiological Network

The supra-regional imaging center group radiology and nuclear medicine Bonn - Bad Godesberg - RheinSieg with 8 sites works with the RADIOLOGY INFORMATION SYSTEM (RIS) of the company medavis. The tight cooperation of the physicians ensures an optimal information flow to the patient, the referrer and the colleagues at several regional clinics. The patient benefits from the care nearby and treatment of the highest medical standard.

One RIS fits all

When, as in the case of this imaging center group, 20 physicians work at 8 sites with their employees with a total of 72 RIS workstations, it is a complex challenge for the IT infrastructure. About 150,000 examinations per year, more than 500,000 patients and more than 1.3 million examinations - this amount of data is mastered by the RIS database; and all sites can access the database centrally without performance problems. medavis RIS controls the information flow between all participants flexibly and reliably with interfaces to all 34 modalities, PACS and a hospital information system. Professor Dr. Vahlensieck, radiologist, managing director and jointly responsible for the IT infrastructure of the imaging center group remembers: “After a very intensive planning phase that was carried out very professionally by the medavis employees, we were happy to start with our new RIS in July 2013. We had high expectations what should be improved with the new system after having dismissed the previous system after only three years.” The requirements for the new system were clearly defined: fluent working across sites from patient registration to evaluation and billing, quick availability of images, independent of the workstation. “The connection with our PACS did not work very well with our old system,” Prof. Dr. Vahlensieck remembers. “We also had some unsatisfactory attempts with speech recognition. Our decision to buy medavis contributed the facts that medavis offered a deep integration and also works together with the market leader in speech recognition, which was highly recommended by colleagues and the conversations we had with medavis employees.” At the beginning, we had to double the network bandwidth, so that all physicians could work across sites with the central RIS without delays, but today the central star-shaped installation runs stably and reliably. “Installations with the same dimension as ours are a challenge. In the area of network, the consulting by the provider is important, so that you know in advance which bandwidth is necessary. We had to readjust a little bit, but then everything ran smoothly. The users are satisfied,” Professor Vahlensieck describes the start with the new RIS.
One Patient Record, networked Working, quick Documentation

Almost two years later, medavis RIS has become an integral constant and faithful companion in the daily imaging center. Independent of the workstation and the site the physician logs in, his personal user profile and the complete patient records are available everywhere in the imaging center group. The central storage of data of all imaging centers ensures the access to previous reports and images, even if the patient was treated at another site before. This enables the physician to optimally prepare for the patient and, if necessary, exchange opinions with the colleague who treated the patient previously. “The alpha and omega is, that all necessary information on the patient, even from the past is available quickly and completely. Our radiologists can exchange information at all times, organise stand-ins and dispatch work with medavis RIS - the central worklists make this possible,” Professor Vahlensieck explains the IT concept across sites. The user profile for the radiologists provide the user with his individual settings including speech recognition independent of where the user logs in. “We only had bad experiences with speech recognition before. Now it works flawlessly,” Professor Vahlensieck is happy about the true improvement of his daily work. The physicians of the imaging center group dictate their reports and letters directly via the RIS workstation, correct them and the documentation is complete. In the meantime, the software learns constantly. As soon as a radiologist corrects a word wrongly recognised three times, the system recognises this word and remembers it in the future. “Of course we also maintain a central dictionary, but this learning function is great in the workflow,” finds Prof. Vahlensieck. Although the speech recognition accounted for additional costs, it was worth it. Five employees that worked as typists before could take over other responsibilities. “The new workflow led to the change that we can now hand the patient the report immediately and the referring imaging centers and clinics are informed in a short time on the patient’s condition, sometimes only five minutes after evaluation. All in all the process support works very well with RIS. The radiologist does not have to administer, and that’s how it should be,” Prof. Vahlensieck concludes.

Clear and reliable Appointment Scheduling

In addition to the evaluation process, especially appointment scheduling has improved in the imaging center group with the introduction of medavis RIS. Six employees are only occupied with scheduling appointments. They are optimally supported by RIS when registering the necessary details of the patient and the search for matching appointment slots. “With this module, appointments are structured very clearly and you receive a quick overview due to the coloured codings.” Thanks to the well prepared documentation already during appointment scheduling, the patient is optimally prepared for the technician,” Prof. Vahlensieck praises the software. “In total, my colleagues, employees and I are very satisfied with the system and would instantly recommend it. For me it’s important that the contact in support cases functions. This is significantly better than with our previous provider. I simply expect that I - as IT layman - can describe a problem and the employee makes an effort to understand me.”