

## RIS – made in Germany! Quality Assurance through gapless Patient History

In the Diagnostic Imaging Center Karlsruhe, doctors and medical professionals offer a quick and secure diagnosis in a comfortable atmosphere. State-of-the-art medical technology, diverse professional medical knowledge of the colleagues and an optimal service are the framework for this service. In July 2014 another big step forward was made concerning quality and performance. The reason is the purchase of the Radiology Information System (RIS) by medavis. Thanks to the new software, almost the complete document workflow is now paperless. This gives all employees an optimal overview of the patient data and helps the imaging center owners Dr. med. Martin Kolb and Professor Dr. med. Henrik Michaely (Photo on the right side) to orient their imaging center optimally towards patient care.



### The Selection Process

“RIS is our central control unit of the whole imaging center, and therefore you are reluctant to make changes in this area” Professor Michaely looks back. “But our EDP system before medavis was slow and simply did not fulfill the requirements. Therefore we decided at the end of 2013 to search for a new system.” The Diagnostic Imaging Center Karlsruhe offers all modern imaging techniques in radiological and nuclear medical diagnostics and x-ray therapy for certain illnesses. The doctors also work hand in hand with cardiologists for a special heart diagnostic. The team of ten doctors and more than 50 other employees use state-of-the-art modalities for their work, that are kept up to date with continuous investments. “In addition, the internal processes are continuously updated, and to improve in this area, we wanted to fully digitalise our workflow” Professor Michaely elaborates. “An alteration such as a RIS change has to be well thought through. That’s why we inquired by other colleagues in their practices about their RIS solutions, researched in the internet and visited professional trade fairs. In the end we restricted our selection to three suppliers and invited them to present their RIS in our imaging center;” he describes the selection process. “medavis convinced us. On the one hand because the product offers everything and on the other hand, I preferred a medium-sized company based in Germany. Experiences already showed, that we as a customer are heard much faster than at our previous supplier.”

### The Introduction

That our decision for medavis was the right one, was already evident during the introduction: “Everything was well organised. All activities were planned towards the Go Live appointment. Beforehand, medavis trained our key users who then trained their colleagues” reports

professor Michaely. He identified two challenges when changing RIS:

1. A new product offers new possibilities. The employees recognise them not during training, but later on working with RIS. As a system change always goes together with mixed emotions, you have to help insecure employees grieving for the old system and partner them with the colleagues that are happy about the new product.
2. The legacy data migration did not work in the beginning, as the previous database was not compatible with the new one. This was a problem we had to solve with our legacy system provider.

“At the beginning changes are always stressful, but the medavis employees filled the project with life and captivated the users. What particularly astonished me was that the complete modality integration went smoothly. It was unbelievable. There were no problems with any modality or the PACS, everything was recognised and transferred immediately. After the introduction it took a maximum of two weeks, until I never heard another comment that employees were unsatisfied with the program.”

### Live Operation

Today, the imaging center works at 43 RIS workstations with the system. The goal of the system change was to accelerate the processes. This is why a good RIS-PACS connection and the document management of old reports was very important to Professor Michaely. “Today we clearly work faster and more efficiently. The RIS works great, is fast, very stable and is being enhanced with the things we need. I am not missing anything, I am deeply satisfied” Professor Michaely says fully convinced. “I am especially happy about the digital document archive. With medavis RIS I always have access to all previous reports and am much bet-

ter equipped for the individual reporting. I am sure we make fewer errors in this way. The reporting process has changed massively. Before, previous reports were opened with several mouse-clicks, this slowed down the working process. Today we can access multiple legacy documents and, if necessary, use in the new report. The INTEGRATED SPEECH RECOGNITION, that works very reliably after the training, supports us in this task" reports Professor Michaely. Thanks to the MULTIMEDIA integration, all documents are managed electronically in his imaging center. Concerning the outgoing documents, the imaging center works completely paperlessly. Reports, letters and invoices are sent as electronic mail or fax and the eReport has been implemented some weeks ago. "We save a lot of time and storage space with this almost paperless document management. I can only recommend all colleagues to use these advantages of digitalisation." The statistic function is from the point of view of an imaging center director "simply fantastic". As it is very granular, you need a little training time to grasp the possibilities, but then almost everything is possible. The statistics used most often are displayed in Professor Michaely's personal menu. All statistics are sorted in clear categories and can be generated over arbitrary periods.

### The Balance

"As imaging center director, these statistics have many advantages for me" Professor Michaely finds. "But also in the daily business, many things have improved and are faster now. I don't even know where to start. The registration is easier and quicker, reporting has been accelerated and improved in quality, as more information is available. With electronic recording of documents such as clarification letters and referrals, we have a complete electronic patient history and therefore declining archiving costs and a quicker and easier access. Another example is the electronic scheduler: It is completely adapted to our needs and gives guidelines for scheduling for our younger colleagues, which reduces errors. The Speech Recognition is very important for us doctors. The

archive makes everything faster and better. When I say this, it sounds so simple, but of course it is not common to have such a stable system with these profound functions." The document workflow is the process that has changed the most in the Diagnostic Imaging Center Karlsruhe. Starting with the referral letter and the clarification, the external documents, the patients bring to us, up to the examination onsite, the handling of current and previous reports and the images: There is almost no paper involved anymore. "We can control everything digitally and can access everything quickly" the imaging center owner states gladly about his team working with medavis RIS.

"Unfortunately the RIS system is in the middle to upper class concerning price and each feature costs extra, but in the medium term it's worth its price. Everything is delivered in a stable condition, I can work securely and rely on the software" Professor Michaely draws his completely positive conclusion. He can not only report positive things about the product, but the exchange with the support team has always been positive. "Before we had a bigger supplier. There, the contact person changed all the time and I never knew when I would receive an answer. This does not happen with medavis. Within max. 48 hours, but more close to 24 hours I receive an answer and often the employee on the phone can help. More than 60 employees work with medavis RIS at our imaging center and yet it is always performant and has never crashed. This unbelievable stability is very valuable and might be the biggest advantage of medavis RIS - in addition to other things that all work very reliably." Professor Michaely would always recommend medavis RIS as the system is stable, multi-faceted and covers everything that is necessary well. "The digitalisation will further increase, and the processes will need less paper. In my opinion the motto of medical care should be: As much as possible and as fast as possible. If we had e.g. full access to all patient data during registration, I predict that we could cut 10 percent of the examinations without losses in the medical care."

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