

Radiologists' Work And Processes Have Become More Efficient



The hospital in Uster, Switzerland, had to replace its radiology information system and has opted for [Medavis](#) RIS.

Without a Radiology Information System (RIS), it is difficult to work effectively in radiology today. All the more annoying, if the highly individualized product is no longer maintained by the provider and is not developed further - and the provider does not offer a successor solution. Then a new RIS is needed. This happened to the hospital in Uster, about 20 kilometers east of Zurich. After an intensive tendering process, the radiologists there opted for medavis RIS.

In addition to the 10,300 inpatients and 50,700 outpatients in the hospital, the radiology department of Uster Hospital also looks after the medical diagnostic centers in Wallisellen and Uster City Center. In the hospital, the seven radiologists have access to two digital x-rays, one fluoroscopy, one mammography, two ultrasounds as well as a 128-line computer tomograph and a 3-tesla magnetic resonance tomograph. Altogether about 47,000 radiological examinations are carried out each year.

Price to Performance Ratio has Convinced

The new RIS was purchased after a regular tendering process. In about 500 questions, parameters were asked about the provider, project services, technical requirements, functional IT requirements and system integration. "The decisive factor for us was in the end the price to performance ratio. We wanted to get the best package at reasonable cost," says Dr. Andreas Steinauer. And in the end, medavis fulfilled this. "We also knew, that medavis is known for a very good Speech Recognition. This is very important for us radiologists," the chief radiologist adds.

The expectations of the new RIS were clearly defined: It should make both the work of the doctors and the processes more efficient. This has come true for the doctors, as Dr. Steinauer says: "We could speed up the processing time for a report immensely. The digital recording of the dictation and the immediate, fully automated dispatch of the released report to internal and external referring physicians, who are stored with their e-mail address in the RIS, functions smoothly." However, the radiology technicians contribute to the efficiency gains of the radiologists with a little more effort of their own, as the leading radiology technician Beatrice Würzer says: "For scheduling a patient and starting the workflow, we can now make more entries than before; this is more time-consuming, but it also makes the information more complete and meaningful."

Online Training and Personal Support

The hospital Uster has been working with medavis RIS since November 2019. The entire system was introduced in an extremely short time - within ten days. "This only worked because the hospital was able to provide its own employees who had extensive know-how, as they had been working closely with medavis," emphasizes Dr. Steinauer. "In addition, the preparation by our business partner was convincing."

There was no classic user training for the software. The hospital Uster and medavis have completely relied on an e-learning tool and thus on the self-responsibility of doctors and technicians. The advantage: Nobody was tied to specific dates for classroom training and they were able to learn exactly when their time allowed - be it during work at the workplace or outside, wherever they wanted. "Those who used it intensively, were optimally prepared. Via logging we were able to see which user was at what level of training," Dr. Steinauer looks back with satisfaction. "The e-learning tool is so well structured and easy to understand that the rapid introduction took place smoothly. Without it, it would have been a lot more difficult," summarizes the head radiologist.

In order to ensure a smooth start to operations, medavis has provided the hospital staff with IT experts from its own company. "They sat next to us at the computer and gave us one on one support. That helped us a lot," praises Beatrice Würzer. In general, she highlighted the professional,

well prepared and helpful team, which had an answer for every question.

Interface Management as a Strength

The introduction of RIS posed many challenges for all involved. Not only the double burden of the introduction during ongoing hospital operations should be mentioned here, but also the parallel hospital-wide implementation of the new hospital information system (HIS) and thus the order management system KISIM. Thus, the introduction plan and success depended on the progress and scheduled implementation of the HIS. In addition, sickness-related downtime at the IT service provider caused the project to falter here and there, but in the end it was well and competently cushioned. "This enabled us to bring the project to a successful conclusion together," says Dr. Steinauer with satisfaction. "Given the dimensions of such a RIS change, including data migration, the entire process was very controlled and focused".

In addition to an interface to Cistec's order management system KISIM, there is also an active connection to Synedra's image data management system, the case management system ERP Navision and all modalities in the hospital. The IT systems are integrated using an IHE profile via HL7 standard and the modalities are connected via DICOM. "The integration of the RIS into our existing IT infrastructure has worked very well, medavis has shown its strength and done a good job", emphasizes Dr. Steinauer.

Sophisticated Solution with Potential

According to the head radiologist, the RIS provider can rely on a mature solution, which has been and is constantly being further developed. "There are very few process steps with which I am not completely satisfied, and a somewhat more intuitive user interface would be helpful. For this purpose, however, there is an easily accessible digital online service center where development proposals can also be placed". In return, Dr. Steinauer emphasizes the high functional depth of medavis RIS.

All in all, he sees RIS at Uster Hospital on a very good path. "In retrospect, we made minor adjustments to the speech recognition and few changes to the document templates. Today we maintain them ourselves, which is also possible without any problems. After almost three quarters of a year, we are very satisfied with our new RIS," says Dr. Andreas Steinauer.

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