

## Optimised Diagnostics with medavis RIS



Progressive thinking, security and workflow issues prompted the Darmstadt Clinic to invest in a RADIOLOGY INFORMATION SYSTEM (RIS) from medavis back in 1999, long before working with a RIS became the norm.

The Darmstadt Clinic is a maximum-care hospital of high importance in South Hessen, Germany. The academic teaching hospital for Frankfurt/Main and Heidelberg-Mannheim medical faculties employs 2,500 staff, has 1,160 beds and cares for over 37,000 patients a year. It offers all the usual methods of interventional radiological treatment and carries out around 90,000 radiological examinations per year. The clinic has two main sites in Darmstadt, in the city centre and in the borough of Eberstadt. Most of the radiological work is done in the city centre, from where other facilities are also looked after using teleradiology.

### Darmstadt Clinic – a Pioneer

The decision to implement a RIS back in 1999 marked the Darmstadt Clinic out as a pioneer. It was a decision driven by “a combination of progressive thinking, security and workflow issues – essentially the same reasons for investing in a RIS today,” says Alexander Steinmetz of the radiology department of the Darmstadt Clinic. At the time, the clinic already possessed a Hospital Information System (HIS), which was programmed by the IT department. It required an interface to transfer the DICOM worklists to the large medical devices, guaranteeing greater security for patients.

“To begin with this interface was also programmed internally, but the result wasn’t perfect, because the solution was ultimately flawed and not easy to operate. Even then we were carrying out a relatively large number of examinations each day, so we wanted a system capable of uniquely assigning reports to patients and preventing images from being mixed up. As inherent progressive thinkers, we believed that the way forward was to implement a RIS for managing examinations and creating reports,” says Steinmetz.

### medavis – a Reliable Partner, not least in Terms of Interfaces

“The biggest challenge, then as now, was the issue of interfaces,” Steinmetz freely admits. “Given that there are always new requirements that have to be taken into account, for instance buying equipment or a new HIS, it’s a constant battle to make sure that all of the interfaces are working properly.” Although the Darmstadt radiology department handles most of the day-to-day challenges, such as importing new examinations, either on its own or in collaboration with the internal IT department, they appreciate that they have a reliable partner in medavis: “If we want to improve something, we often work together with medavis. We

are in close contact with the medavis interface developers," affirms Steinmetz.

The Darmstadt Clinic knows exactly where it stands with medavis, which also comes from the vendor's continuity of staff: "We are in contact with medavis on many levels, and I call with questions or comments about twice a month. I appreciate the familiarity which results from having the same person answer my calls pretty much every time. They know who I am and can put me through or call me back. We've built up a relationship of trust over the years."

### Innovations are embraced

"Being a radiologist you are always an innovator in one form or another, that is to say you are always purchasing new equipment, and that brings with it new technical challenges. For instance, when we invested in our PET/CT in 2014, we encountered new interface problems." This is why it's so important for a RIS vendor to continually develop its product, in order to keep up with medical and technical innovations.

Steinmetz: "Progress made in medicine means, for example, that kidney function is no longer measured based on creatinine levels, but is determined by the GFR (Glomerular Filtration Rate). This is now built into the software and features in the latest version of the medavis RIS; so the medavis RIS is continually developing, in collaboration with its users, in order to keep in step with changes," says Steinmetz. Optimising the workflow by introducing speech recognition has also had a "positive effect on our report turnaround times

and on the level of satisfaction among referring physicians," he continues.

### RIS Functions make Life easier

The ability to create personal worklists is a feature that assistant physicians like to use to document the necessary examinations. It increases transparency across the examinations that are carried out. Steinmetz: "For example, whatever the physicians on night duty do is documented, or anything of an interventional nature can be traced back during the day shift. This type of documentation is also important in the context of further training, because to become a specialist, assistant physicians need to prove that they have performed a sufficient number of different radiological examinations. And further training plays an important role for the Darmstadt Clinic."

Steinmetz goes on to mention other benefits of the medavis RIS: "I think the Diagnostic Patient Centre is great, because you can see a patient's history at a glance in the report. Another advantage is that the worklist lets you show the HIS and RIS data, which means you can always see the name and phone number of the person making the request. I also like the text block function. Blocks of text can be logically linked to the examination to be specified, that was something new to me. This all accelerates the workflow enormously. We also use the mail function of the medavis RIS a lot and the statistics function is extremely helpful. I wouldn't do without either of them." And another plus, says Steinmetz, is that: "The RIS is extremely robust. We really couldn't be happier."

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