User Report

Efficient Data Flow in Mammography Screening
Total solution by VISUS proves itself in practice with screening solutions

Susanne Wurdinger, MD, Radiological Practice Dr. Susanne Wurdinger
Toni W. Vomweg, MD, Radiological Institute Dr. von Essen

The Associations of National Health doctors in Bavaria on one and in North-Rhine and Westphalia-Lippe on the other side have each programmed an own Mammography Information System (MIS) for mammography screening to organize the invitation issue and to administer clients data. So there exist two systems called „MammaSoft” and „MaSc” which providers of software solutions need to integrate into the image logistic of screening units. The Bochum IT provider VISUS has now completed two successful projects – one with „MammaSoft” and the other with „MaSc”.

Screening unit Jena establishes a comprehensive network

In Thuringia with its more than 190,000 women entitled to benefit arises Germany’s largest screening unit overseen by Susanne Wurdinger, MD, who is responsible for this program. The screening program started in May 2007 and will be realized area-wide until February 2008. Currently there are about 400 examinations per week which is supposed to stabilize at about 60,000 examinations per year with an average participation quota.

„To be able to do the work and especially to fulfill the organizational requirements in mammography screening you need – in completion to the screening software „MammaSoft” - the support of an adequate EDP for image logistic”, Wurdinger points out. She decided in favour of the PACS JiveX of the IT provider VISUS in Bochum and the independent finding software JiveX Diagnostic Work-
station „Mammo“. „Furthermore the company realizes the interface to „MammaSoft“ and therewith a seamlessly integration of the solutions“, she says.

**A major logistic challenge**

Presently the screening unit Jena is merely working with a mobile unit whose images are found at the practice site in Jena. But from November on the installation of a comprehensive network of screening and finding units commences. These units are evenly spread over the whole screening area. In February 2008 this process will be finished. Then there are integrated four stationary and two mobile screening units as well as three clarification units. „The fact that about 70% of clients have their mammography screening at mobile sites and only about 30% at stationary sites underlines this huge logistic time and effort“, says Wurdinger.

So far she is only able to report on positive experiences with JiveX. „It had been a system introduction with hardly any problems. If something went wrong VISUS was there very quickly and solved the problems. An additional challenge is imminent with the opening of more units and the implementation of the findings network“.

**Screening Unit Central Rhine relies on total solution**

Since April 1st, 2007 the Mammography Screening Unit Central Rhine operates. It includes the region of Koblenz and the northern Rhineland-Palatinate with 138,000 entitled women. In Koblenz there are two mammography centers, the Radiological Institute Dr. von Essen and the Radiological Institute Hohenzollernstraße, at which clients are examined and the images found. The doctors who are responsible for this project, Jochen Schenk, MD, and Toni W. Vomweg, MD, the latter from the Radiological Institute Dr. von Essen, are planning with more than 5,000 mammograms per site.

„To separate the screening from both practices we decided beforehand to introduce a PACS especially for mammography screening“,
says Vomweg. For more than six months now they are working with JiveX and the JiveX Diagnostic Workstation „Mammo“. The installation is completed by the MaSc-DICOM-Router for communication with the screening software.

**MaSc-DICOM-Router in use**

„Besides its functionality and easy operability JiveX is especially characterized by its convincing costperformance ratio“, explains Vomweg. A decisive factor for system selection was the license concept by VISUS which allows you to embed into the network as many PACS workstations as you like without any additional costs. „This model ensures cost control and planning security in system expansion“, he reports.

But according to Vomweg the crucial factor for selecting the VISUS solution was the MaSc-DICOM-Router. „For the integration of the software „MaSc“ as well as the digital mammogram such a MaSc-DICOM-Router is installed at each site of the screening unit. The router communicates locally with the „MaSc“ software and also via network connection with the system’s central server components.”

**Smooth workflow in screening process**

This complete package provides a smoothly running process in the screening unit. „Experiences of all users are good without exception. After a short introduction with little challenges which were solved very quickly and unbureaucratically by VISUS, the entire system – PACS, workstation and router – are working steady and accurate today“, Vomweg summarizes pleased. However, from his point of view the startup difficulties are simply understandable – after all, the new version „MaSc 2.0“ for digital screening was launched for the first time in the federal state of Rhineland – Palatinate which also was a challenge for VISUS in cooperation with the MaSc-DICOM-Router.

„The easy, quick and effective handling of the images perceptibly accelerates the whole process of finding. Thus we are able to
significantly increase our performance. Also the radiographers will be relieved in their work as they do not have to enter screening parameter and therefore are able to take more care of the clients. This is very important as undergoing a mammogram examination is an alarming and frightening situation for these women”, Vomweg summarizes.

**Toni W. Vomweg, MD**  
Radiologist

Radiologisches Institut  
Dr. von Essen  
Emil-Schüller-Strasse 33  
56068 Koblenz  
Germany  
Telephone: +49 (0)261 - 130 00 - 0  
info@dr-von-essen.de  
www.dr-von-essen.de

**Susanne Wurdinger, MD**  
Doctor for Diagnostic Radiology

Radiologische Praxis  
Dr. Susanne Wurdinger  
Carl-Zeiß-Platz 8  
07743 Jena  
Germany  
Telephone: +49 (0)3641 - 62 85 5 - 0  
susanne.wurdinger@mammo-jena.de  
www.mammo-jena.de