

“You become humble in this project.”

With 167,000 eligible women per round, Hanover is the largest screening unit in Germany. As well as the city of Hanover, the catchment area also includes the surrounding rural areas, so that X-rays are not only carried out in the centrally situated Schwarzer Bär community radiology clinic, but also in a mobile screening unit. The clinic was converted to digital technology at the start of screenings with imaging-plate systems and Carestream Health PACS and mammography workstations used.

Warm wood floors, colourful walls, Pop Art portraits in the hall and waiting room - whoever enters the separate screening area of the Schwarzer Bär radiology clinic feels reminded more of a flat than a medical practice. “We really wanted to furnish the screening unit for women of this age bracket, to make them feel happy and accepted here,” says the doctor in charge, Regine Rathmann, explaining the approach which is consistently continued in the examination and counselling rooms. “Women in the 50-69 age bracket sometimes react sensitively because they naturally come here with a certain sense of fear. So, by supervising them regularly, we train our employees to be friendly as soon as a woman makes an appointment and take her seriously as a woman.”



As the doctor in charge of the screening, Regine Rathmann keeps the big picture in mind, as well as details of the working environment. She believes in this project and knows that it can only operate successfully if all the wheels are running smoothly and synchronising perfectly. Ultimately, the technical facilities, the team, cooperation with external colleagues and umbrella institutions must all function in harmony and be geared towards the welfare of the women being examined. “What I particularly like very much about this project, and what we so often miss in medicine, is this transparency. I know exactly who is working well, who is a good diagnostician or a good MTRA. I also know who is not working as well and can spot mistakes made by anyone, including myself, of course. You become humble in this project because you are confronted by your own mistakes again and again and can learn from them.”

On the one hand this transparency in quality assurance exists on a national level in the interplay between referral centres and screening units via a strict system of monitoring, recertification and long-term data evaluation. Yet it also runs like a main theme through the system at the level of in-house practice, from imaging to the multidisciplinary conference. “There is a unique identification code on each image, so that I know which MTRA has taken which good or bad image. Mammography adjustment is of course the be-all and end-all and our employees are trained to follow these specifications exactly,” says Regine Rathmann, stressing the significance of optimum imaging for the subsequent interpretation of the findings. “Every three months the images are

assembled and we meet for a discussion. There, no one can hide behind the others and must either justify a bad image or be praised for good work. I consider positive feedback to be very important."

At the start of the screening in March 2006 it was not possible to operate at full capacity because there was a serious shortage of trained radiology assistants. But the team now includes many women who are returning to work after a break to have children and working part-time. "Our screening team is nearly the same age as our clients and the new recruits are not usually familiar with digital technology. Therefore we mix them with young people who know it well," says Regine Rathmann, describing this characteristic feature of staff make up. There are exceptional working conditions for staff who are working on their own in what is known as the 'Mammobile' ("Mammobil" in German) which caters for eligible women in the rural areas. In morning three members of staff travel together to wherever this mobile screening unit is located, which is usually in the centre of historic small towns. In the evenings they bring the data back to the clinic in the city on a hard disc, so that it can be fed into the PACS and is available for interpretation the following day. The equipment in the Mammobile is the same as in the clinic in Hanover. This applies both to the technology and the physical environment. Fashionable, striped walls welcome the women into a friendly atmosphere not associated with a visit to the doctor. Although the Mammobile has only sixteen locations, in order to keep costs of logistics and infrastructure down, it remains in each one for a comparatively long time, up to two and a half months. The advantage for eligible women is that the Mammobile is still in the same location if they did not take up the first invitation.

Regine Rathmann has assembled her mammography team from twelve radiologists and gynaecologists who are external to the clinic. "They all have a key to the practice and can come in 24 hours a day. There are no technological interruptions either since everyone works at the same workstations and gets the same image quality," says the doctor in charge, describing the approach which, to a large extent allows the team members flexible timescales. In principle this flexibility also applies to the number of findings per doctor. "Some may evaluate up to 10,000 examinations, others just the prescribed 5,000. We

keep this informal as agreed." This arrangement has enabled the number of women invited to assessment with a carcinoma detection rate of 0.8% to remain constant since the start of the screening. "We make very sure that not too many women are invited back and made anxious as a result. This means that even during the first year we did not work towards keeping to the target rate of 7%, and only ever ask back those whom we think we have to. For this reason our rate is 4.8% of the women taking part."

Regine Rathmann discovered the main focus of her work long before the start of mammography screening. When she started her work in Hanover in 2002, she developed the first diagnostic interdisciplinary conference with one of the local breast centres, which brought about a lively exchange even then. "This exchange became even better with the multi-disciplinary case conference in screening. On the one hand, all five breast centres are now involved. On the other, postoperatively, we can now see how large the carcinoma actually was as well and what has become of it," says Regine Rathmann, describing the purpose of each conference of 15 participants which takes place every week under her management.

"We have lively discussions - it's fun. And the nice thing is that the doctors from competing breast centres respect one another. They also have to justify themselves in front of one another, which brings many an OP in front of the tumour board once again. That is a very fruitful process."

