

National performance assessment of breast cancer screening with mammography

2022



A large proportion of women are invited to participate in screening for breast cancer with mammography and participation rates are high. Nevertheless, there are major regional differences. This is shown in the findings of the National Board of Health and Welfare's first performance assessment of breast cancer screening with mammography.

What is breast cancer screening with mammography?

Breast cancer screening by means of mammography was introduced in Sweden in the 1980s and 1990s. Mammography is an X-ray examination of the breasts which is performed every 18–24 months with the aim of early detection and treatment of breast cancer. Breast cancer is the most common form of cancer in women and accounts for about 30 percent of all cancers. Mortality rates have declined since the 1970s, particularly since the mid-1990s.

The target group for breast cancer screening with mammography is the entire female population in Sweden between the ages of 40 and 74. Each year, almost one million women are invited for screening, and about 60 percent of all breast cancer cases are detected in this way. However, the proportion varies between regions, which indicates inequalities in the healthcareservices.

Increase participation in breast cancer screening

The performance assessment evaluation shows that several regions need to increase participation in the screening programme. In the country as a whole, 78 percent of women who were invited for screening participated. However, findings also show that women with low levels of education participate to a lesser extent than others. Actions need to be taken to identify additional groups with lower participation rates and target special initiatives towards them. The regions thus need to continue their efforts to further facilitate and encourage all women in the target population to participate in breast cancer screening.

High participation in breast cancer screening is a prerequisite for reducing breast cancer mortality. On average, women whose breast cancer is detected within the screening programme have smaller tumours and are more likely to undergo breast-conserving surgery compared to

women whose breast cancer is detected when it is symptomatic (outside the screening programme). It is therefore important that regions work towards high participation in the screening programme.

Improve the quality of the entire screening process

There are regional differences in the proportion of people invited back for a follow-up examination after screening. Mammography units need to target quality improvement of the entire screening process, from imaging to screening review, in order to reduce unnecessary return visits for investigation, which can cause anxiety and stress for the women concerned.

The time interval between each screening session

Most women receive a notification of no deviations after the mammography examination. However, some of them will still be diagnosed with cancer before the next screening session, referred to as interval cancer. The results of the performance assessment show that a longer screening interval results in more interval cancer cases.

For this reason, it is important that the regions' screening examination intervals do not exceed the recommendations. It is also important that the analysis of interval cancer cases is included in the regions' quality assurance work as well as the competence development efforts at the mammography units.

Staff is needed to ensure effective screening

The regions need to ensure that they have qualified staff in place to guarantee high quality and effective breast cancer screening. Staff shortages are still noticeable, even though the problem has received attention since the 1990s. The vast majority of mammography units have shortages of breast radiologists and radiology nurses. Almost half of all breast surgery units have vacancies for breast surgeons. There are also shortages of pathologists and biomedical analysts in several regions.

Invest in continuing professional development of staff training

The state of scientific knowledge about mammography and breast cancer is constantly evolving. In order for the regions to offer high-quality screening services based on the latest knowledge, they need to provide regular opportunities for professional development for staff working with breast cancer screening.

More areas for improvement for regions

- Mammography units need to ensure that all women receive equal and quality-assured information about screening, using the quality-assured national screening invitations. All regions also need to offer the possibility/option to reschedule their appointments via 1177 or online.
- Breast cancer screening can cause anxiety and stress, and some women need more information and support. Mammography units therefore need to offer additional services, such as telephone counselling to those women who feel uneasy. This may result in more women participating in the screening programme.
- Participation may increase if women who do not attend breast cancer screening receive a new invitation with a pre-scheduled appointment. More mammography units need to introduce procedures and systems for this.

National quality register

A national quality register is needed to monitor the development and quality of the screening programme. Although breast cancer screening has been carried out for many years in Sweden, no specific quality register exists with data that can be used for national monitoring.

➔ More information about the performance assessment is available (in Swedish) on the National Board of Health and Welfare's website, www.socialstyrelsen.se.