



Title **Mammography Screening**
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Aim

To undertake a critical and systematic review of the clinical effectiveness of mammography screening for groups aged 40 to 49 years and 50 to 59 years. The effect of mammography screening is controversial. This controversy is mainly related to the balance between supposed reduced mortality and possible negative consequences of screening.

Methods

Studies were identified by searching MEDLINE, EMBASE, Cinahl, PsychInfo, Cochrane Library, DARE, INAHTA, and The National Guideline Clearinghouse. The draft report was peer reviewed by Norwegian and Nordic experts.

Results and conclusions

This technology assessment on mammography screening is based on systematic reviews and meta-analyses of 7 (8) randomized controlled trials (RCT) published from 1995 and later, including results of population-based screening programs.

Women in the relevant age groups must be informed about all aspects of mammography screening as a health offer. This information must address the benefits and also the negative consequences of screening. The knowledge presented in this report includes the following elements:

- Mammography screening reduces breast cancer mortality in the group aged 50 to 69 years. The scientific documentation has some weaknesses, and the estimated relative risk reduction in mortality is estimated to range between 6% and 27%. Other documentation reports a risk reduction of 20% to 25%.
- The effect in the group aged 40 to 49 years is less, and uncertain, with even weaker evidence.
- Mammography screening does not protect against developing breast cancer between screening rounds. Interval cancer is a reality, and more than one fifth of the women who are diagnosed with breast cancer receive their cancer diagnosis between screening rounds. Women must be made aware of this phenomenon.
- There is a cumulative risk of false positive mammograms for each screening round and, thereby, a need for new mammograms and other examinations (including biopsies or surgery).
- Mammography screening increases the incidence of breast cancer findings by also detecting early stages (Ductal Carcinoma in Situ (DCIS)). It is uncertain if all DCISs require treatment. The problem is that we do not know which DCISs need treatment and which ones do not.