

**Medical  
Physics  
Department**



MARIA SKŁODOWSKA-CURIE  
MEMORIAL CANCER CENTER

# Comparison of results of quality control of physical parameters and of results of clinical evaluation of mammography images for mammography screening facilities in Poland

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## **Introduction**

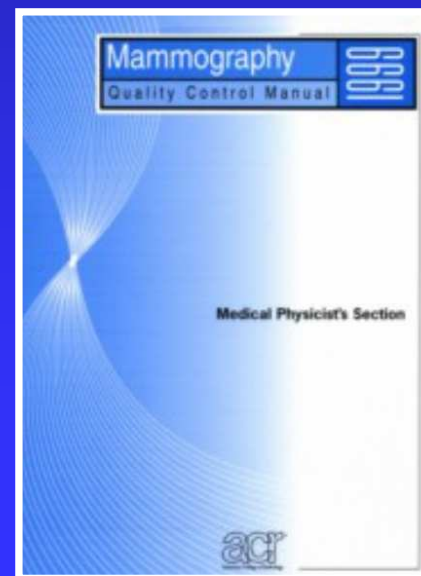
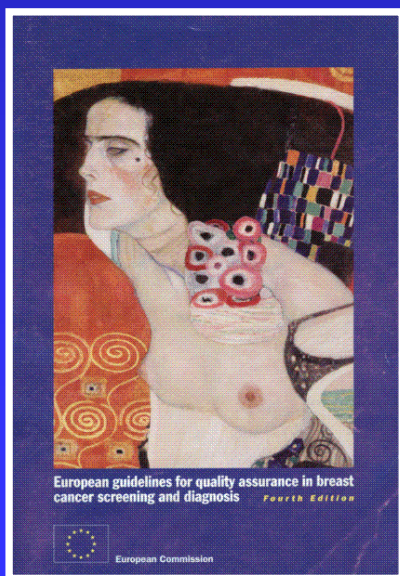
The purpose of this study was to compare the results of quality control of physical parameters and of results of clinical audits of the images  
**in 248 mammography screening facilities  
in 2007 in Poland.**

## **Material**

The material for this study comprised control protocols from 248 mammography screening facilities, prepared by physicists employed at sixteen Regional Coordinating Centres, and the results of clinical audits of mammographic images at these facilities.

# Methods

The physicists carried out supervising tests checking physical and technical parameters by the methods described in the “European guidelines for quality assurance in breast cancer screening and diagnosis” and “Mammography Quality Control Manual”.

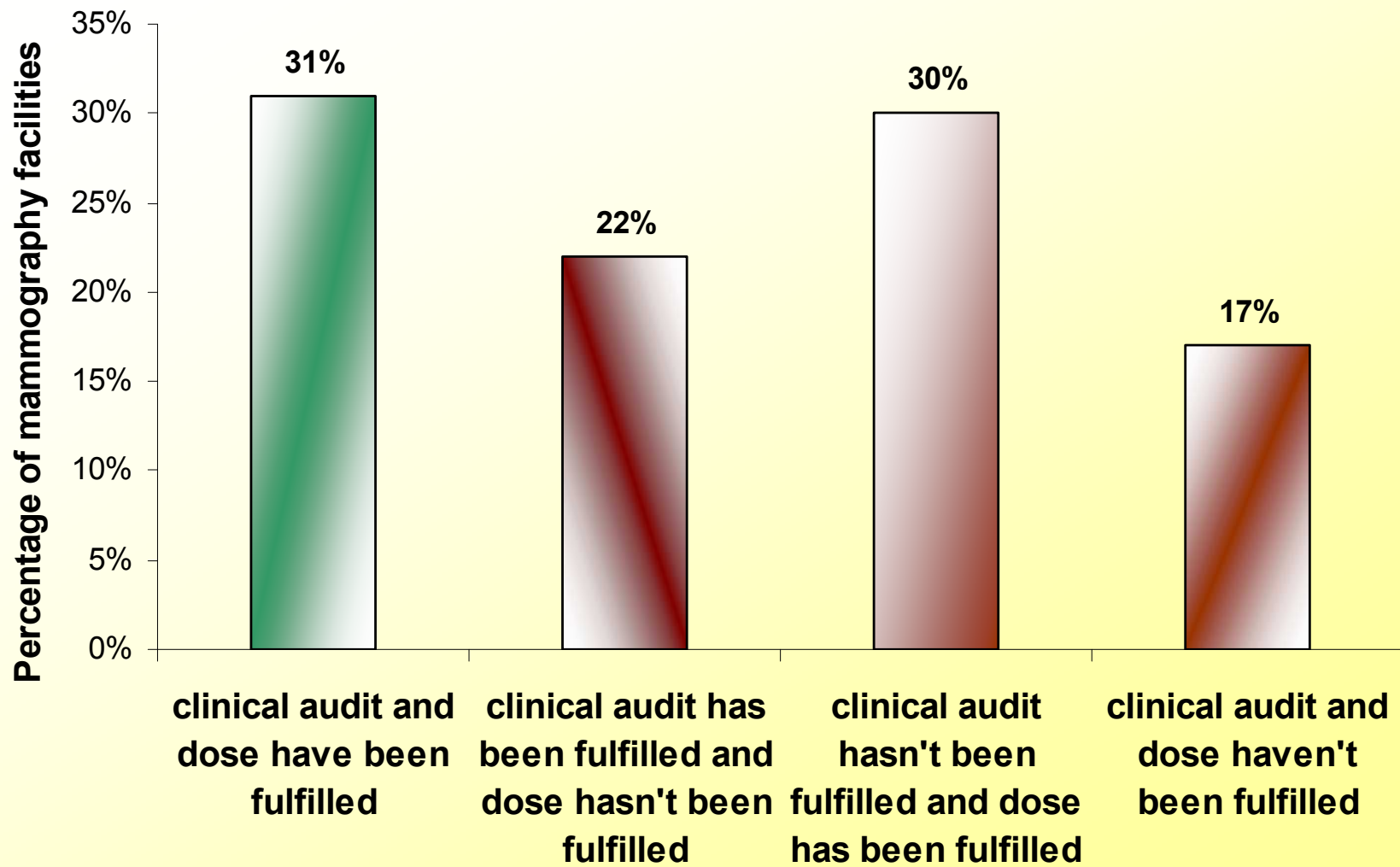


The mammography facilities have delivered two sets of representative images of breasts (without cancer) with a high content of fat ("fatty") and with a high content of glandular tissue ("dense").

All mammograms were evaluated independently by three radiologist experts selected from a list approved by the national consultant in radiology and diagnostic imaging.

# Results

Percentage of mammography facilities where requirements of <b>supervising tests and clinical audit have been fulfilled</b>	38%
Percentage of mammography facilities where requirements of <b>clinical audit has been fulfilled</b> and supervising tests haven't been fulfilled	15%
Percentage of mammography facilities where requirements of <b>supervising tests have been fulfilled</b> and clinical audit hasn't been fulfilled	28%
Percentage of mammography facilities where requirements of supervising tests and clinical audit haven't been fulfilled	19%



# Conclusions

Results of quality control of physical parameters and the results of clinical evaluation of mammographic images **are complementary.**

The fact that there are mammography facilities, where the **absorbed dose to the routine exposure and image quality is inadequate, arouses anxiety.** This means, that women undergoing examinations in these mammography facilities received too high doses.

Moreover, the images which were received as a result of examination, were of poor quality, what may **contribute to misdiagnosis.**