Contribution of the epidemiological cancer registry in Lower Saxony for the evaluation of the mammography screening project in Weser-Ems

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For the quality assurance in the mammography screening project in Weser-Ems (MSWE) the interval cancer rate, the breast cancer incidence rate and the cancer mortality rate are very important parameters and can only be identified by the epidemiological cancer registry in the Lower Saxony (EKN). In the initial phase of MSWE the comparison between screening data and the data of the EKN was planned. For data security reasons the control number system of the EKN has to be used.

The target population of the MSWE is 20,000 women at the age of 50 and 69 years with a screening interval of two years. For every woman attending for screening a hash code (MD5) will be generated and encrypted (IDEA) according to the control number system of the EKN [1]. Every encrypted hash code will be compared with the cancer cases of the cancer registry database.

If an interval cancer is found, we need an authorisation by the patient to contact the diagnosing physician in order to review the case. Furthermore the MSWE get the breast cancer incidence rate and the cancer mortality rate of different person groups.

By the use of the control number system and the comparison by pseudonyms the evaluation of quality assurance parameters of the MSWE can be realised in compliance with the data security law. This concept can easily be used by other screening programs.

References: