



# Role of cancer registries in the assessment of the screening programmes

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# Overview

- Role of cancer registries
- Population based cancer screening programs
- Role of the cancer registries in screening

# Role of cancer registries

# Role of the cancer registries

- Cancer control:
  - Monitor burden of the disease (trends in incidence, mortality, prevalence, survival)
  - Support for policy makers
  - Support cancer prevention and mass screening
- Research
  - Support research for quality of care, translational research of prognosis and survivorship
- Awareness and information to the public

# Support for policy making


- Cancer surveillance via the population-based registry plays a crucial role in formulating cancer control plans, as well as in monitoring them.
- E.g. Provide reliable estimates on the burden of women with breast cancer who, once tested with multigene testing, could potentially have their treatment changed to hormone therapy only.

Original Research Article

## **Female breast cancers (T1-2, N0, M0, HR+, HER2-) with an intermediate genetic-based recurrence risk: a real-world estimate in Italy**

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# Support research

- Use of Cancer Registry data (ENCR survey 2010-2012) (Siesling at. All, 2015): 161 Cancer Registries
  - Clinical audits of diagnosis and staging:  
15% regularly and 42% ad-hoc
  - Adherence to guidelines on treatment:  
8% routinely and 50% ad-hoc
  - Data availability  
61% of CR collect information on stage and primary treatment

# Support research (quality of care)

- The role of the European cancer registries in the assessment of breast cancer care:
  - An increase in the quality of care for patients treated according to guidelines.
  - The implementation of a multidisciplinary breast cancer pathway leads to better compliance with the guidelines.
  - Cooperation with hospital based cancer registries and linkage with administrative databases increase the possibility to perform research studies at population level.

# Population based cancer screening programs



# Population based organised cancer screening Characteristics

- a policy specifying target population, screening method and interval;
- a defined target population;
- an active invitation of the entire target population;
- a team responsible for overseeing screening centres;
- a decision structure and responsibility for healthcare management;
- a quality assurance system utilising relevant data;
- **monitoring of cancer occurrence in the target population.**

# Aim of population based cancer screening

- Early detection
- Improve quality of life
  - Less invasive treatments
- Decrease mortality from invasive cancer or even decrease incidence (e.g. cervical cancer)

# EU Council Recommendation on cancer screening 2003

- (17) Quality screening includes analysis of the process and outcome of the screening and rapid reporting of these results to the population and screening providers.
- (18) This analysis is facilitated if the screening database can be linked to **cancer registries** and mortality databases.
- Screening for cervical, breast and colorectal cancer

# Role of the cancer registries in screening

# Support cancer prevention and mass screening

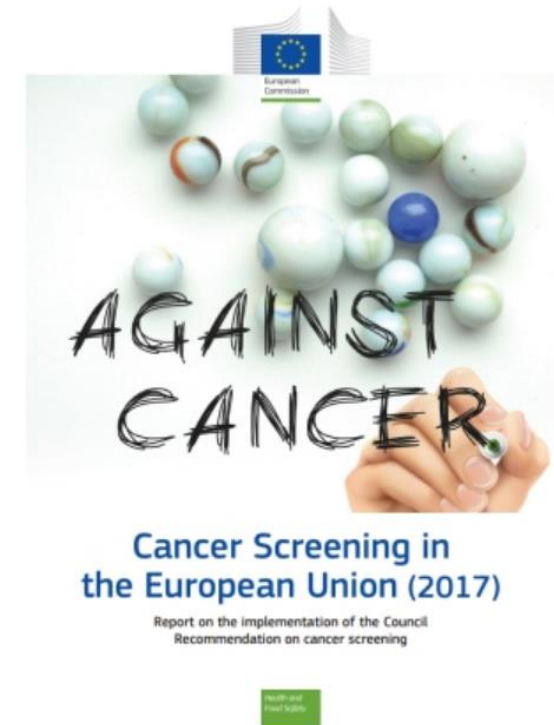
- Monitoring the performance of the screening program
  - Audit of case histories: interval cancers
  - Audit: false negative tests
- Time trends of incidence and mortality in relation to screening intensity
- Cancer burden outside of programme
- Observational studies on screening effect by screening history

# Link screening programme – cancer registry

- Example: Interval cancer rate
  - Nominator: Number of interval cancers
  - Denominator: Total number of screened negative women at the last screening round

# Report on the implementation of the Council Recommendation on cancer screening

- Key recommendations:
  - **Population-based cancer registries** should be strengthened in the countries already having **population-based screening programmes** or contemplating to introduce them. It will be of immense value if future reports reflect **detection modes** and **stage distribution of cancers**; such information can be obtained only through a well-organized cancer registry.



# Support of cancer registries in improving evaluation of screening

- Collect and report pre-cancerous lesions (e.g. intraepithelial cervical dysplasia and in situ cancers, DCIS for breast, advanced adenomas for colorectal cancer)
- Variables:
  - Stage at diagnosis
  - Method of detection in relation to screening



# Keep in touch



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# Thank you



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