Implementation of Cancer Screening in the European Union - Second Report 2017

Positionnement de la France

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➢ To document changes in approach to program implementation compared to first report of 2008

➢ To collect more detailed information on program organization

➢ To estimate process & outcome indicators that are recommended in the European QA guidelines
Second Report

➢ Main collaborating institutions
  • IARC - International Agency for Research on Cancer, Lyon, France (coordination)
  • CPO Piemonte, University Hospital “Città della Salute e della Scienza”, Turin, Italy
  • Finnish Cancer Registry, Mass Screening Registry, Helsinki, Finland

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➢ Over 80 Data providers from all 28 EU Member States for Breast, colorectal and cervix
  • Index year: one year between 2012 and 2014, depending on the country
  • Main results: 50-69 years
  • France: Santé publique France for Breast, Colorectal and Cervix data, 2012
Second Report – Site specific standardized Data Collection

➢ **Questionnaires** to collect information on
  • Program policy, organization, invitation, QA, financing, costs
  • Screening tests, eligibility, screening interval, further assessment

➢ **Tables** on annual aggregated data **stratified by age / gender / test & initial vs subsequent screening**

➢ Screening extension / invitation coverage
  • Participation rate
  • Examination coverage
  • Further assessment rate / FA participation rate
  • Detection rates
  • Positive predictive values
Status of implementation and organization of cancer screening in The European Union Member States—Summary results from the second European screening report

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9 Cancer Registry of Norway, Oslo, Norway; Finnish Cancer Registry, Helsinki, Finland

The second report on the implementation status of cancer screening in European Union (EU) was published in 2017. The report described the implementation status, protocols and organization (updated till 2016) and invitation coverage (for index year 2013) of breast, cervical and colorectal cancer screening in the EU. Experts in screening programme monitoring (N = 80) from the EU Member States having access to requisite information in their respective countries provided data on breast, cervical and colorectal cancer screening through online questionnaires. Data was collected for screening performed in the framework of publicly mandated programmes only. Filled in questionnaires were received from 26 Member States for all three sites and from one Member State for breast cancer only. Substantial improvement in screening implementation using population-based approach was documented. Among the age-eligible women, 94.7% were residents of Member States implementing or planning population-based breast cancer screening in 2016, compared to 91.6% in 2007. The corresponding figures for cervical cancer screening were 72.3 and 51.3% in 2016 and 2007, respectively. Most significant improvement was documented for colorectal cancer screening with roll-out ongoing or completed in 17 Member States in 2016, compared to only five in 2007. So the access to population-based screening increased to 72.4% of the age-eligible populations in 2016 as opposed to only 42.6% in 2007. The invitation coverage was highly variable, ranging from 0.2–111% for breast cancer, 7.6–105% for cervical cancer and 1.8–127% for colorectal cancer in the target populations. In spite of the considerable progress, much work remains to be done to achieve optimal effectiveness. Continued monitoring, regular feedbacks and periodic reporting are needed to ensure the desired impacts of the programmes.
Breast cancer in Europe (European age-standardized, per 100,000), 2012

Breast Cancer Screening Programs in the EU 2016
Participation au programme de dépistage organisé du cancer du sein (50-69 ans)
22 countries
N=726,791
D=14,094,852
Result = 5.2% (1.62%-11.76%)
Data from table 4.4.1
BREAST - Detection rate of invasive carcinoma (Women, 50-69 years)

20 countries
N=68,066
D=13,130,021
Result = 5.2‰ (1.85‰-8.08‰)
Data from table 4.4.6
19 countries
N=81,174
D=666,938
Result = 12.2% (4.4%-27.9%)
Data from table 4.4.7
13 countries
N=3,461
D=4,935,605
Result = 0.7‰ (0.05‰-2.58‰)
Data from table 4.6.9
<table>
<thead>
<tr>
<th>Performance indicators</th>
<th>France</th>
<th>EU mean</th>
<th>Acceptable standard</th>
<th>Desirable standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation rate</td>
<td>51%</td>
<td>60.2%</td>
<td>70.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td>Further assessment rate*</td>
<td>9.4%</td>
<td>4.4%</td>
<td>&lt;5.0%</td>
<td>&lt;3.0%</td>
</tr>
<tr>
<td>Further assessment participation rate*</td>
<td>96%</td>
<td>97.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment referral rate*</td>
<td>8/1,000</td>
<td>6/1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detection rate of invasive cancer*</td>
<td>5.7/1000</td>
<td>4.6/1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detection rate of CIS*</td>
<td>1.0/1000</td>
<td>0.9/1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of CIS of all cancers*</td>
<td>15.1%</td>
<td>16.9%</td>
<td>&gt;10.0%</td>
<td>10.0-20.0%</td>
</tr>
<tr>
<td>Positive predictive value to detect CIS+ disease*</td>
<td>7.5%</td>
<td>11.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benign open biopsy rate*</td>
<td>1.3/1000</td>
<td>0.7/1,000</td>
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<td></td>
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<tr>
<td>Benign / malignant ratio*</td>
<td>0.19/1000</td>
<td>0.13</td>
<td>&lt;0.5</td>
<td>&lt;0.25</td>
</tr>
</tbody>
</table>
Conclusions

Collection of information in a unified manner enabled to estimate the values of the main screening performance indicators at the regional or the national level and to produce pan-EU average estimates that could usefully be monitored regularly. The response rate of population based programs was very satisfactory.

This project could constitute the model for extending systematic screening monitoring and reporting elsewhere and on an even larger scale.
Conclusion pour la France

- Participation faible en raison d’un fort dépistage individuel (reco EU : dépistage organisé nettement préférable au dépistage individuel)
- Un taux de “bilan” complémentaire élevé, compensé par l’intérêt d’un “bilan immédiat”
- Un bon taux de détection, accompagné d’une proportion d’in-situ peu élevée
- Un taux de “biopsie chirurgicale avec résultat bénin” et ratio Bénin/Malin un peu élevé
- Une évaluation avec des données individuelles couvrant l’ensemble du territoire (reco par l’EU)
- Malgré le système “décentralisé” français, de bons indicateurs de performance
- Prochain rapport : comparer la taille des cancers et les cancers d’intervalle
Thanks to the Working Group of authors, Scientific Committee, Data Providers