The Dutch colorectal cancer screening programme: first and second round

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Possible conflicts of interest

• No conflicts of interest
What to expect

• Results of Dutch CRC screening programme 2016
• Stage distribution of screen-detected CRCs 2015
• Site distribution of screen-detected CRCs 2015
Dutch CRC screening programme

• Dutch programme implemented in 2014
• Men and woman
• Age 55 to 75 years
• Biennial
• Fecal immunochemical test (FIT)
Results of 2016

- 1.5 million persons invited
- 1.0 million participants
- 57,000 positive test results
- 47,000 persons underwent colonoscopy:
  - 3,700 colorectal cancers
  - 20,000 advanced adenomas
Results of 2016

- **1.5 million** persons invited
- **1.0 million** participants
- **57,000** positive test results
- **47,000** persons underwent colonoscopy:
  - **3,700** colorectal cancers
  - **20,000** advanced adenomas
Results of 2016

- **1.5 million** persons invited
- **1.0 million** participants
- **57,000** positive test results
- **47,000** persons underwent colonoscopy:
  - **3,700** colorectal cancers
  - **20,000** advanced adenomas

*Persons invited for the first or second screening round!*
Participation rate 2016

<table>
<thead>
<tr>
<th></th>
<th>First round</th>
<th>Second round</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>71.8%</td>
<td>75.9%</td>
</tr>
</tbody>
</table>
## Positivity rate 2016

<table>
<thead>
<tr>
<th>First round</th>
<th>Second round</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

Cut-off level 47 µg Hb/g
Positivity rate 2016

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### Participation rate colonoscopy 2016

<table>
<thead>
<tr>
<th>First round</th>
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</tr>
</thead>
<tbody>
<tr>
<td>83.0%</td>
<td>82.1%</td>
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</tbody>
</table>

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Yield of colonoscopy

First round
- Colorectal cancer: 8%
- Advanced adenoma: 20%
- Non-advanced adenoma: 22%
- Serrated polyps: 5%
- No polyps or tumours: 45%

Second round
- Colorectal cancer: 7%
- Advanced adenoma: 25%
- Non-advanced adenoma: 27%
- Serrated polyps: 6%
- No polyps or tumours: 35%
## Positive predictive value

<table>
<thead>
<tr>
<th></th>
<th>First round</th>
<th>Second round</th>
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</thead>
<tbody>
<tr>
<td>CRC</td>
<td>8.3%</td>
<td>6.6%</td>
</tr>
<tr>
<td>CRC + AA</td>
<td>53.7%</td>
<td>42.1%</td>
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</tbody>
</table>
## Detection rate

<table>
<thead>
<tr>
<th></th>
<th>First round</th>
<th>Second round</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRC</td>
<td>4.1‰</td>
<td>22.3‰</td>
</tr>
<tr>
<td>CRC + AA</td>
<td>2.4‰</td>
<td>13.0‰</td>
</tr>
</tbody>
</table>
Processing times primary process

- Waiting time FIT result: 3.4 weekdays
- Waiting time intake: 13.2 workdays
- Waiting time colonoscopy: 10.3 workdays

5 weeks between participation and colonoscopy

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Stage distribution of colorectal cancer

- Screen- and symptom-detected CRCs in 2015
Screen-detected CRCs have a more favourable stage distribution (stage I and II) than symptom-detected CRCs (67% versus 40%).

Stage distribution of colorectal cancer:

**Screen-detected**

- Stage I: 50%
- Stage II: 20%
- Stage III: 10%
- Stage IV: 10%

**Symptom-detected**

- Stage I: 30%
- Stage II: 30%
- Stage III: 20%
- Stage IV: 20%
Site distribution of colorectal cancer

- Screen- and symptom-detected CRCs in 2015
Site distribution of colorectal cancer

Screen-detected CRCs were more often located in the left colon than symptom-detected CRCs (45.9% versus 31.4%).

![Graph showing site distribution](image)
Stage distribution by gender

- **Screen-detected percentage (%):**
  - Men: [Diagram showing distribution]
  - Women: [Diagram showing distribution]

- **Symptom-detected:**
  - Men: [Diagram showing distribution]
  - Women: [Diagram showing distribution]
Stage distribution by social economic status

- Screen-detected percentage
- Symptom-detected percentage
Summary

• **Dutch** screening programme is **proceeding well**

• **Both** screening rounds have **high** participation rate

• High number of **advanced adenomas** and **cancers** have been detected in **both rounds**

• Highlight the importance of **repeated screening**

• Screen-detected cancers have a more **favourable stage distribution**
Future

- In **2019** roll-out will be complete
- **Interval cancers** expected in 2018
- **Optimizing** the programme
Acknowledgement

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