SLOVENIA – AN EARLY AND SUCCESSFULLY ORGANISED POPULATION-BASED SCREENING PROGRAMME

Dominika Novak Mlakar,
Tatjana Kofol Bric, Ana Lucija Škrjanec, Špela Fistrič

National Institute of Public Health, Slovenia
COLORECTAL CANCER SCREENING IN SLOVENIA

• Nationally organised, centrally managed, population-based CRC screening programme.

• **Target population covers all residents aged 50-74 with compulsory health insurance.** They are invited every two years. Up to 2015 population aged 50-69 was included.

• Legally based, financially and professionally supported.

• **National implementation:**
  – pilot phase in 2008 with the aim of examining all steps of the programme algorithm in practice,
  – at the national level, the programme has been running since 2009.

• **Target population is app. 600,000 people per screening round:**
  - 1th screening round: April 2009 – March 2011,

• **Testing method:**
  - faecal immunochemical test (FIT) with automatic readings in one central laboratory,
  - screening colonoscopy provided for all patients with positive FIT.
SLOVENIAN COLORECTAL CANCER SCREENING GUIDELINES AND SCREENING ALGORITHM


Invitation to screening programme

Invitee responds with signed consent

Respondent receives testing kit for 2 stool samples by post

Respondent not returning the test kit

Written reminder 2X

Respondent returning the test kit to the central lab by post

Test results for tested participants

Positive

Colonoscopy

Negative

Invited for FIT in 2 years
NETWORK OF COLONOSCOPY CENTRES WITH COLORECTAL CANCER SCREENING PROGRAMME

Dominika Novak Mlakar
<table>
<thead>
<tr>
<th>Programme Svit indicators by 2-year screening rounds</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invitation sent</td>
<td>536,709</td>
<td>502,488</td>
<td>501,391</td>
<td>607,123</td>
</tr>
<tr>
<td>Coverage by invitation</td>
<td>99.3%</td>
<td>99.6%</td>
<td>99.6%</td>
<td>99.6%</td>
</tr>
<tr>
<td>Invitation response rate</td>
<td>56.9%</td>
<td>57.8%</td>
<td>59.9%</td>
<td>62.2%</td>
</tr>
<tr>
<td>Individuals with exclusion criteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(self reported and colorectal pathology found in screening)</td>
<td>12.5%</td>
<td>7.7%</td>
<td>5.5%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Uptake / participation rate</td>
<td>49.9%</td>
<td>52.8%</td>
<td>55.7%</td>
<td>58.0%</td>
</tr>
<tr>
<td>Positive FIT rate</td>
<td>6.2%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Bowel cleansing, quality of colonoscopy preparation</td>
<td>96.2%</td>
<td>96.9%</td>
<td>96.8%</td>
<td>95.5%</td>
</tr>
<tr>
<td>Caecal intubation rate</td>
<td>97.8%</td>
<td>98.0%</td>
<td>98.1%</td>
<td>97.5%</td>
</tr>
<tr>
<td>Colonoscopy after positive FIT rate</td>
<td>90.9%</td>
<td>92.2%</td>
<td>93.1%</td>
<td>92.6%</td>
</tr>
<tr>
<td>Colonoscopy compliance rate</td>
<td>98.4%</td>
<td>98.9%</td>
<td>99.1%</td>
<td>98.7%</td>
</tr>
</tbody>
</table>

Dominika Novak Mlakar
# CANCER STAGING IN 1., 2. AND 3. SCREENING ROUND

<table>
<thead>
<tr>
<th>Stage</th>
<th>1. screening round</th>
<th>2. screening round</th>
<th>3. screening round</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Stage I, T1Nx (T1 Nx Mx) *</td>
<td>196</td>
<td>22.0</td>
<td>117</td>
</tr>
<tr>
<td>Stage I, (T1/2 N0 M0)</td>
<td>238</td>
<td>26.7</td>
<td>134</td>
</tr>
<tr>
<td>Stage II, (T3/4 N0 M0)</td>
<td>188</td>
<td>21.1</td>
<td>99</td>
</tr>
<tr>
<td>Stage III, (any T N1/2 M0)</td>
<td>211</td>
<td>23.7</td>
<td>104</td>
</tr>
<tr>
<td>Stage IV, (any T N1/2 M1)</td>
<td>57</td>
<td>6.4</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>890</td>
<td>6.4</td>
<td>493</td>
</tr>
<tr>
<td>No data</td>
<td>15</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>905</td>
<td></td>
<td>493</td>
</tr>
</tbody>
</table>

* Endoscopic resection only

Early stage of detection (stages I and II): 67.0% - 70.0%

Dominika Novak Mlakar
COLORECTAL CANCER INCIDENCE HAS BEEN DECREASING SINCE 2011

Source: Slovenian Cancer Registry, Institute of Oncology Ljubljana.

Dominika Novak Mlakar
The most common cancer locations for both genders - incidence. The share of colorectal cancer among all cancers in Slovenia has decreased.

Diagnosed in CRC screening

Not diagnosed in CRC screening

Source: Epidemiology and Cancer Registry, Institute of Oncology Ljubljana

Dominika Novak Mlakar
• Online presentation of indicators is available per colonoscopist and per centre as a part of online interface with the Svit information system supporting the colonoscopy procedure and results registration.

• Detailed indicator results are a part of the discussion in regular supervision visits to colonoscopy centres.

• Bad performance is the reason for exclusion from the list of Svit colonoscopy providers.

• Indicator results oriented topics are presented at an annual colonoscopist training module.
PATIENTS’ PAIN DURING COLONOSCOPY

- Data are collected using postcolonoscopy questionnaire.

- Share of patients pain during colonoscopy is used among indicators for discussion in the supervision visit to a colonoscopist.

- Indicator enabled the estimation of the share of population in need of sedation during colonoscopy (10-15%) which was the major argument in negotiation for financing of the procedure.

Dominika Novak Mlakar
Materials for the general public:
- leaflet with general information about the programme
- booklet with step-by-step instructions
- cards with engaging and somewhat humorous (but true) facts about digestion

Comics with instructions on how to participate in the programme for people with cognitive disabilities
Svit Programme is well-organised and effective colorectal cancer screening programme with important impact on population health.