



NATIONAL INSTITUTE
OF PUBLIC HEALTH



SLOVENIAN POPULATION BASED
NATIONAL COLORECTAL CANCER
SCREENING PROGRAM

NATIONAL COLORECTAL CANCER SCREENING PROGRAMME IN SLOVENIA

The Svit Program

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Colorectal Cancer Burden in 2008

Source: Cancer Registry of Republic of Slovenia, 2011,
Institute of Oncology Ljubljana

- 1,450 new cases (ICD C18-C20):
 - crude incidence rate 71,6 / 100.000
- 4th most common cancer in men (12.8%)
- 3rd most common cancer in women (11.0%)
- 2nd most common cause of cancer death: 758 deaths
- Very low percentage of colorectal cancer detected at an early stage:
 - colon 12.8% of cases
 - rectum 13.7% of cases

The Survival Rates of Colorectal Cancer Patients

Source: Survival of cancer patients 2001-2005,
Cancer Registry of the Republic of Slovenia, 2009,
Institute of Oncology, Ljubljana

Stage of colorectal cancer	Colon	Rectum
Stage I,II	95%	90%
Stage III	72%	60%
Stage IV	8%	8%
All stages	58%	52%

- The 5-year relative survival rate of colorectal cancer patients is increasing thanks to improved treatment
- The cancer stage on diagnosis remains unchanged
- The mortality rate in colorectal cancer patients remains high compared to the European average

3

The Svit Program

- A nationally organized, centrally managed, population-based CRC screening programme;
- Based on scientific evidence, quality standards and best practice experience;
- Adapted to local needs and capacities;
- Target population covered: 540,000 men and women aged between 50 and 69 with basic Health Insurance, invited every two years;
- Based on
 - the immunochemical FOBT test with automatic readings
 - a screening colonoscopy for all FOBT positive cases
- Legally based, financially and professionally supported.

4

The Objectives of the Svit Program

- To reduce CRC patient mortality rate by 25 - 30%: 200 lives saved each year
- To reduce CRC incidence by 20%: 300 fewer colorectal cancer cases per year
- To increase the proportion of CRCs detected early from 14% to more than 50% in 10 years
- To improve the quality of CRC patients life
- To reduce the financial burden of CRC treatment

5

Svit Program Institutions and Executants

- The Ministry of Health of the Republic of Slovenia
- The Health Insurance Institute of Slovenia
- Svit program operator: National Institute of Public Health of the Republic of Slovenia
- Program council
- Executants:
 - The Svit centre (Central laboratory, post terminal, call centre)
 - general practitioners
 - 56 authorized colonoscopists in 23 colonoscopy centres
 - 14 authorized pathohistologists in 4 pathohistology centres
- Health education centres, Institutes of health protection, NGOs
- Pharmacies
- Media
- Patients who have already participated in the program

6

The Svit Program is Designed as a User-Friendly

- Personal invitations, reminders and information about all the procedures are provided to all participants; the process is user-centered
- There are short waiting times for all procedures
- A special emphasis on communication (a personal counseling call centre)
- Monitoring responses; sending re-invitations and reminders, personal conversations, strategies for encouragement
- Accessibility
- The program is free for all participants
- A user-friendly colon cleansing procedure prior to colonoscopy (Moviprep)
- People with special needs: special attention

7

The Svit Program - National Implementation

Method of inviting population:

- in on odd-numbered year, we invite population born in an odd year (e.g. in year 2009 we invited people born 1941, 1943, ...)
- in an even-numbered year, we invite population born in an even year (e.g. in 2010 we invited people born 1942, 1944, ...)

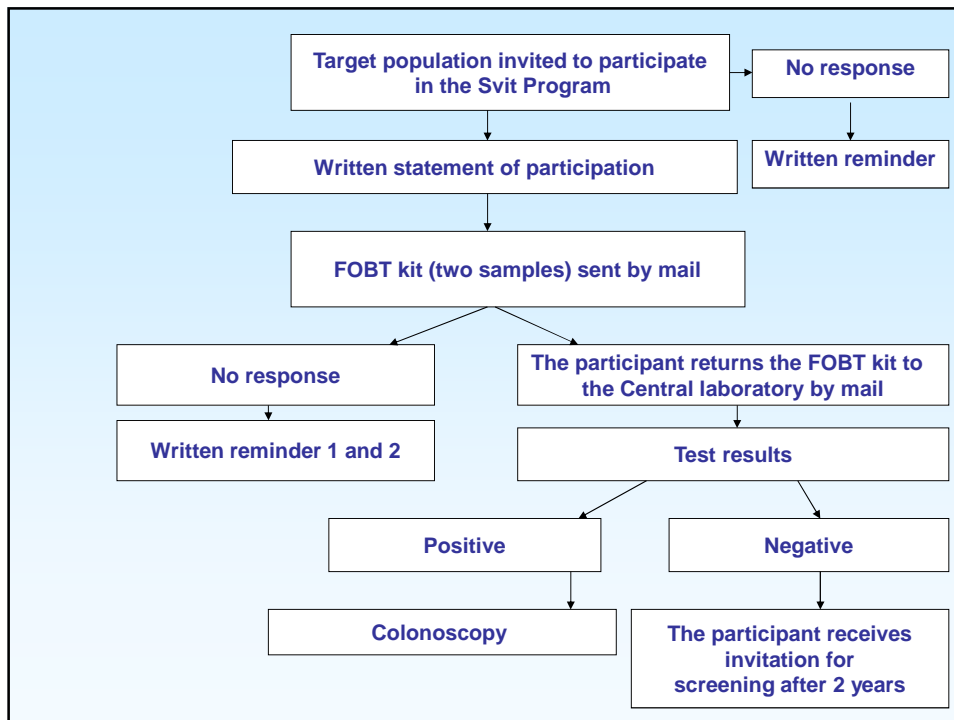
The first round of screening is completed (2009 – 2010):

17.04.2009 – 31.03.2011

The second round of screening (2011 – 2012):

04.01.2011 - 31.12.2012

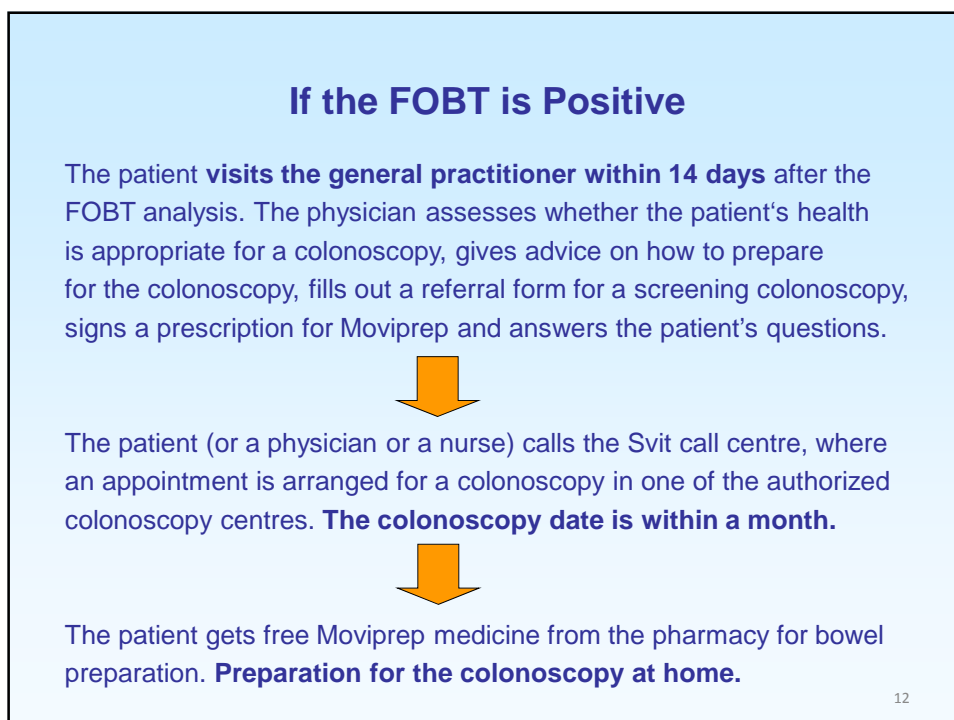
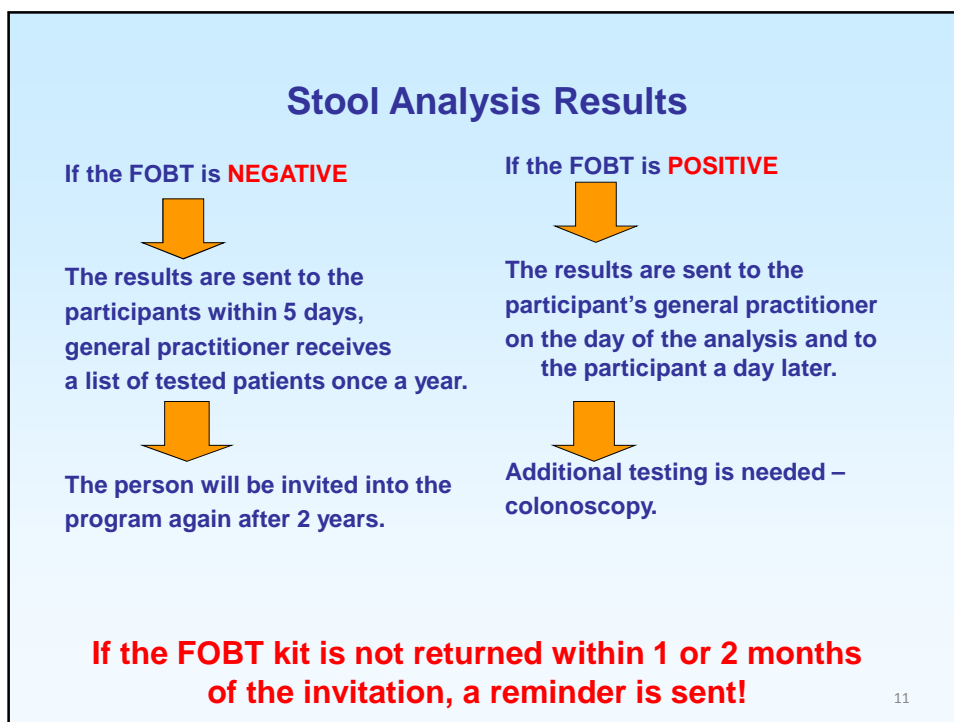
8



Patients Excluded from the Svit Program

- 1) Patients already involved in diagnostic or therapeutic colorectal cancer treatment.
- 2) Patients diagnosed with ulcerative colitis or Chron's disease.
- 3) Patients who previously had adenomas removed at colonoscopy.
- 4) Patients who have had a colonoscopy at any time in the past 3 years, providing that the results were normal. They will be invited to participate in the Svit Program again after two years.

The statement should be returned in each case!



Care for Quality

- Entering data into the unified information system: central unit, colonoscopists, pathohistologists
- Unified education for colonoscopists and pathohistologists
 - supervision for one to two years
- Anonymous post-colonoscopy questionnaire on patient experience
- The active role of the general practitioners:
 - unified preparation of patients with a positive FOBT for the colonoscopy
 - feedback on the patients' participation in the program
 - the active involvement of non-responders in the program
- A network of info points in all health care centers
- Community nursing staff support the active involvement of non-responders

13

Response to Invitations Sent in the First Round (period from 17.4.2009 to 31.3.2011)

Invitation sent	536,636 (95.43%)
Invitation received	532,954 (99.31%)
Signed statement of participation in the program returned (response to invitations sent)	300,659 (56.41%)
Exclusion criteria	36,361 (12.09%)
Participation refused	1,361 (0.26%)
FOBT kits for collecting stool samples sent	263,683 (87.97%)
Screened	245,107 (49.36%)
- adequately tested	243,028 (a) 92.17% (b) 99.15%
• positive FOBT	15,113 (6.22%)
• negative FOBT	227,915 (93.78%)
- inadequate FOBT	2,079 (0.85%)

(a) Proportion of adequately tested among sent kits for collection of stool samples.
(b) Proportion of adequately tested among screened.

14

Response Rates in the Svit Program within Slovenian Health Regions, Comparison by Periods

Health regions	1.1. - 30.6.2010	1.7. - 31.12.2010	1.1. - 30.6.2011	1.7. - 31.12.2011
Celje	53.04%	62.43%	63.22%	52.81%
Koper	49.99%	62.79%	61.40%	48.08%
Kranj	57.84%	68.51%	67.44%	54.56%
Ljubljana	57.29%	66.91%	67.60%	54.04%
Maribor	47.97%	60.48%	66.27%	50.10%
Murska Sobota	47.44%	57.39%	63.57%	47.93%
Nova Gorica	57.28%	69.36%	66.65%	53.03%
Novo mesto	57.26%	68.05%	65.33%	55.49%
Ravne na Koroškem	55.08%	64.61%	67.59%	52.42%
SLOVENIA	53.93%	64.58%	65.79%	52.40%

The response rate to the first invitation in 2009 was 36.03%.

The response rate to the first invitation in 2010 was 56.99%.

The response rate to the first invitation in 2011 was 58.30%.

15

Colonoscopies Performed in the First Round (period from 17.4.2009 to 31.3.2011)

Colonoscopy procedures	Men	Women	Total
Screening	4,182	4,292	8,474 (60.84%)
Therapeutic*	3,445	1,701	5,146 (36.95%)
Incomplete	137	171	308 (2.21%)
Total	7,764	6,164	13,928

*lesion \geq 10 mm

16

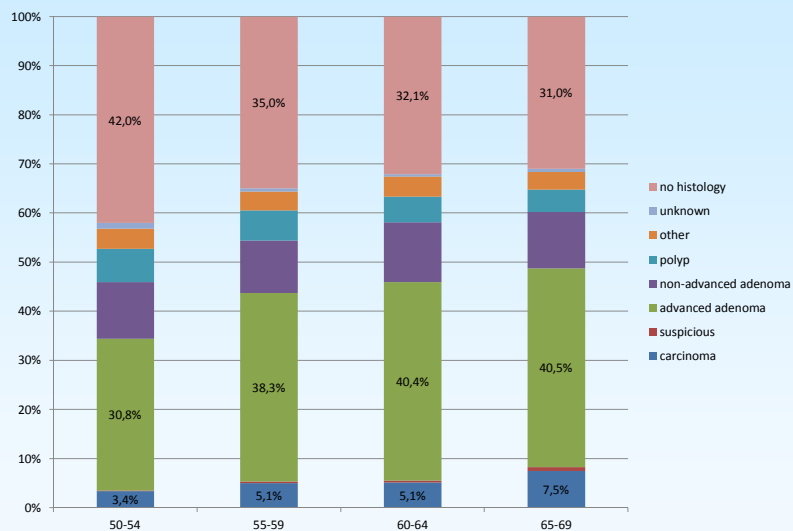
The Svit Program Findings – First Round

The (worst) pathological findings in patients who had colonoscopy:

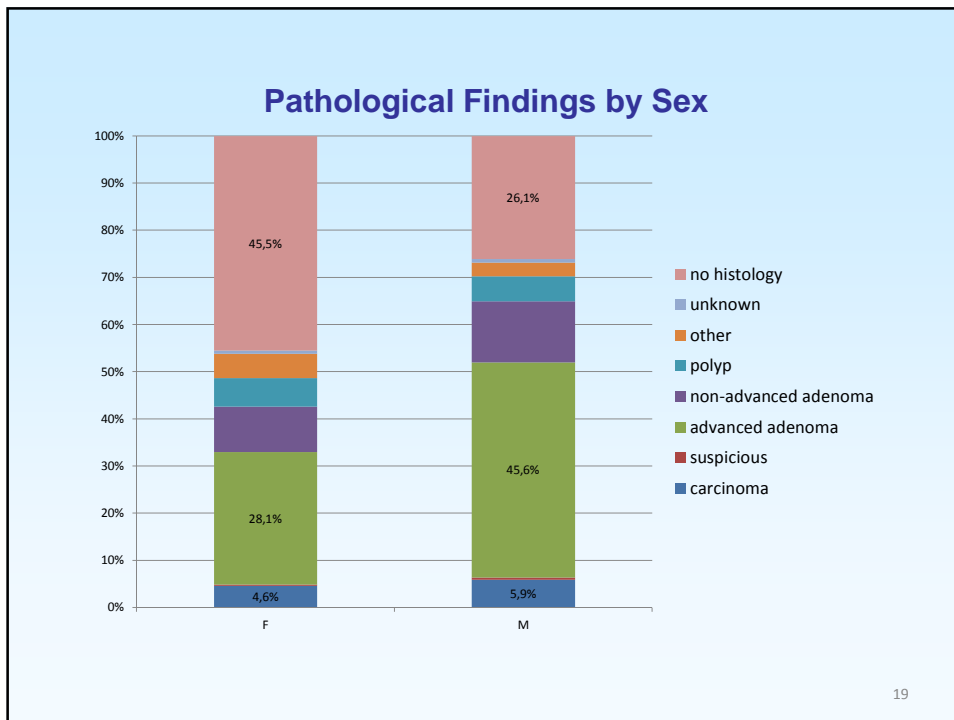
• carcinoma	726	5.3%
• suspicious for carcinoma	57	0.7%
• advanced adenoma	5145	37.8%
• non-advanced adenoma	1563	11.5%
• non-neoplastic polyp	765	5.6%
• other non-neoplastic	533	3.9%
• unknown	95	0.7%
• no histology	4724	34.7%

17

Pathological Findings by Age



18



Detected Cancers Stages

TNM stage	N	%
I	163	33,50%
I*	82	16,80%
II	103	21,10%
III-IV	139	28,50%
Total	487	100,00%

- Stage I: T1 or T2, N0, M0
- Stage I*: T1 NX (no surgery)
- Stage II: T3 or T4, N0, M0
- Stage III IV: lymph node involvement or distant metastases

20

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21