



IMPROVEMENT OF QUALITY OF THE NATIONAL CANCER SCREENING PROGRAMMES IMPLEMENTATION (CRO SCREENING)



This project
is funded by the
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WHY AND HOW TO SCREEN

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ORGANISED POPULATION SCREENING

- Screening actively offered from health care system to target population without clinical symptoms of disease
- With simple examinations and tests we try to find latent or early stage of the disease
- All people tested who are suspected to be ill need additional diagnostic examination



Classical criteria for screening programme

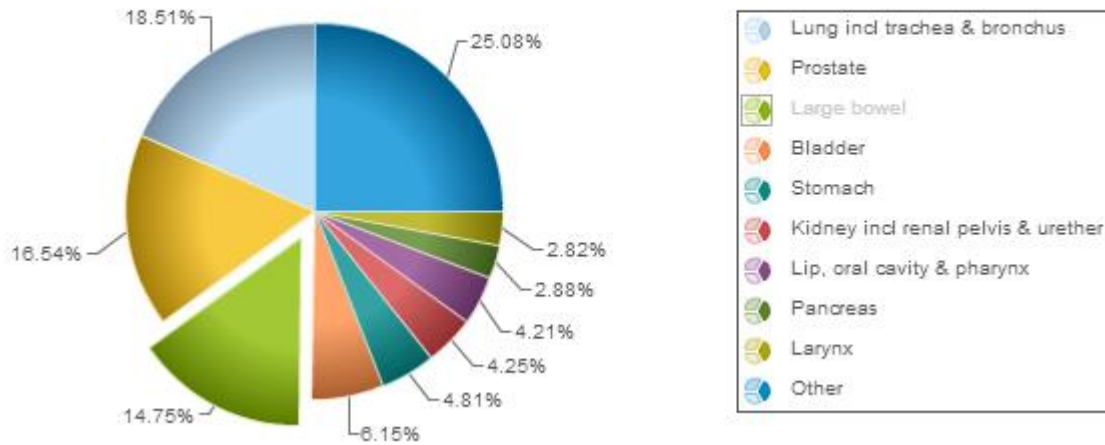
Source: Wilson JMG, Jungner G. Principles and practice of screening for disease. Geneva: WHO; 1968.

- (1) The condition sought should be an important health problem.
- (2) There should be an accepted treatment for patients with recognized disease.
- (3) Facilities for diagnosis and treatment should be available.
- (4) There should be a recognizable latent or early symptomatic stage.
- (5) There should be a suitable test or examination.
- (6) The test should be acceptable to the population.
- (7) The natural history of the condition, including development from latent to declared disease, should be adequately understood.
- (8) There should be an agreed policy on whom to treat as patients.
- (9) The cost of case-finding (including diagnosis and treatment of patients diagnosed) should be economically balanced in relation to possible expenditure on medical care as a whole
- (10) Case-finding should be a continuing process and not a "once and for all" project

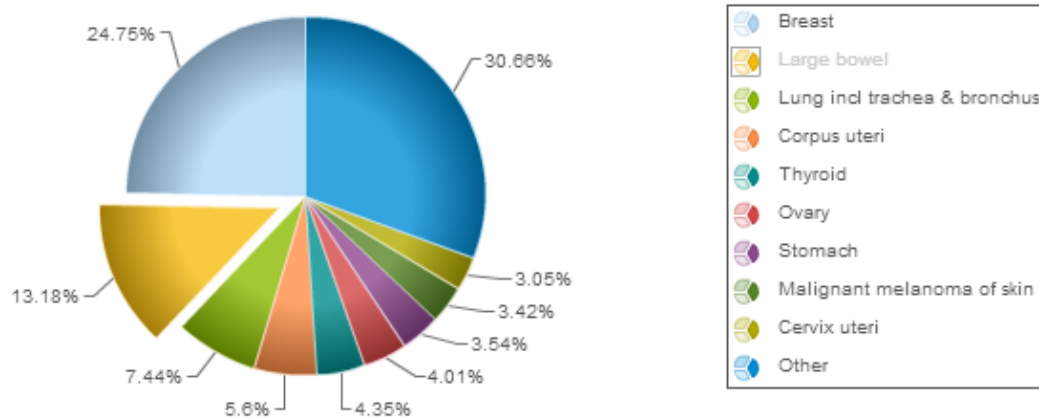


(1) The condition sought should be an important health problem.

Estimated incidence for men in Croatia, 2012



Estimated incidence for women in Croatia, 2012



Crude incidence rate in 2013
72 per 100.000

Mortality rate in 2013
47 per 100.000

BOTH increasing

(5) There should be a suitable test or examination

Two main types of FOBT are available - guaiac and FIT

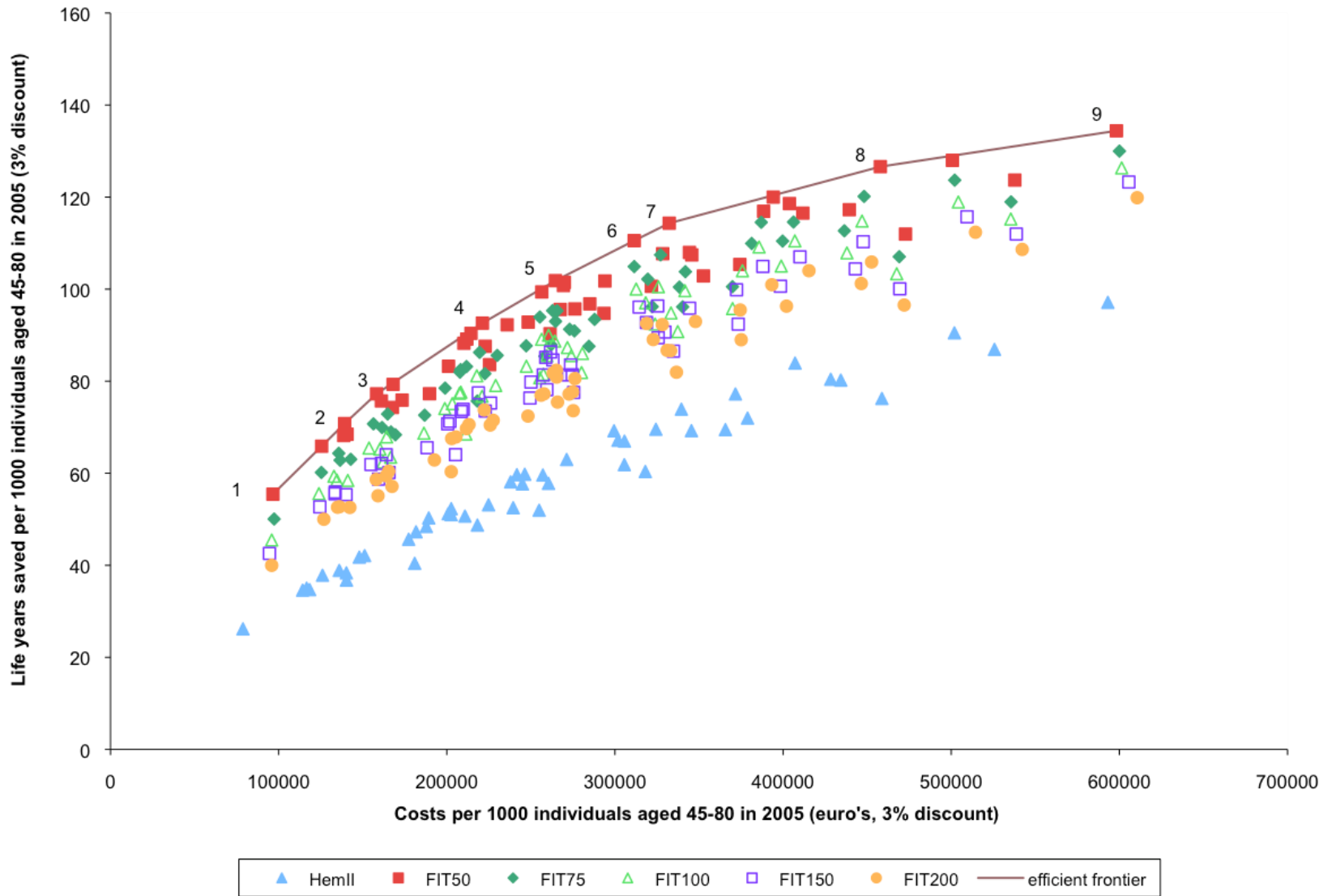
Guaiac-based FOBT version	Sensitivity for cancer	Sensitivity for adenomas
Hemoccult Sensa (high-sensitivity)	50% - 79%	21% - 35%
Hemoccult II	13% - 50%	8% - 20%

FIT and guaiac-based FOBT	Sensitivity for cancer	Sensitivity for adenomas
Immunochemical tests (FIT)	55% - 100%	15% - 44%
High-sensitivity guaiac-based FOBT (Hemoccult Sensa)	50% - 79%	21% - 35%

Colonoscopy is the optimal method for further diagnostic procedure in population CRC screening

Screening (+FOBT with diagnostic colonoscopy) reduces mortality due to CRC	15-33%
Screening increases share of early detected CRC – in localised limited stage	9-11%
Screening reduces CRC incidence	17,8-14,2%

Cost – performance modelling of gFOBt and FIT



Classical criteria for screening programmes

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Revisiting Wilson and Jungner in the genomic age: a review of screening criteria over the past 40 years

Source: Andermann A, Blancquaert I, Beauchamp S, Déry V. Geneva: WHO; 2008. <http://www.who.int/bulletin/volumes/86/4/07-050112/en/index.html>

Synthesis of emerging screening criteria proposed over the past 40 years

- The screening programme should respond to a recognized need.
- The objectives of screening should be defined at the outset.
- There should be a defined target population.
- There should be scientific evidence of screening programme effectiveness.
- The programme should integrate education, testing, clinical services and programme management.
- There should be quality assurance, with mechanisms to minimize potential risks of screening.
- The programme should ensure informed choice, confidentiality and respect for autonomy.
- The programme should promote equity and access to screening for the entire target population.
- Programme evaluation should be planned from the outset.
- The overall benefits of screening should outweigh the harm.





“The best screening test is the one that gets done well.”

– Sidney J. Winawer, MD



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Screening goals

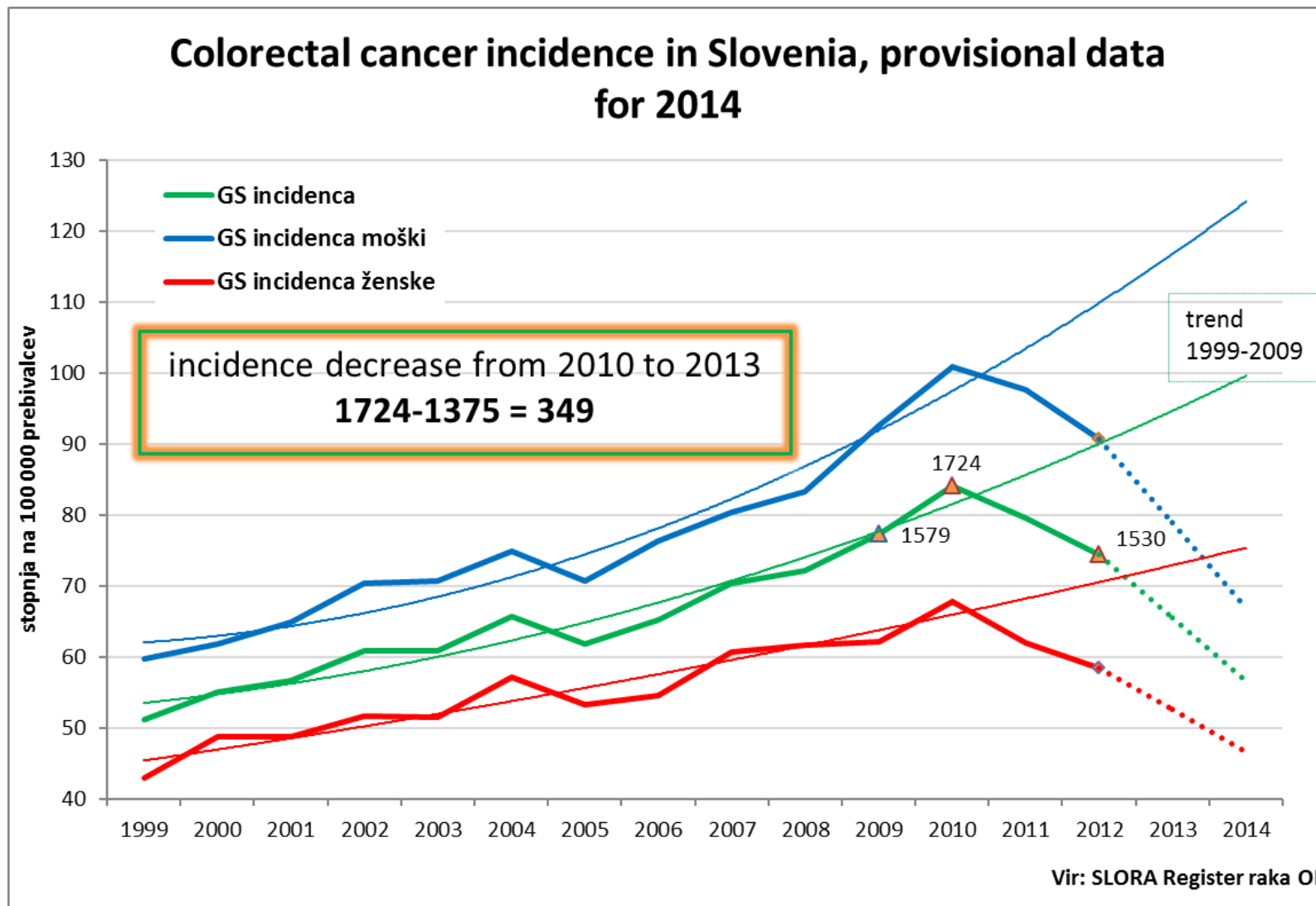
EFFECTIVE RESPONSE TO HEALTH AND FINANCIAL BURDEN OF CRC

- Finds and removes premalignant changes.
- Reduces the incidence of new cases of CRC.
- Increases a share of early diagnosed CRC.
- Reduces mortality due to CRC.
- Reduces costs of treatment of the disease.
- Increases quality of life in patients with CRC.



Effects of CRC screening in Slovenia

www.program-svit.si



Shift in cancer stages detected in the SLO screening

Stage	1. round 2009-10		2. round 2011-12		Cancer register in 2008 (limited)	
	number	share	number	share		
I. stage T1Nx (T1 Nx Mx) *	196	21,9%	117	23,4%	}	13,5%
I. stage (T1/2 N0 M0)	238	26,7%	140	27,9%		
II. stage (T3/4 N0 M0)	191	21,4%	99	19,8%		
III. stage (any T N1/2 M0)	211	23,6%	105	21,0%		
IV. stage (any T N1/2 M1)	57	6,4%	40	8,0%		
total with stage	893	100,0%	501	100,0%		
no data	15					
Total cancers	908		501			

Early phase of detection (I. in II. stage): 70,0 % in 71 %

Workshop -Worksheet

1



- **Basic criteria**

(2) There should be an accepted treatment for patients with recognized disease.

(3) Facilities for diagnosis and treatment should be available.

Please discuss the questions:

- a) How long is the waiting time from positive screening test to screening colonoscopy
- b) How to achieve that all Croatia will be covered by screening colonoscopy which include polypectomy in the same colonoscopy
- c) How long is the waiting time for surgery after carcinoma confirmed at histopathology



Further diagnosis and treatment



EU guidelines recommendation

- Treatment and after-care service following evidence-based guidelines should be offered to all patients detected with cancer or pre-invasive lesions at the time of assessment of abnormal screening findings.
- Follow-up colonoscopy after positive screening test should be within 31 days of referral (an acceptable standard is >90%, >95% is desirable) (page 95 of EUg)
- The time interval between the diagnosis of screen-detected disease and the start of definitive management should be within 31 days . Acceptable standard: >90%, desirable >95%

