



Informatisation of Croatian national colorectal screening programme as a tool in quality control

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Thanks to all participants in this programme



**Ministarstvo
zdravlja**
Za zdravlje. Zajedno.



Objectives

MAIN:

- detect cancer in early stage, and to detect and remove polyps of the colon
- enhance the possibility of cure in patients with colorectal cancer and improve quality of life
- achieve 45% coverage
- reduce mortality from colorectal cancer by 15%, after 10-13 years of the program with a good response (references-major international research)

OTHER:

- improve quality of performance in FOBT reading and colonoscopy
- improve and organize system
- create and implement informatisation



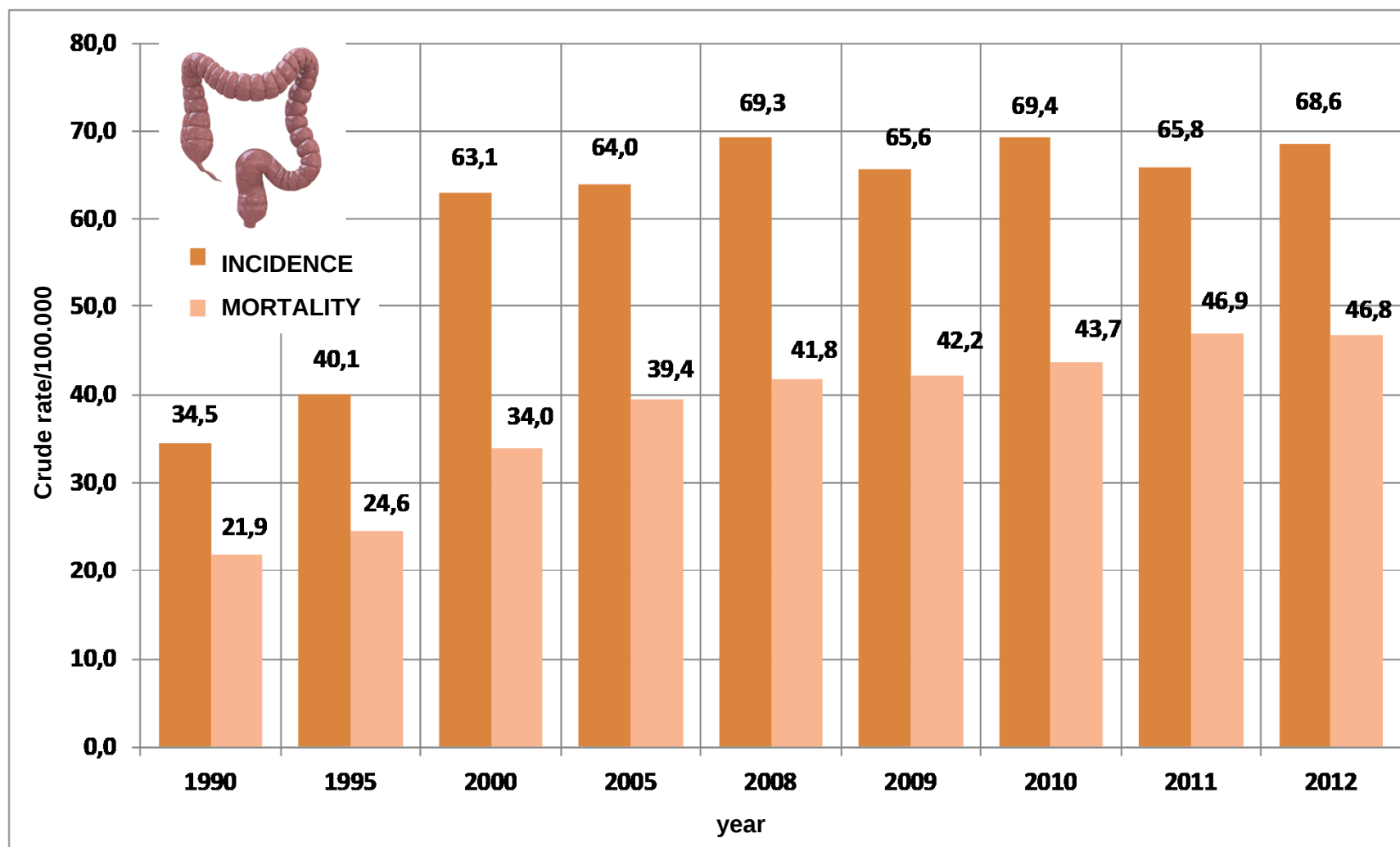
Colorectal cancer

INCIDENCE:

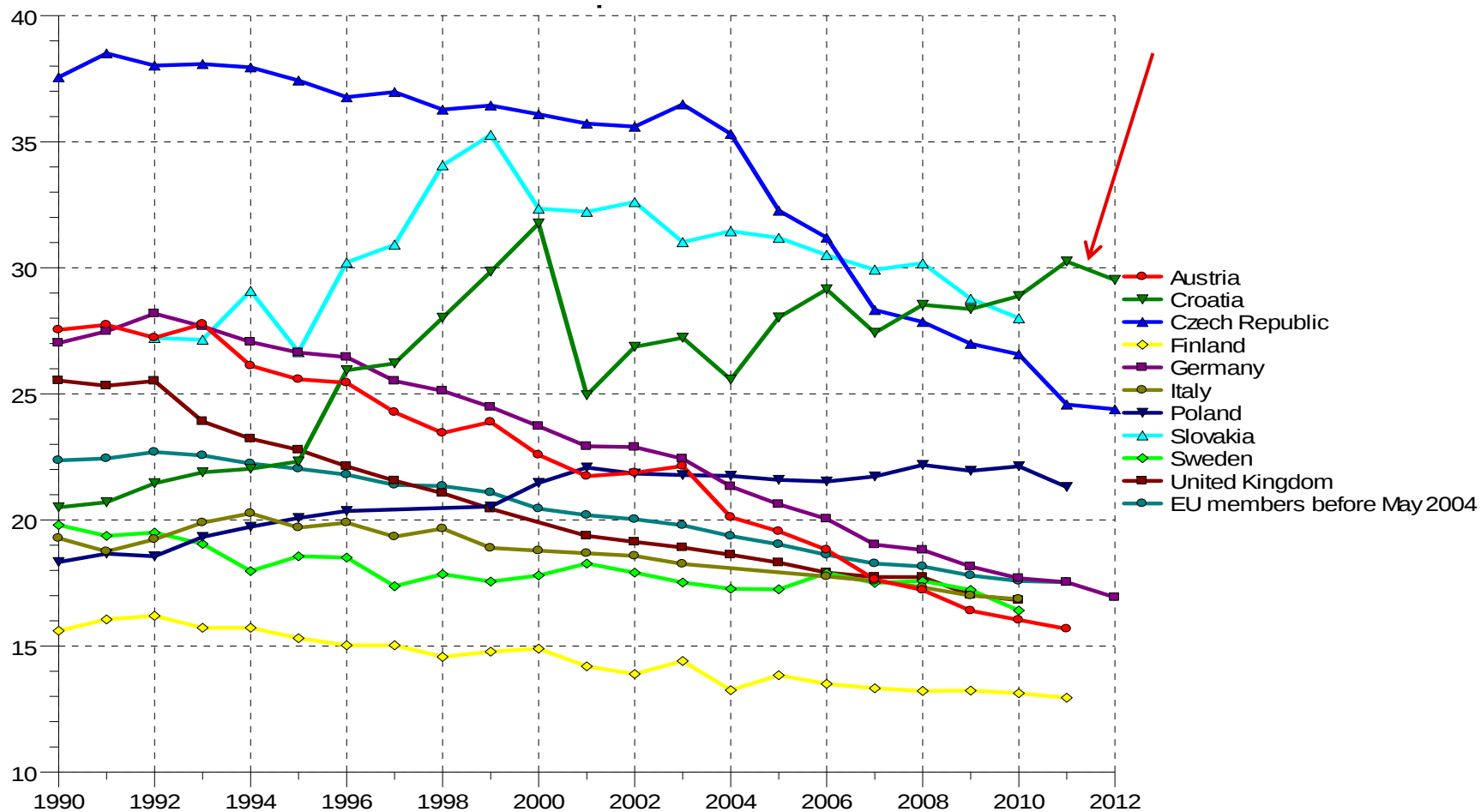
- 1990.g.- 1648 (34,5/100.000)
 - 2012.g.- 2820 (68,6/100.000)
- 1648 M i 1172 F

MORTALITY:

- 1990.g.- 1049 (21,9/100.000)
 - 2013.g.- 2004 (45,5/100.000)
- 1136 M i 868 F

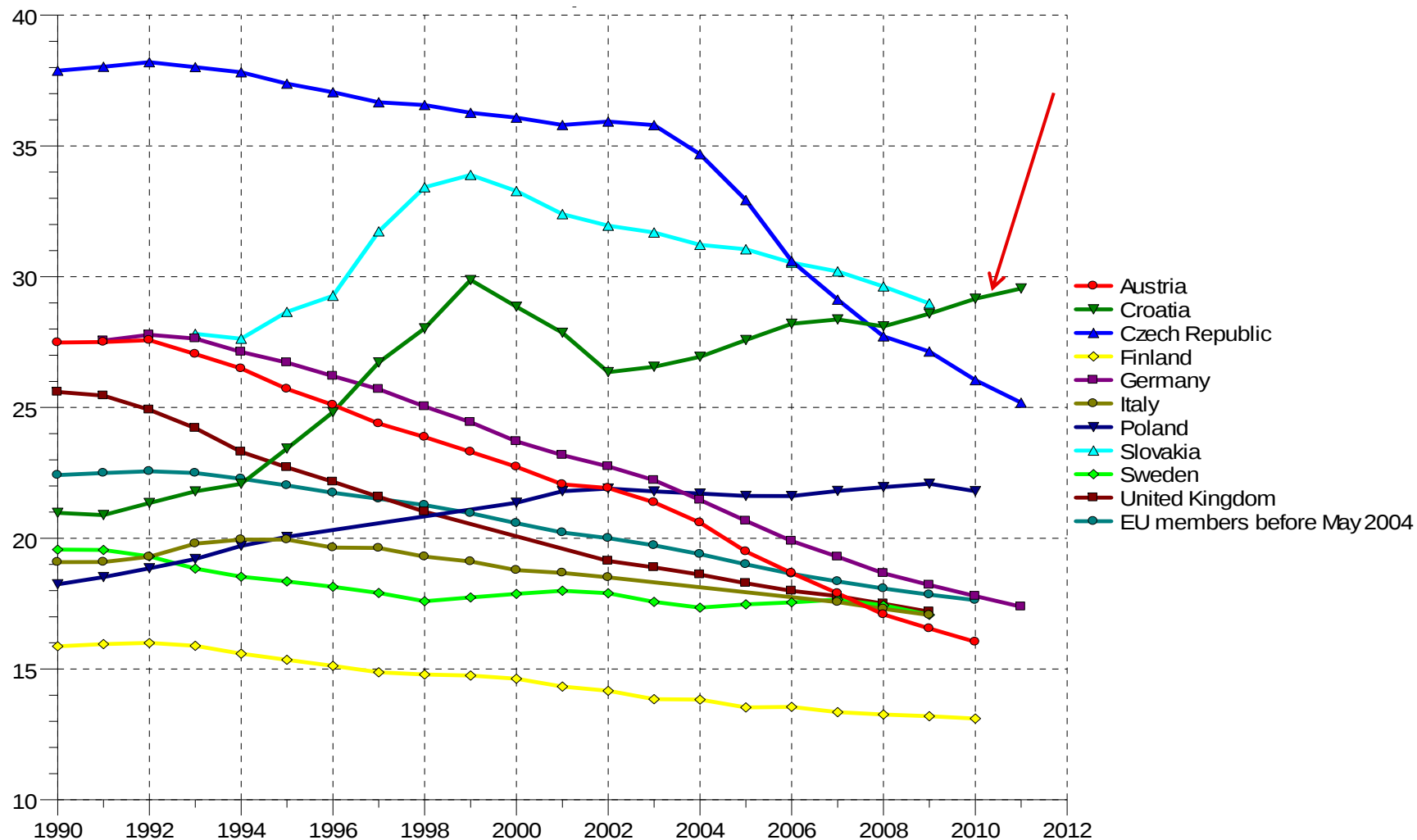


ASR-COLON, RECTUM, ANUS



Source: HFA database

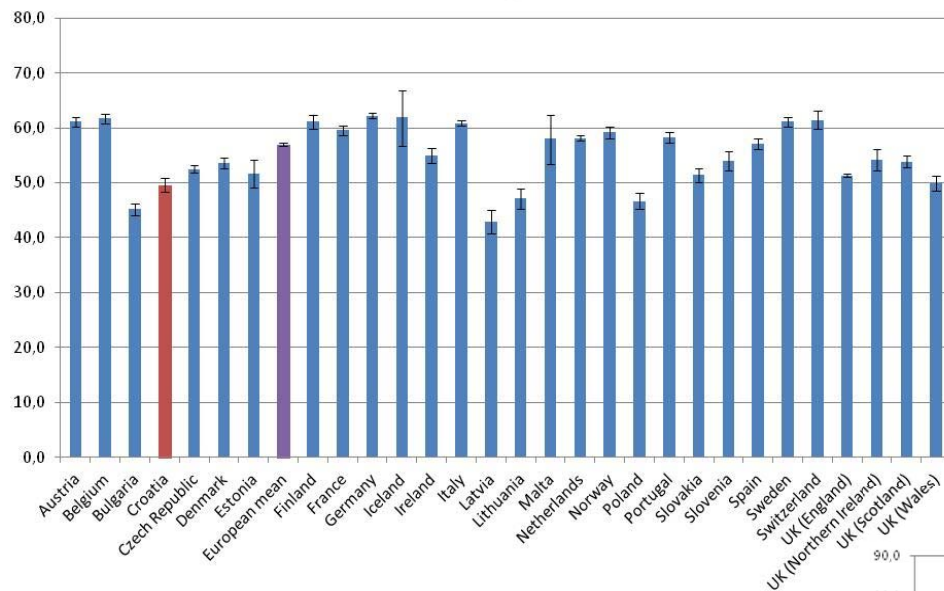
ASR-colon, rectum, anus-moving averages 3-year



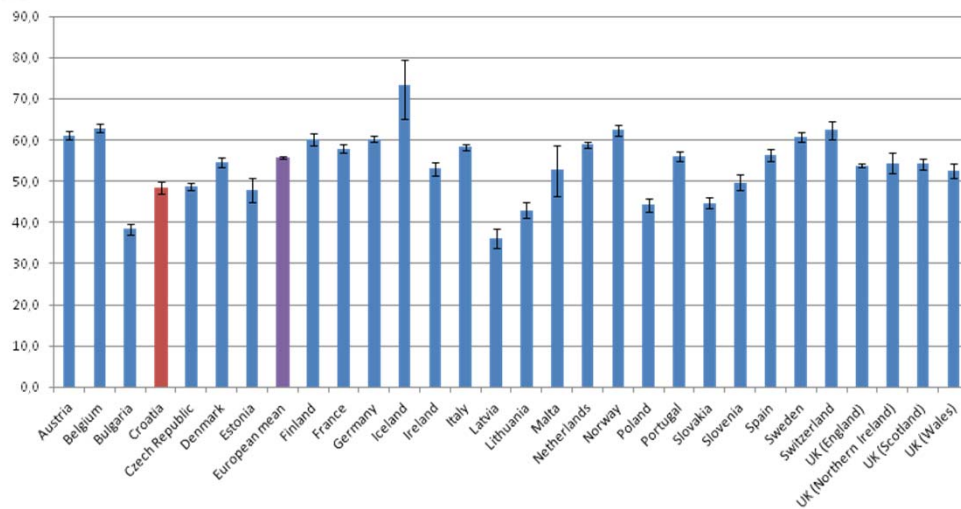
Source: HFA database

EUROCARE-5

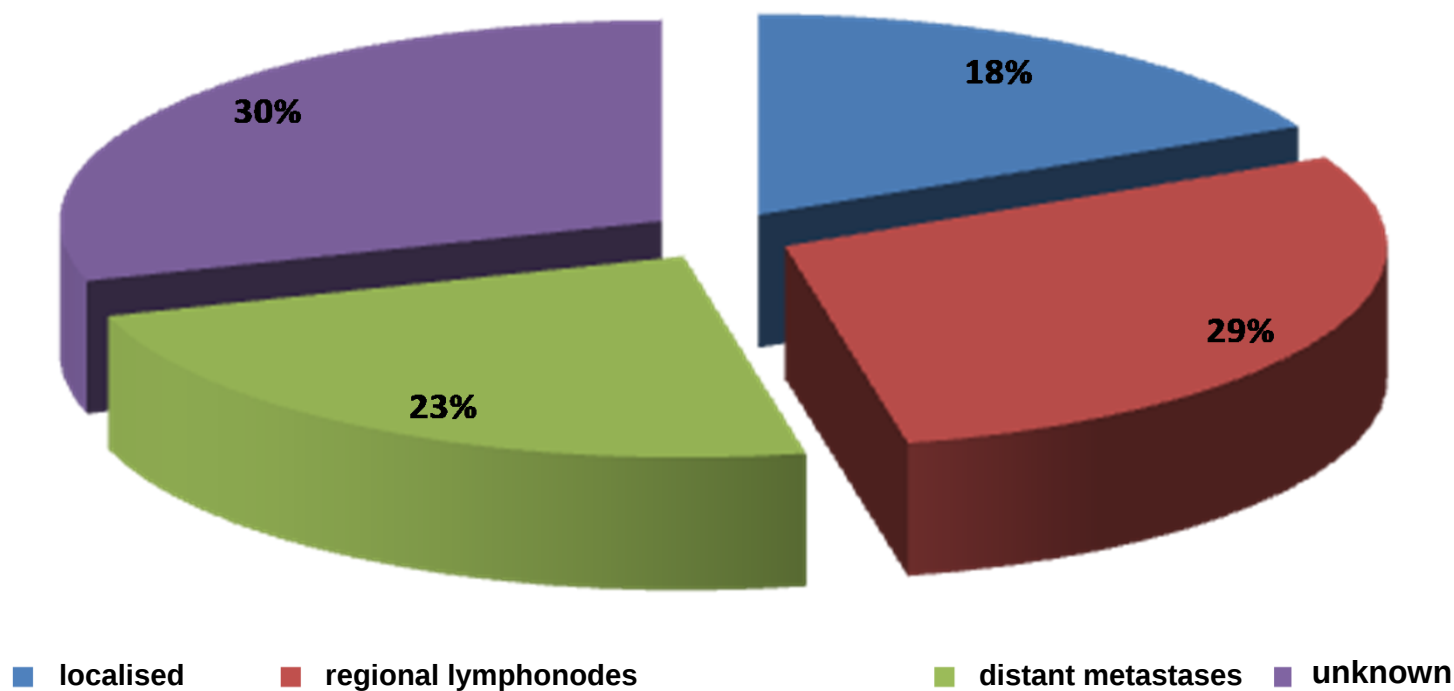
Colon cancer- 5 year survival



Rectal cancer 5-year survival



Cancer registry data





Results of 1. cycle

- 1.419.639 test-packages sent (99%)
- 288.935 packages returned-21% (according to EU guidelines expected response 17,2-70,8%).
- 247.520 persons sent correctly applied stool specimen
- 15.578 FOBT positive persons (6,3%, expected from 1.5-8.5%)
- 10.428 colonoscopies done (80%)
- 564 persons had cancer (2,3/1000 of all tested persons-EU guidelines 1,2-2,3/1000)
- 4.117 polyps detected (40% of colonoscoped persons)
- 2.983 persons had haemeroids, 1.825 divertikula and other, mainly inflammatory bowel disease
- false positive on FOBT was 939 (9%)



Program improvements

- participation in meetings of associations of patients (eg. day of persons with stoma ILCO-Day of blue iris)
- purchased a colon model used in the education and promotion
- made the facebook page with a unique telephone number,
- call center for routing information
- TV spots that are broadcast on TV
- published in the widely circulated newspaper
- direct contact and training carried out by employees of Institute of Public Health
- instructions for the test on a hidden blood in the stool has been simplified, in line with recommendations from the European guidelines, accompanied by a picture representation of persons with disabilities in understanding
- easier stool sampling enabled by supplied trays for toilet



Program improvements



- performed quality control for colonoscopy examination (planned single, enabled by PC application)
- process of ensuring quality control reading test on a hidden blood in the stool for all employees of the Institute for Public Health-implementation currently ongoing in May 2015
- also included training of gastroenterologists in the workshop Croatian Society of Gastroenterology-endoscopic section, education coordinator
- European guidelines have been translated and published on the web CIPH and MZ web pages
- creation and implementation of the new web program with which will be able to track responses and improve the quality of the program, and a very important communication with family physicians (over CEZIH) and with the field nurses (already possible by web application, and soon over Web programs for field nurses)
- calling system and ordering connection with the system of e-orders for colonoscopy
- it takes some time to adjust all system participants to Web program achieved full functionality, and demonstrated value in the implementation and quality control of all participants

HEMOGNOST® TEST KOMPLET

UPUTA ZA PACIJENTE
POSTUPAK SAKUPLJANJA UZORAKA STOLICE

NAMJENA I SASTAV TESTA

HemoGnost test karton je brzi test za otkrivanje skrivenog (nevidljivog, okultnog) krvarenja u stolici.
Komplet se sastoji od tri HemoGnost test kartona, 12 kartonskih štapića, upute za korisnike i povratne kuverte s vrećicom za zaštitu uzorka. Može sadržavati i 3 sanitarnu podložku.

UVOD

HemoGnost test karton je jednostavan test kojim je moguće ustanoviti postoji li u stolici (zmetu) golim okom nevidljivo krvarenje, jer takvo krvarenje ima dijagnostički značaj u ranom otkrivanju zloćudnih bolesti debelog crijeva.

UPUTE ZA KORISNIKA PRIJE SAKUPLJANJA UZORKA STOLICE

Kako bi testiranje bilo pouzdano, potrebno je dobro proučiti ovu uputu jer neke bolesti i stanja mogu djelovati na rezultate testiranja. Potrebno je pridržavati se dolje navedenih preporuka:

- Test treba odgoditi krvarenje ili iz hemoroida ili mokraćovoda, ili imate projev ili menstruaciju.
- Sakupite uzorke iz tri stolice tijekom tri različita dana i to po četiri uzorka s različitih mjesta iz svake stolice.
- Ne uzimajte vitamin C (askorbinska kiselina) u količini većoj od 250 mg dnevno tri dana prije testiranja. To se odnosi i na dodatke hrani koji sadrže askorbinsku kiselinu, limune i naranče, voće i sokove. Npr. prosječna naranča sadrži 70-75 mg vitamina C.

Prije početka testiranja obavezno pročitati ovu uputu za izvođenje testa i upoznati se s izgledom HemoGnost test kartona.

Test karton sastoji se od prednje strane na kojoj se nalazi veliki poklopac i naziv testa HEMOGNOST, i stražnje strane na kojoj se nalaze dva manja poklopca s naznakom da je poklopac dozvoljeno otvoriti samo u laboratoriju. **Pacijent prilikom testiranja otvara i zatvara samo veliki poklopac na prednjoj strani testa, dok se stražnju stranu testa ne smije dirati.**

VAŽNO!

- Spriječiti doticaj stolice s vodom u zahodu stavljanjem presavinutog novinskog papira na površinu vode. Nakon uzimanja uzorka, isprati zahod. Ako je priložen, na dasku postaviti sanitarnu podložku.
- Zaštititi HemoGnost test karton od prekomjerne hladnoće, vlage, topline i izravnog sunčevog svjetla.
- HemoGnost test karton čuvati na sobnoj temperaturi izvan dohvata djece.
- HemoGnost test karton s nanijetim uzorcima stolice poslati u zdravstvenu ustanovu unutar 7 dana od sakupljanja prvog uzorka.

Slikovni prikaz na drugoj strani →

POSTUPAK TESTIRANJA (tijekom tri dana)

1. Na prednju stranu HemoGnost test kartona napisati: IME, PREZIME, ADRESU I DATUM.



2. Otvoriti prednji veliki poklopac HemoGnost test kartona. Otvara se na donjem dijelu gdje se nalazi crvena strelica i natpis "OTVORITI OVDJE".



3. Priloženim kartonskim štapićem nanijeti uzorak stolice veličine zrna pšenice i namazati ga u tanom sloju unutar kruga označenog slovom A.



4. Ponoviti isti postupak na površinama polja B, C i D uzimajući novim kartonskim štapićima uzorke s raznih dijelova stolice.



5. Zatvoriti poklopac HemoGnost testa tako da se zakači na mjestu označenom crvenom strelicom i natpisom "ZATVORITI OVDJE". Taj natpis postaje vidljiv tek nakon što se otvori prednji veliki poklopac. (Vidi slike!)



6. Spremiti karton u priloženu vrećicu za slanje u zdravstvenu ustanovu.



Ponoviti postupak na identičan način i drugi i treći dan, uz upotrebu NOVOG HemoGnost test kartona i NOVIH, ČISTIH kartonskih štapića.

Sva tri HemoGnost test kartona zatvoriti u vrećicu, staviti u priloženu kuvertu i ubaciti u poštanski sandučić.



Slikovni prikaz na drugoj strani →



Skinuti zaštitnu traku s prednjeg podloška

Sanitarni podložak

Pomoćno sredstvo za uzimanje uzoraka stolice
Santarni podložak služi za sigurno i higijensku
sakupljanje uzoraka stolice, potrebnih za dobivanje
pouzdanih rezultata pretraga



Skinuti zaštitne trake sa sanitarnog podloška i
zaljepiti ga na dasku WC školjke. Pri tome paziti da
podložak ne dođe u dodir s vodom, sredstvom za
čišćenje ili osvježavanje WC školjke.
Uzorak stolice uzeti u skladu s uputama.

Skinuti zaštitnu traku s prednjeg podloška



Nakon uzimanja uzorka, istovremeno odlepiti oba
kraja podloška s dasko i spustiti u školjku. Kako bi
se izbjegnulo ispuštanje, prije ispiranja WC školjke
pričekati da papir osuškne.
Preporuča se korištenje BioGnostovog sanitarnog
podloška bez obzira na vrstu WC školjke, u
zdravstvenim ustanovama i za kućna testiranja.

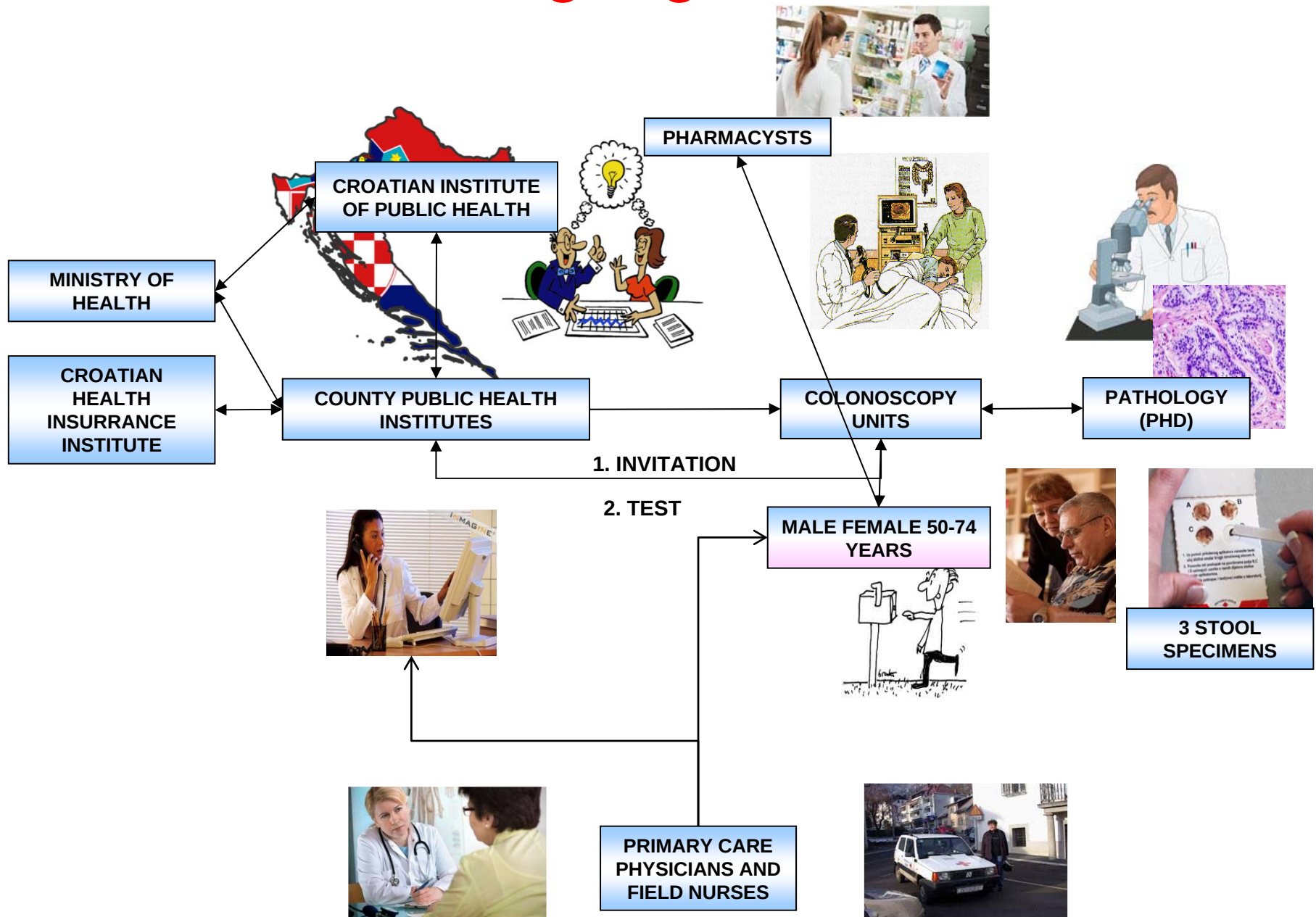
MediGnost d.o.o. - MediGnostika 55, 10040 Zagreb
tel: +385 1 3380 991, fax: +385 1 2454 639
www.mediagnostika.hr



II cycle-preliminary results

- invitation sent to 901.152 persons
- 686.760 of them responded and finished process
- till and of 2014. average respons was 21% but range was between 15 - 37%
- 83.067 people were tested
- 3.104 were FOBT positive (3,7%), colonoscopy done in 2.163 persons
- confirmed data for 100 persons with colorectal cancer
- 795 persons with polyps (37%), and in 1.026 osoba other findings

CRC screening organisation





Epidemiologic indicators

- response to first invitation
- causes of non-response
- response to FOBT
- response to FOBT with correctly applied specimen
- response to colonoscopy
- colonoscopy quality
- rate of findings (polyps, size, Cudo classification, etc.)
- pathohistologic findings and rates
- complications
- time from FOBT positive reading to colonoscopy



Informatisation

- web application by Ericsson Nikola Tesla and MCS, reporting system SPAGO-BI
- connection with CEZIH (info system of primary care)
- so called GX applications-for GP-s
- new application for field nurses
- e-ordering an e-prescription (IN2), generation and connection with hospital systems (BIS, ENDO)
- problems with connection together
- harmonisation of current system



Great possibilities

- reporting system, opportunities to generate new reports
- all indicators can be compared
- this year is period of implementation and correction
- preparation for 3. cycle
- planning more education to improve colonoscopy quality
- future-equipement, including all society in arising knowledge about possibilities

Does European quality control guidelines answer all questions?

- different systems
- no unique recipe
- great field for learning, but who want to learn?
- long lasting programme
- slow results
- not for one ministry mandate

