COLORECTAL CANCER screening
THE LOGISTICS BEHIND....

T Ponchon
Edouard Herriot Hospital
Lyon, France, Europe
SCREENING in FRANCE

Mass screening: FOBT/ 2 years mean risk colonoscopy if FOBT pos. Organized by the state

Individual screening: Direct colonoscopy high risk, very high risk Organized by the scientific societies
Mass screening in France

Launched in 2002:
- 22 regions out of 95
End 2007: 41 regions
Mid 2008: 63 regions
End 2008:
- 95 regions = the whole country
- 18 millions persons

All persons > 50y and < 75y are advised by mail to see their GP to get the tests.
RESULTS

18 Millions people invited
Compliance to test: 31%

%age of exclusions (previous colono): 12.3%
%age of positive tests: 2.2%

Compliance to colonoscopy if positive test: 87%

Number of adenomas: 33.1% / colonoscopies
Number of cancers: 9.3% / colonoscopies
Stage 0-1-2 = 73%
COLORECTAL CANCER screening
THE LOGISTICS BEHIND....

Cost related to logistics
Logistics itself
COLORECTAL CANCER screening
THE LOGISTICS BEHIND....

Cost related to logistics

Logistics itself
Why CRC screening has been launched in France?

Deaths related to CCR: 17,000 / years
Deaths related to road accident: 4,000 / years

In Rhone region (2 Million inhabitants)
400 persons can be saved / year

It saves lifes and......
Why CRC screening has been launched in France?

Deaths related to CCR: 17 000 / years
Deaths related to road accident: 4 000 / years

In Rhone region (2 Million inhabitants)
400 persons can be saved / year

It saves lifes and.................MONEY
Why it has been launched in France?

Cost-effectiveness

UPPER LIMIT accepted by French authorities

Cost per year of life saved
< 2 gross national product/head

Or Cost < 50000 $

Cost-effectiveness analysis of fecal occult blood screening for colorectal cancer.

COST OF THE MASS SCREENING PROGRAM

Direct cost
breast cancer screening \( 38-53 \text{ M}\€ \)
colorectal cancer screening \( 111-122 \text{ M}\€ \)

Indirect cost for both programs \( 76 \text{ M}\€ \)

TOTAL COST \( 208-234 \text{ M}\€ \)
COST OF THE MASS SCREENING PROGRAM

COST per person screened for CRC: 21.9 €
(breast: 19.1 €)

COST per CR cancer detected: 9531 €
(breast: 3000 €)
COST with FOBT mass screening:
2500 euros / year of life saved

In comparison, for advanced CCR, with chemotherapy
Minimal COST = 50 000 euros / year of life saved
COST OF THE MASS SCREENING PROGRAM

THE PAYERS:

The SOCIAL SECURITY (= The state)

The REGION

Following discussions (negociations) at a regional basis, every year, between the payers and the regional agency in charge of breast cancer and colorectal cancer screening
COLORECTAL CANCER screening

THE LOGISTICS BEHIND....

Cost related to logistics

Logistics itself
Organisation 1

Mail invoice to the whole population 50 to 74 years

General practitioner

1) excludes high risk patients (direct colonoscopy)
2) distributes and explains the test
3) also explains the limits of the test:
   • explains that, if the test is negative and if patient then present symptoms, the patient has to have a colonoscopy

Test repeated / 2 years if negative
Organisation 2

General practitioner

Has then a major role for population education also to promote individual screening by colonoscopy if high risk patient.

Should also be motivated and trained (By the regional agency and the gastroenterologists)

Receives fees as a compensation (for training, then for test distribution)
Regional center for cancer screening

1. Invitation letter to see the general practitioner
   Uptake = 35%

2. Invitation letter to see the general practitioner
   Uptake = 15%

3. Mailing of the test directly at home
   Uptake = 10%
Organisation 3: logistics…

Registry of the whole population 50-74y (social security registry) = NOT ANONYMOUS

One agency per region (same as breast cancer mass screening)

To organize the program
To send the letters to the persons
To provide tests to the GP
To collect all the data: exclusions, test results, colonoscopy results, surgical results, histology, ……
Organisation 3: logistics...

6-20 persons full time / region
(including a webmaster and a communication assistant)

Budget in Rhone region: 2.5M€ / year
Organisation 4: logistics…

A national pilot committee

to follow the results
to decide for minor modifications or adaptations

The National agency against cancer
To organize and sponsor research on screening

The National agency on healthcare survey
To store and manage all the data
Organisation 5: colonoscopy…

Standardized case report form

National registry, quality standards

2000: prior mass screening

  1.1 Millions colonoscopies / year

2008: after mass screening

  1.2 millions colonoscopies / year
  plus 0.1 million colonoscopies due to mass screening only
  only 10% increase
A major gap in France

Logistics are not for high risk patients: patients who undergo colonoscopy are not well followed up
COLORECTAL CANCER screening
THE LOGISTICS BEHIND....

CRC screening saves money

Nevertheless logistics are expensive and should be well adapted and sized