

Physicians' Point of View on a Colorectal Cancer Screening Program

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Outline

 Context Conceptual framework Objectives Methods Results Conclusions



Context

Second killer among cancers

MEN

Incidence Mortality

1. Prostate 1. Lung

2. Lung 2. **CRC**

3. **CRC** 3. Prostate

WOMEN

Incidence Mortality

1. Breast 1. Lung

2. Lung 2. Breast

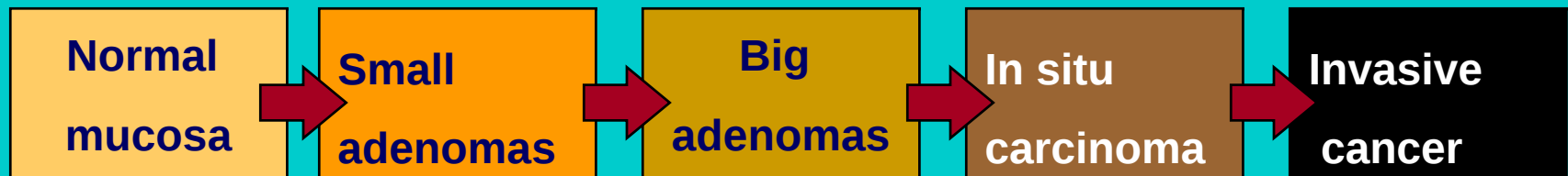
3. **CRC** 3. **CRC**

Source: National Cancer Institute, 2001



Context

Detectable preclinical stages



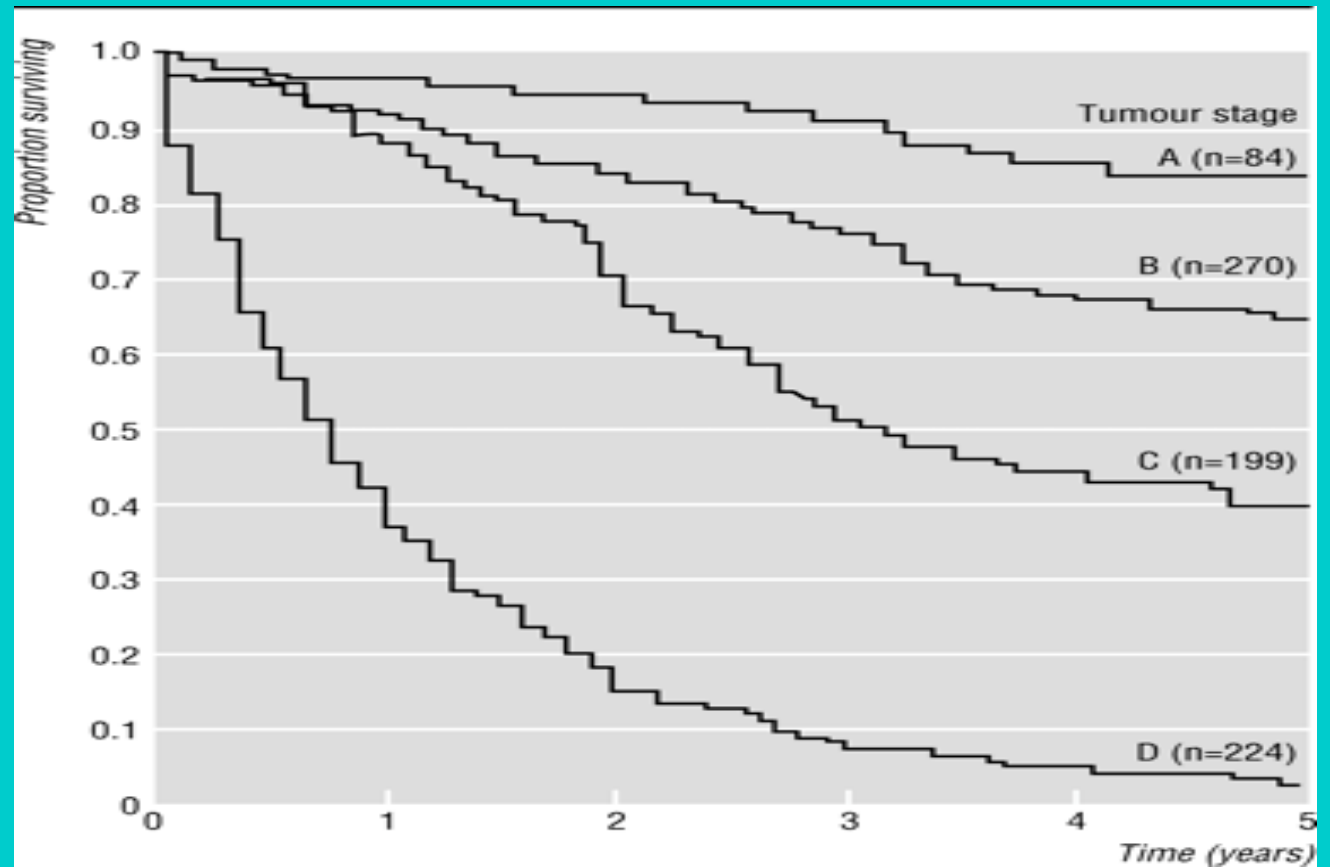
10 years in average risk population

Source: CETSQ, 1999



Context

Survival according to stage

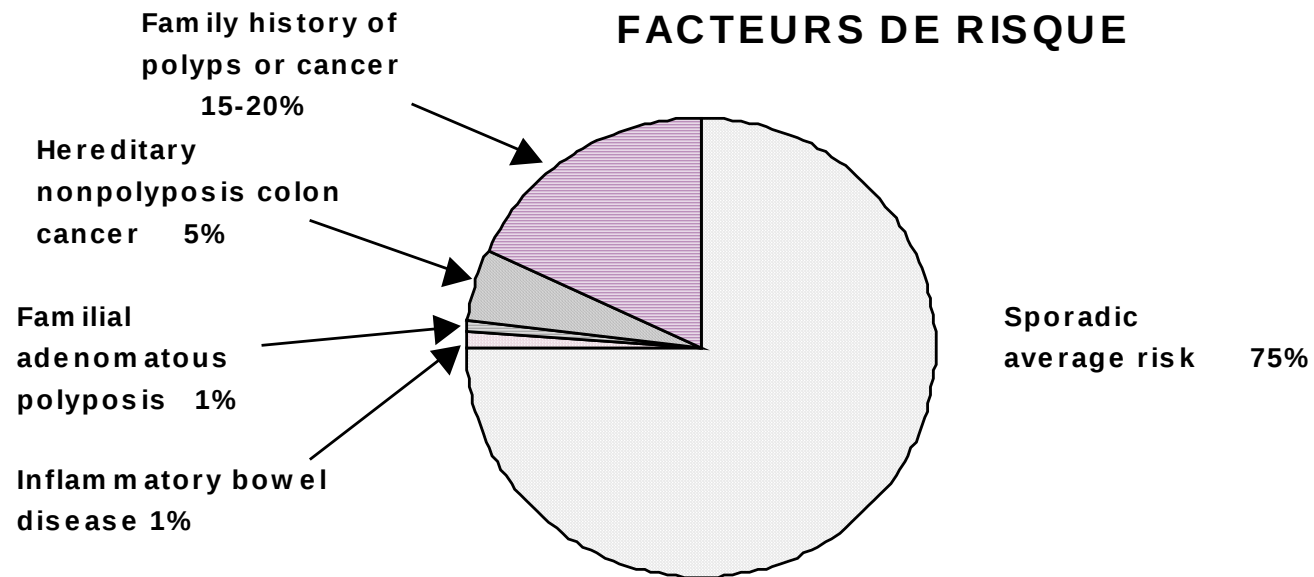




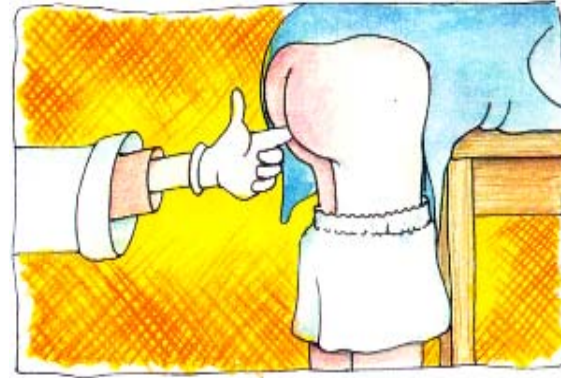
Context

Risk factors

FACTEURS DE RISQUE



Digital Rectal Examination (DRE)

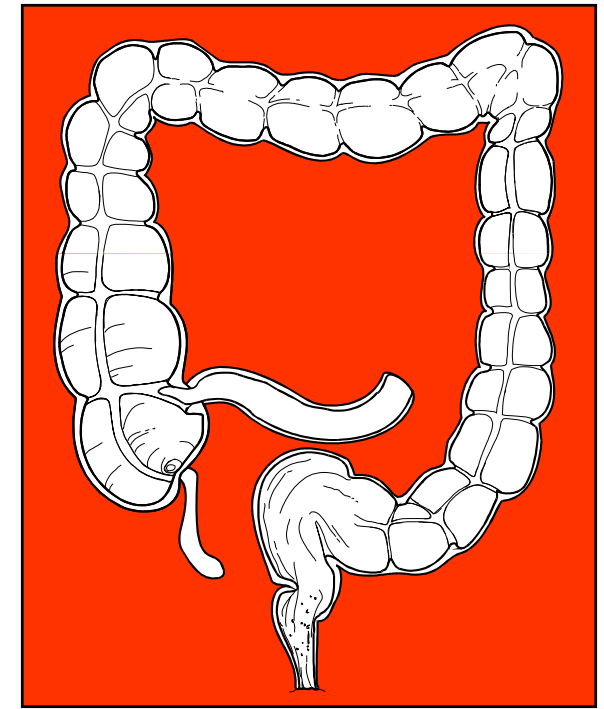


➡ Sensitivity for cancer: 10%

➡ Finger 7-8 cm long, rectal mucosa 11 cm

➡ Tendancy of cancer to migrate up

Fecal Occult Blood Test (FOBT)



- ➡ Sensitivity for cancer: 40-60%
- ➡ Sensitivity for adenomas: 3-14%
- ➡ False positives for cancer: 2-10%

Source: CETSQ, 1999 ; Australian Health Technology Adv. Committee, 1997;
US Preventive Task Force, 2002

Double Contrast Baryum Enema

➡ Sensitivity for cancer:

55-85%

➡ Sensitivity for adenomas:

< 1 cm = 32-53%

> 1 cm = 48%

➡ False positives for cancer:
< 1%

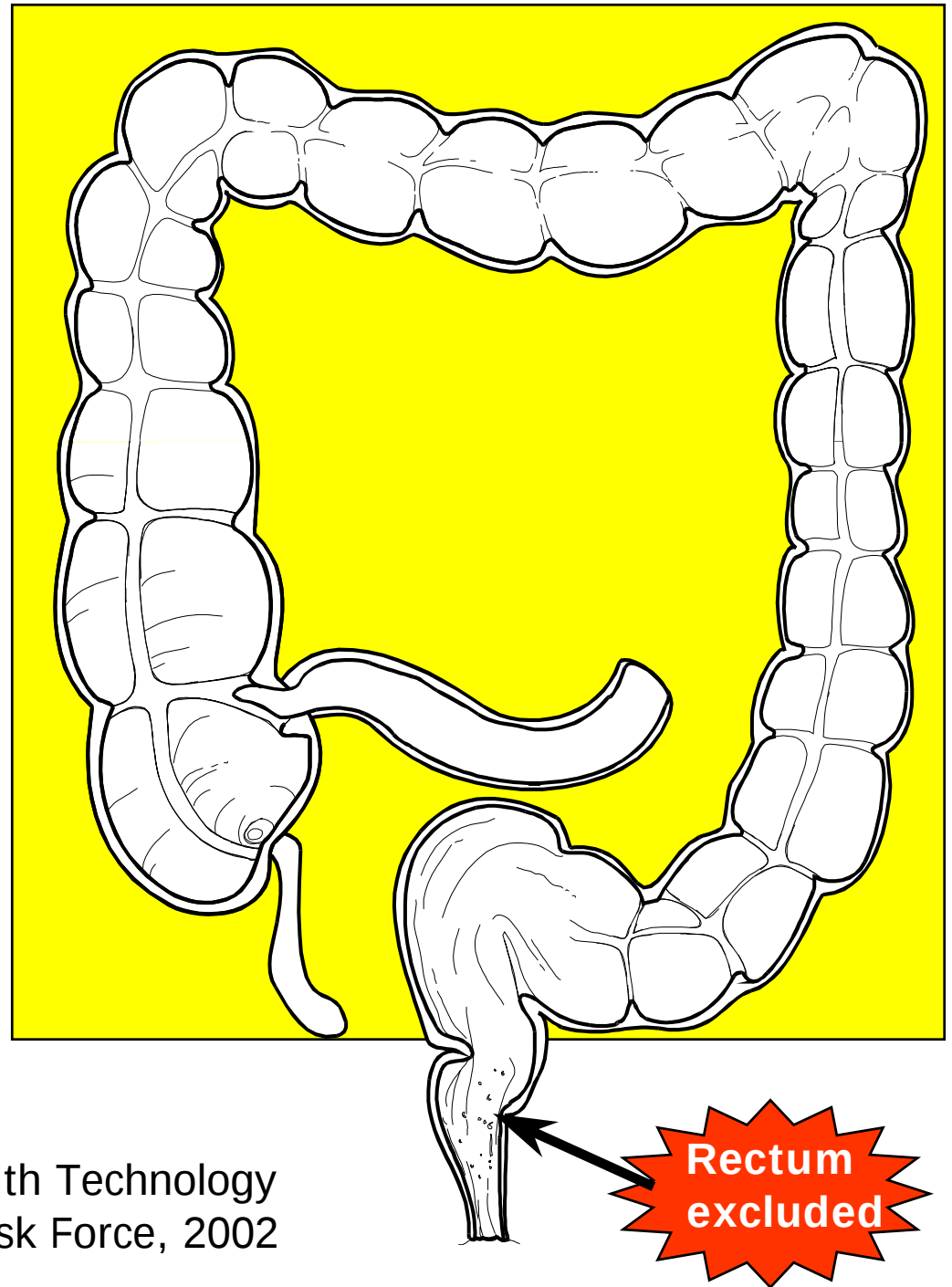
➡ Perforation: 4/100 000

cardiac: 2/ 100 000

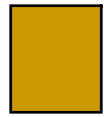
infection: rare

mortality: 2/100 000

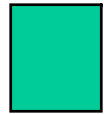
Source: CETSQ, 1999 ; Australian Health Technology Adv. Comittee, 1997; US Preventive Task Force, 2002



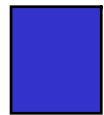
Sigmoidoscopy



Rigid: 20 cm



Flexible: 35 cm



Flexible: 60 cm

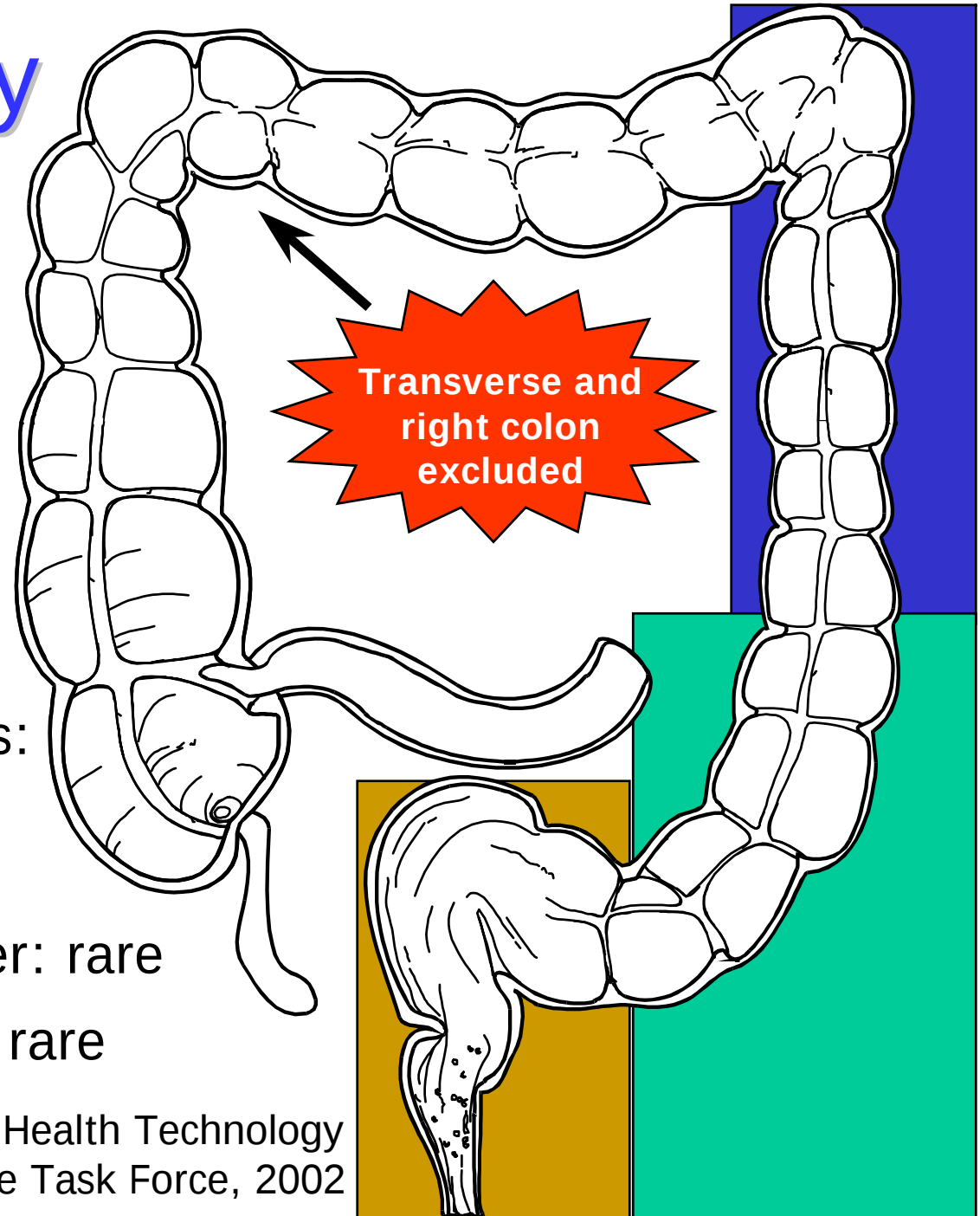
➤ Sensitivity for cancer:
70-80%

➤ Sensitivity for adenomas:
< 1 cm: 70-85%
> 1 cm: 100%

➤ False positives for cancer: rare

➤ Perf: 10-20/100 000 inf: rare

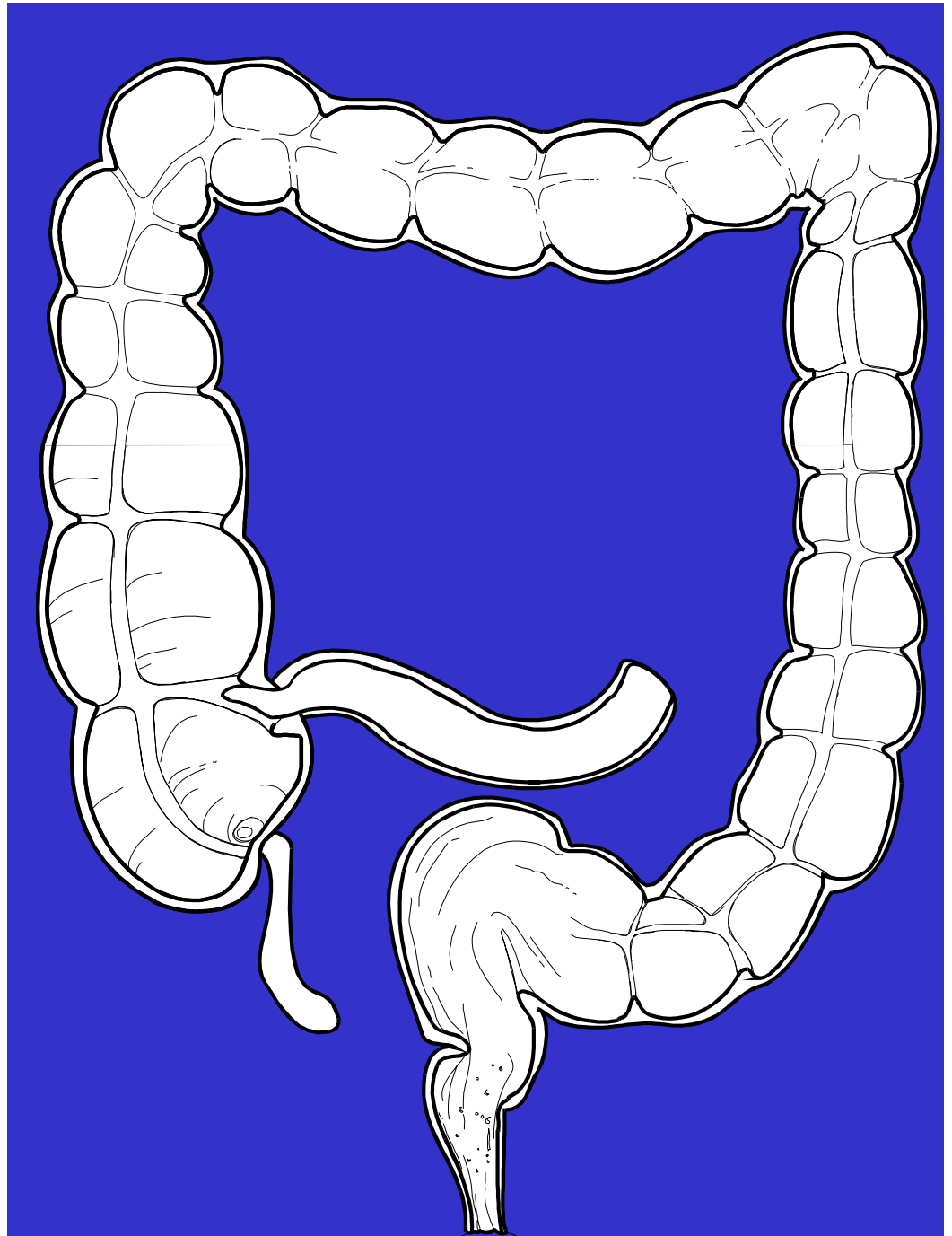
Source: CETSQ, 1999 ; Australian Health Technology Adv. Committee, 1997; US Preventive Task Force, 2002



Colonoscopy

- Sensitivity for cancer:
100%
- Sensitivity for adenomas
< 1 cm: 75%
> 1 cm: >90%
- False positives for cancer
rare
- Perfor: 300-600/100 000
cardiac: 500/100 000
resp: 300/100 000
hemorrhage: rare
mortal: 3-33/100 000

Source: CETSQ, 1999 ; Australian Health Technology Adv. Committee, 1997; US Preventive Task Force, 2002





Context

Recommendations (CPGs) for *average risk* >50 yo

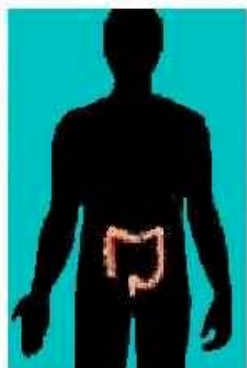
Test	CTFPHC (2001)	USPSTF (2002)
FOBT (Annual, biennial)	A	A
Sigmoidoscopy	B	B
Combined FOBT/Sigmoid.	C	
DCBE	C	C
Colonoscopy	C	C



Context

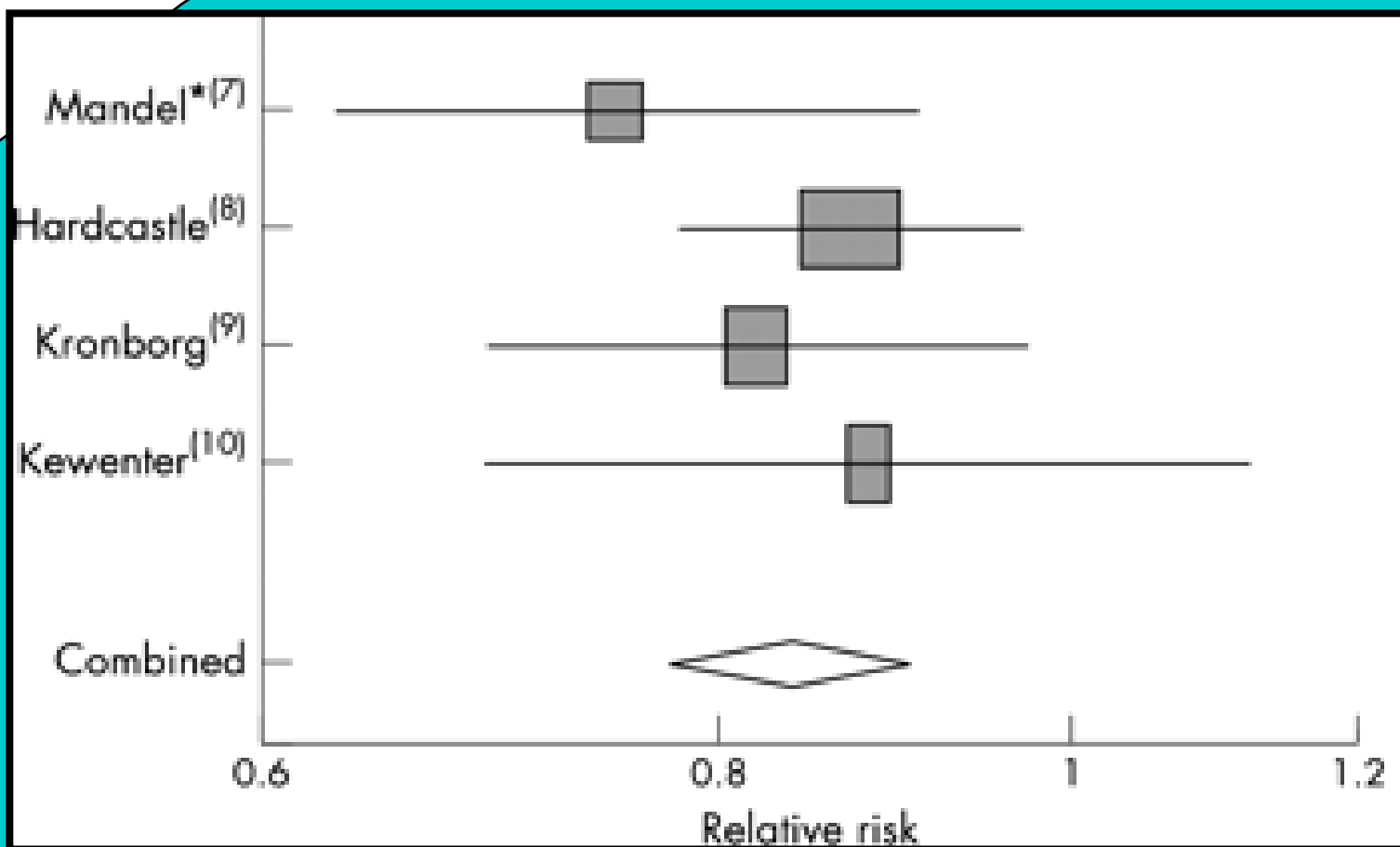
Recommendations (CPGs) for above average risk

Test	CTFPHC (2001)
Sigmoidoscopy for FAP	B
Genetic testing for FAP	B
Colonoscopy for HNPCC	B
Colonoscopy for first degree family history of polyps or CRC	C



Context

Screening program Effectiveness



Source: Towler et al., 2002



Context

Screening program Costs

Scenario	Frequency	Biannual	Annual
	Screening participation	67%	67%
FOBT	FOBT done per year (millions)	2,8	4,9
	Positive FOBT	59 267	118 434
Colonoscopies	Number of colonoscopies	55 845	111 654
Costs	Cost per year (millions)	112 \$	194 \$
	Screening costs in proportion to total	23,6%	35,1%
	Reduction in treatment costs	4,8%	5,8%

Source: Flanagan et al., 2001



Context

Screening program
Population participation

In randomized controlled trials:

- Participation to initial screening test (FOBT)
has been 53 to 67%
- Participation to all recommended screening
and diagnostic tests has been 38 to 46%



Context

Screening program Feasibility studies

CETSQ (AETMIS) suggested in 1999

- ➡ A multiphasic program designed according to British and Danish trials
- ➡ Targetting asymptomatic 50-79 yo persons
- ➡ Using biennial FOBT returned by mail as the first test
- ➡ Any positive FOBT referred for medical examination and diagnostic or therapeutic colonoscopy
- ➡ Need of feasibility and pilot studies to validate Quebec operational parameters

Conceptual Framework

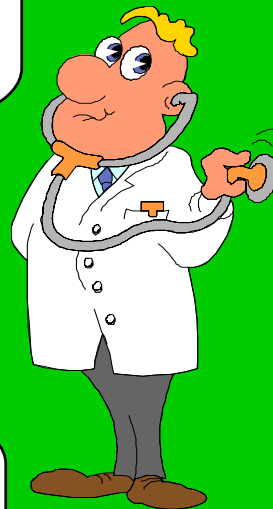
Predisposing factors

Facilitating factors

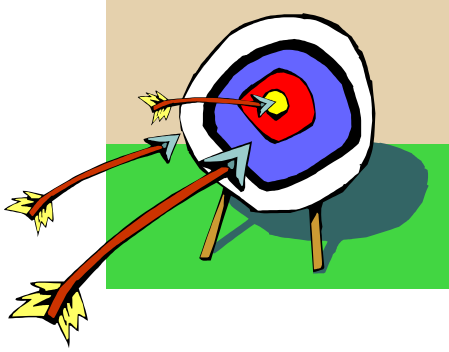
Reinforcing factors

Health care system
organisational
factors

Characteristics
of preventive
activity



Source: Walsh and McPhee, 1992



Objectives

- ➡ Document current screening practices
- ➡ Identify factors which influence on the adoption of colorectal cancer screening
- ➡ Define interventions which are the most able to help the implementation of a screening program

Methods

👉 Data collection

👉 Data processing

Data collection : GPs



- ➡ 474 /1250 GPs selected to receive faxed invitations
- ➡ Interested physicians recalled by phone with final recruitment of 44 participants into 5 focus groups
- ➡ 2 hours of discussion, followed by a 1 hour update and video presentation on CRC screening
- ➡ Independent interviewer leading the discussion
- ➡ Expert speaker from the Public Health Directorate
- ➡ CME credits and 150 \$ paid for each participant by the medicare / medical association CME fund
- ➡ Lunch provided by the research fund

Data collection : Gastroenterologists and General surgeons



- ➡ All the 47 Gastroenterologists and the 51 General Surgeons received faxed invitations
- ➡ Interested physicians recalled by phone
- ➡ Final recruitment of 5 Gastroenterologists and 4 General Surgeons in 2 phone group discussions
- ➡ Independant interviewer leading the discussion
- ➡ 1 hour duration
- ➡ 150 \$ paid to each participant by the research fund

Data collection : Other medical specialists



- 8 biochemists met on their monthly meeting
- 1 pathologist
- 1 hemato-oncologist
- 1 radiologist
- 1 surgical oncologist
- Semi-structured face to face interviews

Data processing : Focus Groups and Phone Groups



- Informed consent obtained
- Recording and transcription of verbatim
- Coding X 2 - intra and intercoder cross-checking
- Team discussion about codes adopted
- Encoding and data management using NUD.IST 4.0
- Condensation, presentation and organisation, interpretation and verification of data according to Huberman and Miles (1991)

Prescription of screening tests by 44 GPs pre and post CME



SKETCH		DRE	FOBT	DCBE	SIGM	COLO
M 53, PHE	Pre	37	11	2	2	2
	Post	22	32	0	1	1
F 62, PHE, CRC in mother 70	Pre	30	20	5	2	20
	Post	18	26	3	6	12
M 51, fear of cancer, polyps in father 70 and brother 55	Pre	33	18	4	6	27
	Post	18	22	2	3	23
M 40, fear of cancer, CRC in mother 58	Pre	28	13	7	2	19
	Post	19	24	1	3	15

Pros and Cons of screening tests according to 44 GPs



Test	Pros	Cons
DRE	low risk, low cost simple useful for prostate	low sensitivity technical limits neglected in women
FOBT	high accessibility low cost facilitating other inv.	false +/- requires explanations diet/med. restriction
DCBE	high accessibility sensitive/specific safe	uneasy preparation misses polyps misses rectum
Sigmoïdoscopy	medium accessibility specific allows for Bx	medium tolerability misses high lesions medium risk
Colonoscopy	gold standard not for screening allows for Bx and Tx	low accessibility low tolerability high risk

GPs vs Specialists



Issue	GPs	Specialists
Who should undergo screening	average risk population (high risk already cared for)	high risk first
Guidelines	confusing recommendations	clear recommendations
Ressources	delegate endoscopy to nurses	delegation is not cost- effective
Screening tests	FOBT unsatisfactory (3/4) : new tests needed	FOBT with better standardization is OK
Colonoscopy as first screening procedure	yes for symptomatic, FOBT positive or high risk, not for average risk	yes for all

GPs behavior determinants

Predisposing factors

- 3/4 agree with a mass screening program (feeling guilty about average risk !)
- Perceive playing a role in risk factors detection, screening, counselling and keeping a trustful relationship
- Think patients are fearful, passive and lack skills for screening

Facilitating factors

- Guidelines ill known and confusing

Reinforcing factors

- It is our work to prevent, to find cases, to save lives
- Patient satisfaction
- Support from associations

Health care system organisational factors

- Lack of professional resources including GPs
- Need for new endoscopy facilities
- Limited time for screening
- Lack of reimbursement

Characteristics of preventive activity

- Low acceptability of present tests



Specialists behavior determinants

Predisposing factors

- A majority agree with a screening program, giving priority to high risk groups (more gain, model to be tested)
- Perceive playing a proactive role, in choosing tests after consensus with other specialists and in performing tests
- Think patients should have a choice between options
- Fear lack of training and resources, useless tests

Characteristics of preventive activity

- Much to do to improve the quality of FOBT (biochemists)



Facilitating factors

- Guidelines from the literature and expert groups / associations well known
- Experience is the key factor

Health care system organisational factors

- Patients referred by GPs mostly for symptoms, some for familial CRC or polyps, very few (1%) for average risk
- The waiting list is the problem...
- Lack of professional resources including specialists and lack of material
- Lack of coordination, follow-up

Suggestions of the physicians

Context	• Political and population will • Commitment of the medical community • Better tests available • Demonstration of cost/effectiveness
Organization and coordination	• Rapid access to confirmation tests • Structured program with database and recall of patients • Dedicated and accredited walk-in facilities
Communication	• Mass media education campaigns • Recruitment in relatives • Physicians' training for risk identification

Conclusions

- ➡ Most physicians agree with a mass screening program, even if they do not presently apply current recommendations to their patients. Specialists suggest to limit the program first to high risk groups.
- ➡ A structured program backed by political and professional commitment, mass media involvement, assisted by a computerised database, increased human and material resources, reimbursement and better training for physicians could overcome some barriers to implementation.
- ➡ Combination of a focus group and a CME activity has increased recruitment and been effective for short term change in attitude.

The future...

