

# Primary care at the forefront of colorectal cancer screening

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Presentation by

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# Introduction



Prague



**1.7.2000**



Institute of General Practice, Prague



Training practice

# Special interest in colorectal cancer screening

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- A member of a Foundation which initiated colorectal cancer screening in the Czech Republic in 2000
- Representative of GPs in Czech National Colorectal Cancer Screening Committee
- Education for GPs and public on CRC screening
- Research on
  - the role of primary care physicians in screening
  - attitudes toward screening in target population
  - FOBT methods

# Characteristics of the medicine in the 3rd millenium

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- Key issue: Non-communicable diseases
- Fascinating technology development
- Succeses in diagnostics and treatment and improvement of prognosis of serious diseases

## **Successes and expectations push medicine**

➤ towards prevention

➤ towards pro-active inteventions in asymptomatic people

# Prevention and screening

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## Consequencies:

- Ethics (nature of patient – doctor relation)
- Safety
- Costs
- Capacity

# Colorectal cancer is the most preventable visceral form of cancer

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- Stage of diagnosis matters!

*Early diagnostics helps to increase 5-year survival: Duke´s A (90%) v. stage with distant metastases (< 10%)*

- Colorectal cancer is preventable before exists.

*Identification and excision of risk polyps*

- About half of polyps/cancers bleed and blood can be detected by simple test.

- Colonoscopy is a method with high diagnostic and curable capacity

# Early diagnostics of colorectal cancer

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- The principal method of identification of colorectal cancer stays symptomatic presentation to GPs who are source of referral to secondary care.
- 90% of colorectal cancers detected
- Importance of research on early diagnostics

# Early diagnostics of colorectal cancer

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- GP Competence
- Interdisciplinary cooperation
- Referral system
- Capacity
  - Access to colonoscopy, waiting times
  - Prioritization

## Research:

- on sensitivity , specificity, PPV of symptoms
- on markers (iFOB, M2-PK, calprotectin stool test)



# Role of primary care in prevention

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## **Primary prevention**

## **Secondary prevention:**

- screening programmes for high risk persons
- screening programmes for average risk p.

## **Early diagnosis in symptomatic**

## **Quality of care/tertiary prevention**

# CRC screening: Implications for General Practice

**The involvement of GPs** varies in countries according to chosen strategy:

- Direct: performing FOBT (CR, SLO, GER)
- Indirect: recruitment for colonoscopy screening (Pol)
- Supportive: administrative, advices (UK)

## **The involvement of people**

- Population based screening (central invitation...UK)
- Organized screening (GP/patient activities, GE, Czech)
- Opportunistic screening (Poland)

Lionis C. Colorectal cancer screening and the challenging role of general practitioner/  
family physician: an issue of quality, *Quality in Primary Care* 2007; 15:129-31

Seifert B., The role of primary care in colorectal cancer screening: The experience from the Czech Republic,  
*Neoplasma*, 2008; 55:74-80

# Benefits of primary care involvement in screening program

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- complex approach to person
- personalised care
- additional value of preventive/screening programs (CV, GYN, MAM, CRC)
- cheaper

# Burden of screening program in primary care

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- Workload (up to 300 FOBT per year per practice)
- Organization issues
- Ethics
- Bad news

# What matters the most in screening?

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If we put money in colorectal cancer screening what affects the most the outcomes?

1. Adherence rate?
2. Choice of primary test?
3. Quality/capacity of endoscopic services?
4. Program monitoring /data collection?

# 1. Adherence rate

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# Population based v. organized screening

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- Programs using invitation system show higher adherence of target population
- Central invitation is the only way how to get participation over 50%.
- Invitation via GP offices increases the adherence rate in 8% (UK)

**CZECH PROGRAM: letters administered by sick funds (different for all three programs) will invite people to GPs (gynaecologists, mamma centrum) since 2013.**

# 1. Choice of primary test

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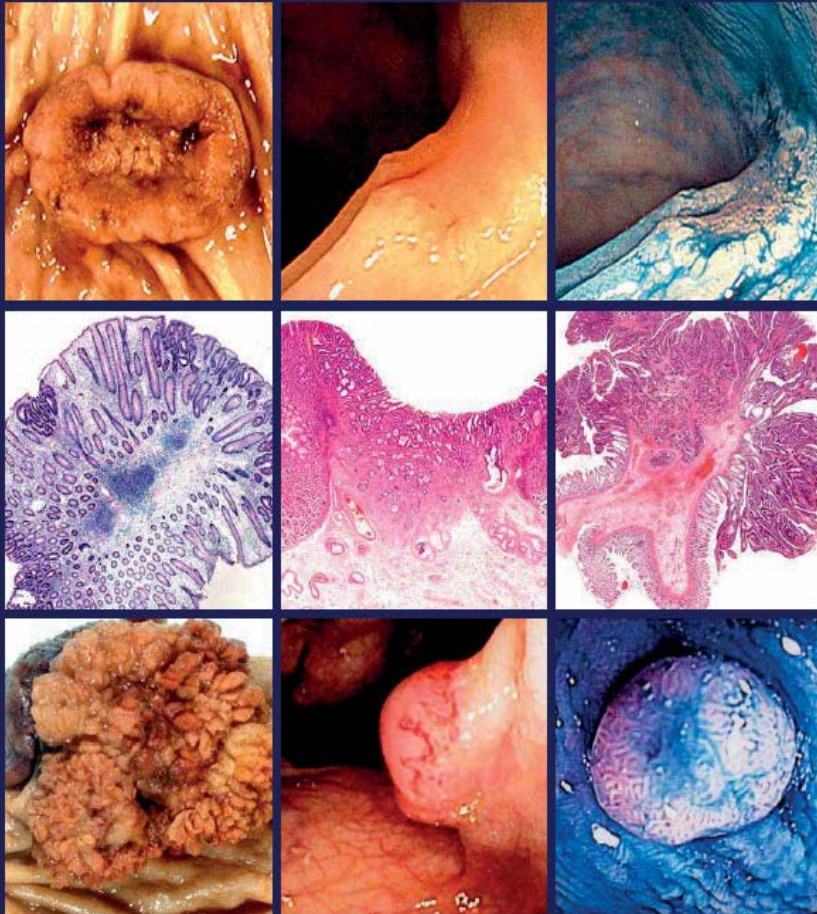


# European guidelines: FOBT

Dietary restriction is not indicated for programmes using either guaiac-based or immunochemical tests

- Drug restriction is not recommended for population screening programmes using either guaiac-based or immunochemical test

- The iFOBT is preferable over gFOBT (higher participation, smaller number of stool samples needed, automated reading, greater sensitivity for detection of advanced adenomas, similar PPV)



**European guidelines for quality assurance in colorectal cancer screening and diagnosis** *First Edition*



European Commission

# Optimal FOBT

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- Without **diet** restriction
- Simple (user friendly) quantitative **sampling**
- Easy **logistics** (POCT?)
- Automatic **reading**
  
- **Cut off options with regards to**
  - **optimal sensitivity and specificity**
  - **safety, capacity and cost/benefit**
  - **risk groups (men, seniors, diabetics)**

## ➤ **Quantitative iFOB tests**

# FOBT: Cut off optimization

CUT OFF	Number of colonoscopies	Sensitivity	Specificity	PPV
high	↓	↓	↑	↑
low	↑	↑	↓	↓

Chen, 2007: 100 – 150ng/ml faecal hemoglobin

Rossum, 2009: 75 ng/ml for the Netherland  
200ng/ml where CS capacity is insuff.

Recent Czech study shows, that suggested cut off 75ng/ml would mean FOBT positivity rate 12-16% compare to current 4% with gFOBT.

# 4. Program monitoring/data collection?

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# Data collection

## **Epidemiology:**

- incidence
- prevalence
- mortality
  
- staging
  
- 5 years survival
  
- Quality of life

Outcomes, Efficiency,

## **Screening:**

- FOBT
- PS colonoscopy
- S colonoscopy

**Follow up**

**Diagnostics**

**Treatment**

Costs, Capacity

# Primary care data: Effect of measures for improvement

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- **centrally** collected (hard) data/indicators:
  - FOBT adherence rate
  - FOBT positivity rate
  - GPs, gynaecologists involvement
  - regional differences
  
- **primary** care collected data (experimentally)
  - waiting times for colonoscopies
  - compliance with colonoscopy in FOBT positives
  
  - feedback on endoscopic services/adherence to guidelines

# Colorectal Cancer: Imperatives for primary care

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- Do not miss a symptomatic cancer/refer in time!
- Identify high risk patients!
- Screen for colorectal cancer!

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