



Military University Hospital
First Medical Faculty of Charles University
Department of Gastroenterology

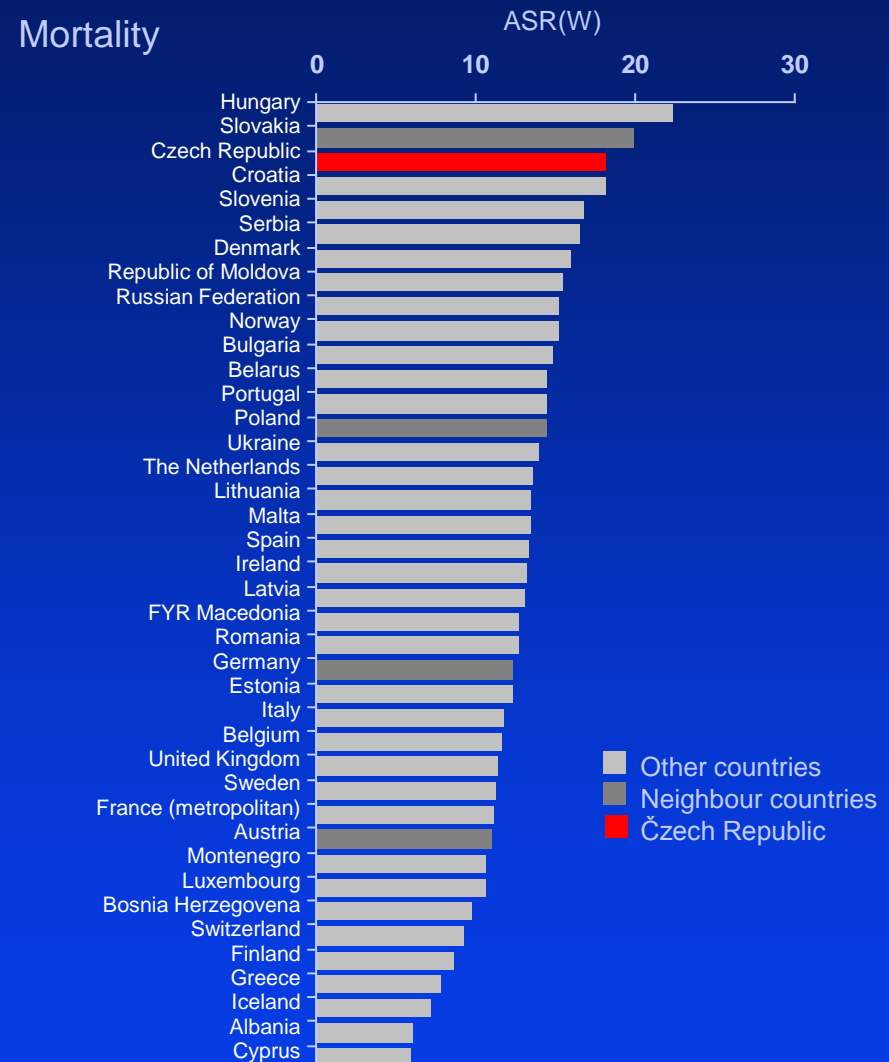
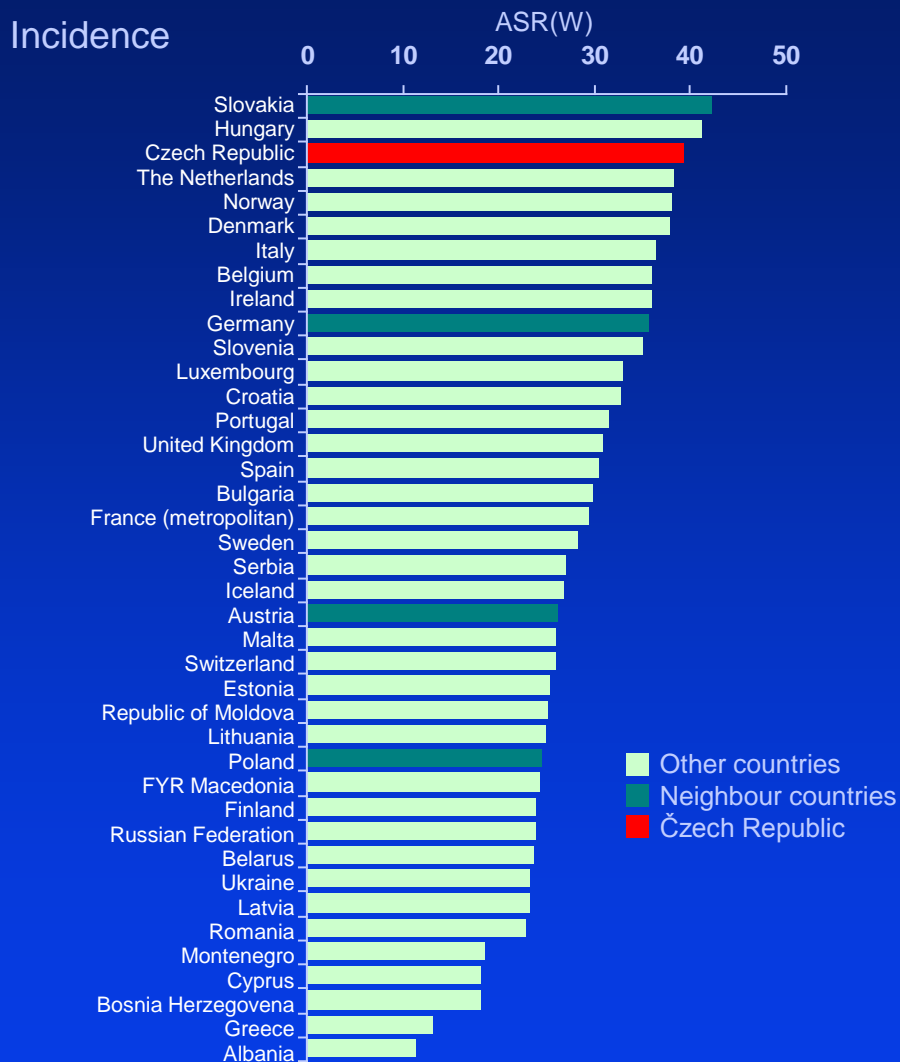


Results and recent progress in the Czech Colorectal Cancer Screening Programme

M. Zavoral, S. Suchanek, O. Majek, B. Seifert, L. Dusek

European Colorectal Cancer Days: Brno 2012 – Prevention and Screening
4 – 5 May 2012, Brno

CRC incidence and mortality in Europe



ASR(W): number per 100 000 inhabitants, world age standardi

Programme development positive steps

- 2000: programme launched
 - GPs, preventive check-up
 - Biennial gFOBt – colonoscopy
- 2006: screening colonoscopies database
 - On-line access from every GE unit involved
 - Data quality control – validation, regular reports
- 2009: new program design introduced

Actual programme design

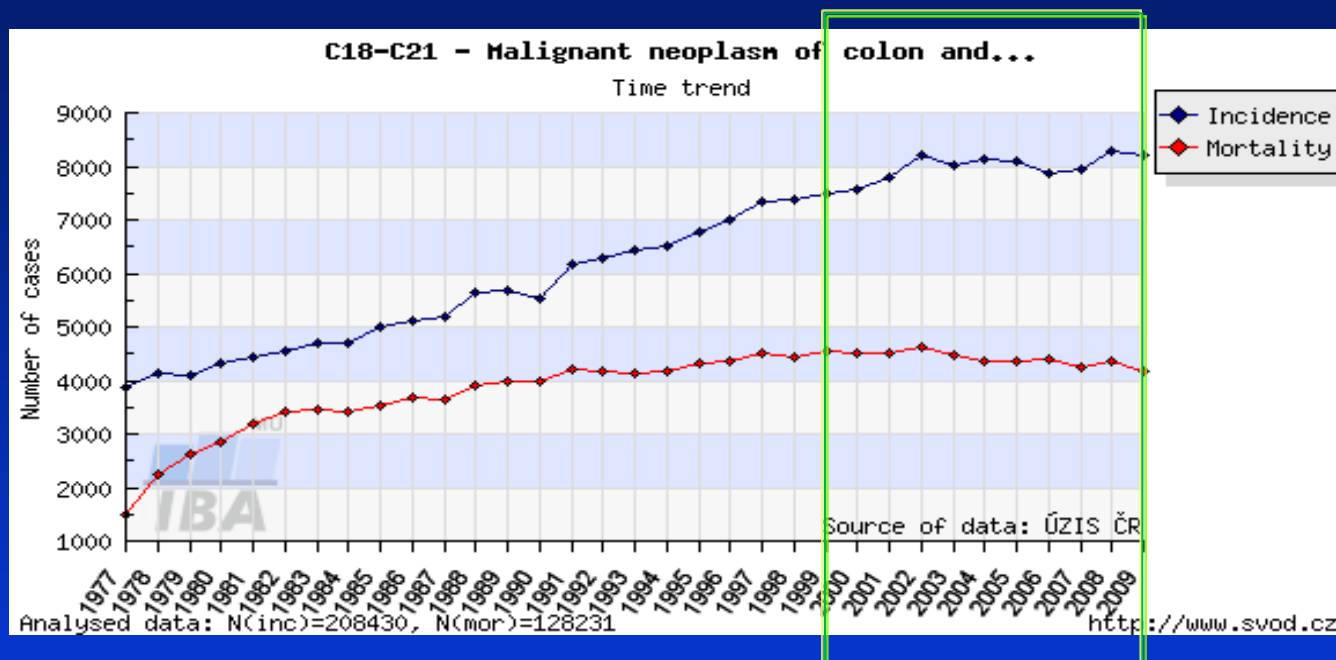
- Asymptomatic individuals:
 - Age 50-54: gFOBT/FIT annually
 - Age 55: gFOBT/FIT biannually or primary screening colonoscopy in 10 years interval
- Centers for screening colonoscopy
 - Nationwide network
 - 225 GE units available, 160 involved (71%)
 - Minimum of screening colonoscopies: 50 per year
- Involvement of gynecologists
 - Is this enough to satisfy?

Controversial topics

- Programme efficiency evaluation
 1. long-term impact indicators **YES/NO**
 - a) decrease of CRC incidence and mortality
 - b) detection of early stage cancers
 - c) low numbers of interval cancers
 2. population programme **NO**
 3. individual data **NO**
 4. early performance indicators **YES/NO**

- Adequate reimbursement?

Decrease of CRC incidence and mortality

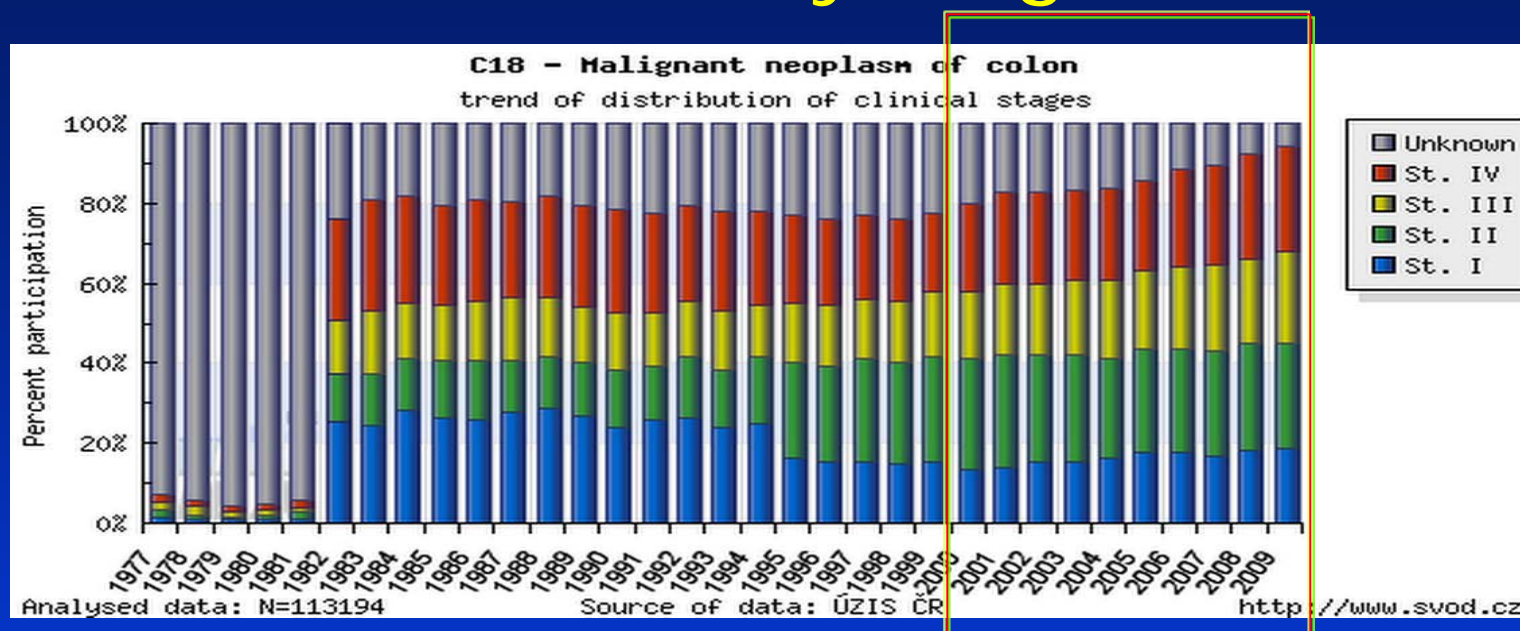


	2000	2009
Incidence	7 456	8 205
Mortality	4 506	4 169

Prevalence 2010	No.	%
Stadium I	17 077	31%
Stadium II	16 287	30%
Stadium III	11 412	21%
Stadium IV	7 243	13%
Stadium unknown	2 983	5%
Total	55 002	100%

Source: Institute of Health Information and Statistics of the Czech Republic

Detection of early stage cancers



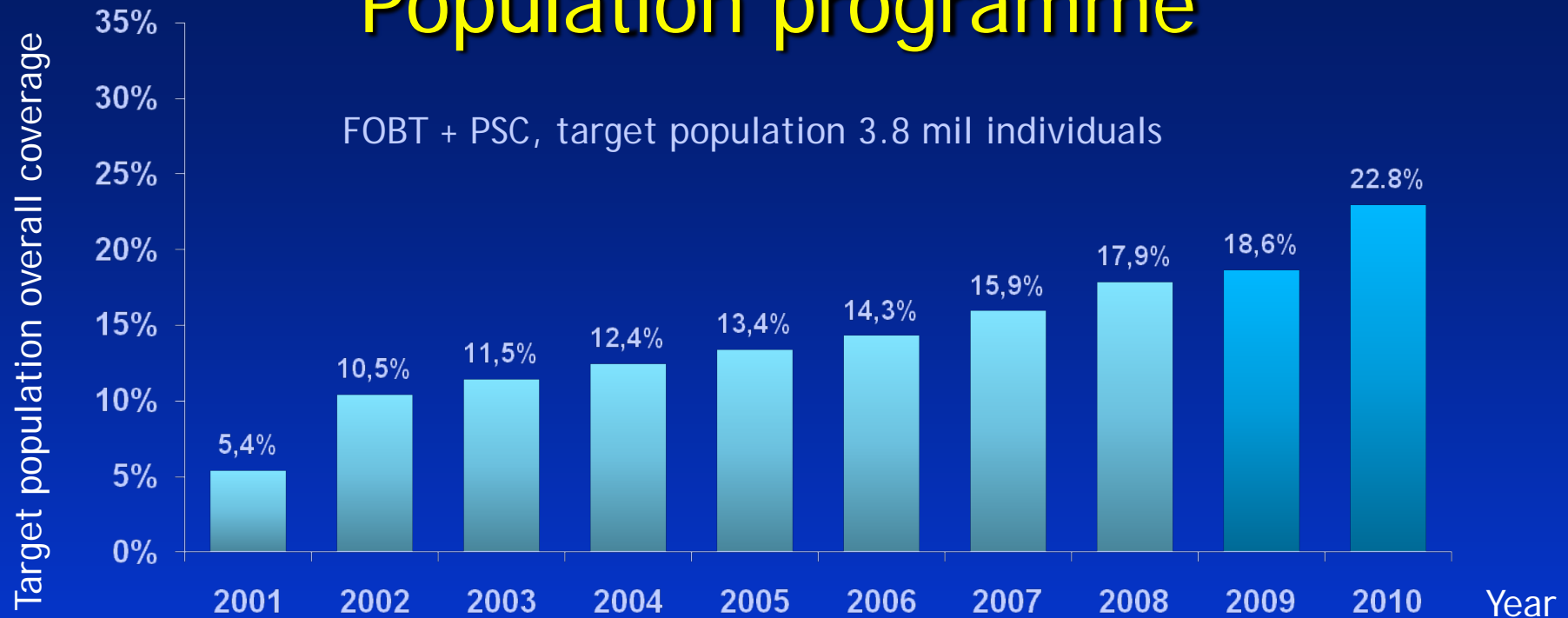
	2000	2008	Trend
Stage I	13.4 %	18.6 %	↑
Stage II	27.6 %	26.2 %	↓
Stage III	16.8 %	23.0 %	↑
Stage IV	22.1 %	26.5 %	↑
Stage unknown	20.1 %	5.7 %	↓

Low numbers of interval cancer

- „CRC that occur following a negative screening test, in the interval before the next procedure is due“
- Individual data necessary
- Czech Republic: 3 databases, but without linkage
 - CRC screening database
 - National Oncology Registry (NOR)
 - National Reference Center (NRC)
 - Health insurance companies

Population programme

FOBT + PSC, target population 3.8 mil individuals



Source: National Reference Centre

- Identification and organized personal invitation of target population
- EU Recommendation:
 - Accepted coverage: 45%
 - Recommended coverage: 65%

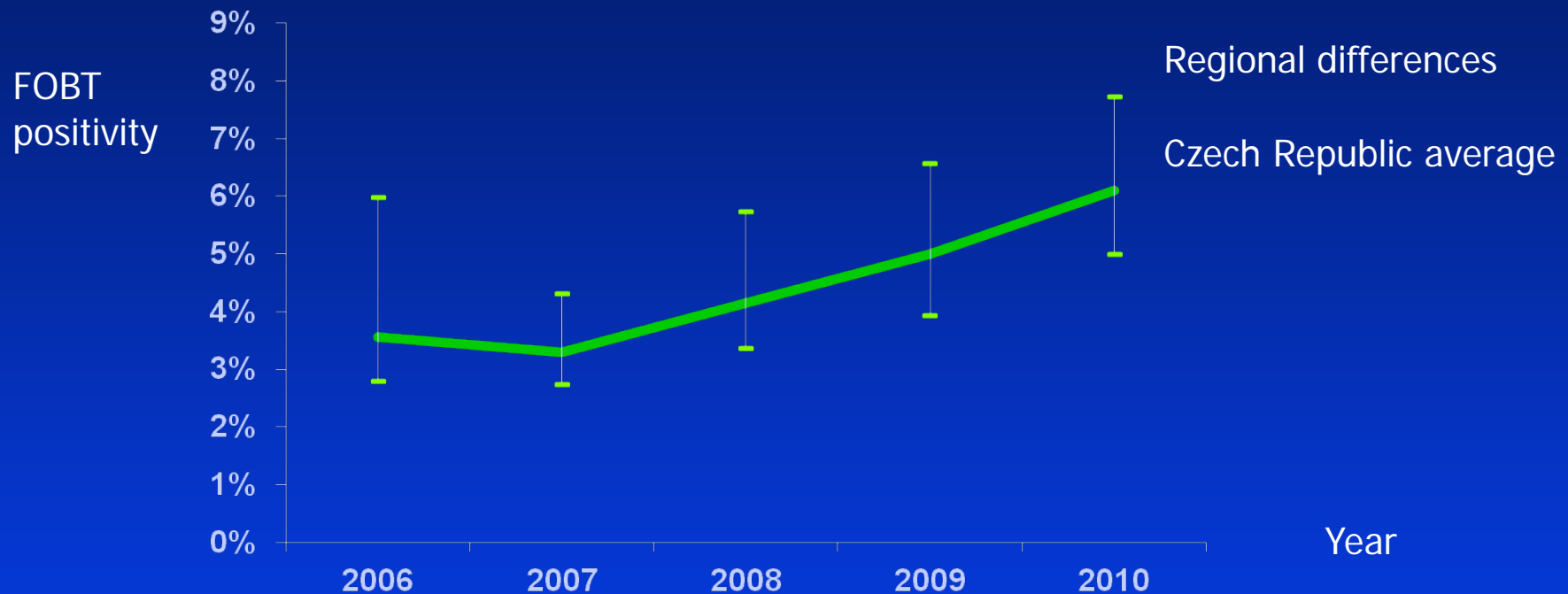
Individual data

- Every individual can be identified by national identification number
- Chain of screening and follow-up procedures
 - example: FOBT given → FOBT returned → FOBT positive → screening colonoscopy → therapeutic procedure → possibly operation or oncology therapy → death
- Interval cancers identification
- Exposure of non indicated procedures
 - Repeated in different health facility
 - Shorter interval than by recommendation
- Relevant and detailed data of FOBT
 - Currently only aggregated data available

Early performance indicators

- FOBT positivity
- Waiting times for screening colonoscopy
- Adenoma detection rate
- Positive predictive values and detection rates for adenomas and cancers
- Cecal intubation rate
- Adverse events

FOBT positivity



- Overall FOBT positivity has been growing since 2007
 - immunochemical FOBT introduction?
 - gynecologists involvement (qualitative FIT)?

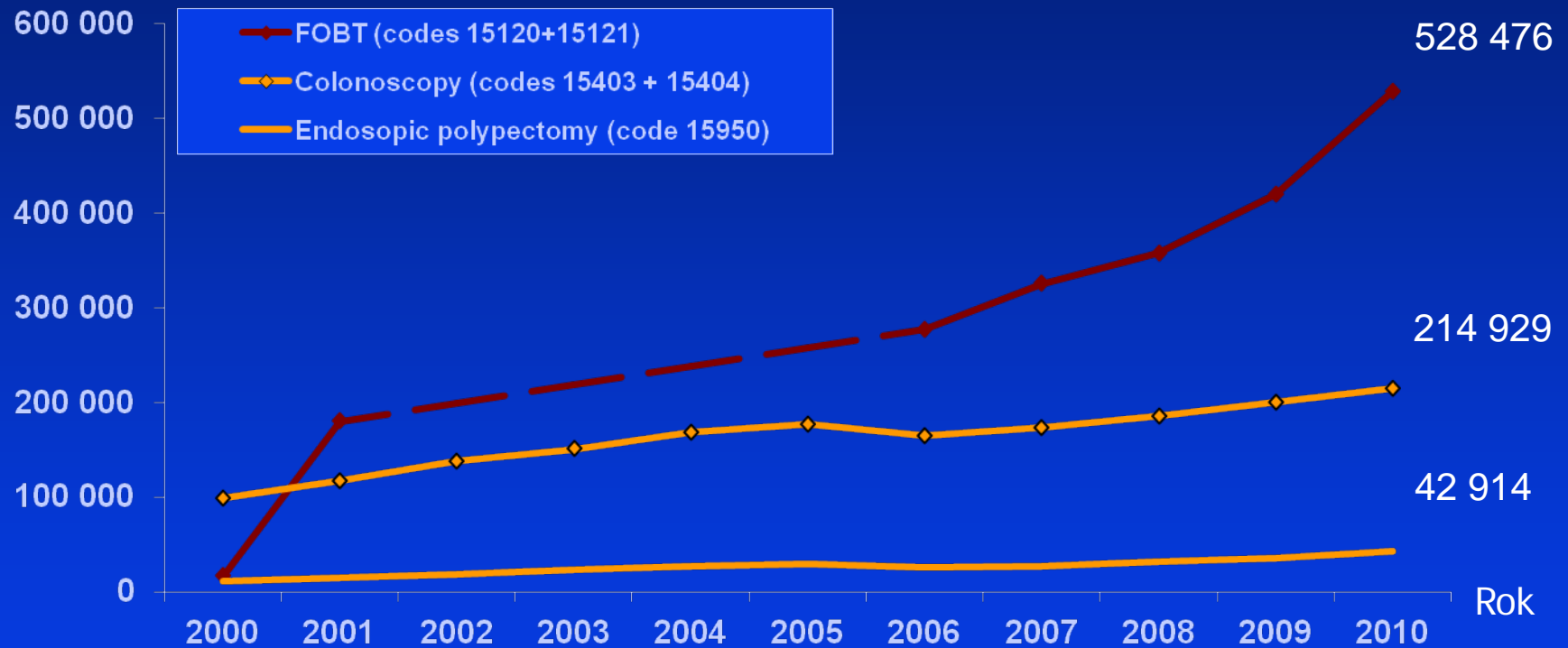
Screening colonoscopy waiting times

Year	No. of screening colonoscopies	Average waiting time (months)
2006	5,335	0.85
2007	5,678	0.91
2008	7,457	0.95
2009	11,710	1.04
2010	18,324	1.13
2011	20,042	1.22

Notice: FOBT data are monitored in month and year system. Waiting time is evaluated in full months (0 : colonoscopy in the same month, 1 colonoscopy in the following months ..)

Timeframe of screening procedures

Number of individuals with procedure



Number of FOBTs performed has been growing since 2009 intensively

Programme basic results and ADR

Year	Patients with colonoscopy	Patients with detected adenoma	Proportion	Patients with detected cancer	Proportion
2006	5,335	1,578	29.6%	335	6.3%
2007	5,678	1,636	28.8%	337	5.9%
2008	7,457	2,367	31.7%	446	6.0%
2009	13,072	4,122	31.5%	624	4.8%
2010	22,723	7,304	32.1%	872	3.8%
2011	24,591	8,251	33.6%	766	3.1%
2012*	3,915	1,221	31.2%	83	2.1%
Total	82,771	26,479	32.0%	3,463	4.2%

* Preliminary results (April 2012)

Source: CRC screening database

Screening procedures reimbursement

- Cervical screening: since 2008
 - New screening specialty 820, special reimbursement, no regulation
- Breast screening: since 2002
 - New screening specialty 806, special reimbursement, no regulation
- Colorectal screening: since 2000
 - Request of new screening specialty → denied by Ministry of Health
 - Only screening colonoscopy a primary screening colonoscopy: new codes (15101, 15105), special reimbursement, no regulation
 - Accompanying procedures (biopsy, polypectomy, resection, videocode) stays under regulation

→ Request: to have same conditions as the other two screening programs

Challenges to the future

- Organized personal invitation – population screening
- Individual data – programme monitoring
- FOBT: switch from gFOBT to qFIT (quantitative)
- Adequate screening procedure reimbursement with new screening specialty