

Cancer Prevention and Care: Closing the Gap

15th September, 2005, Brussels, Belgium

A payer's perspective: *Challenges of oncology in Hungary*

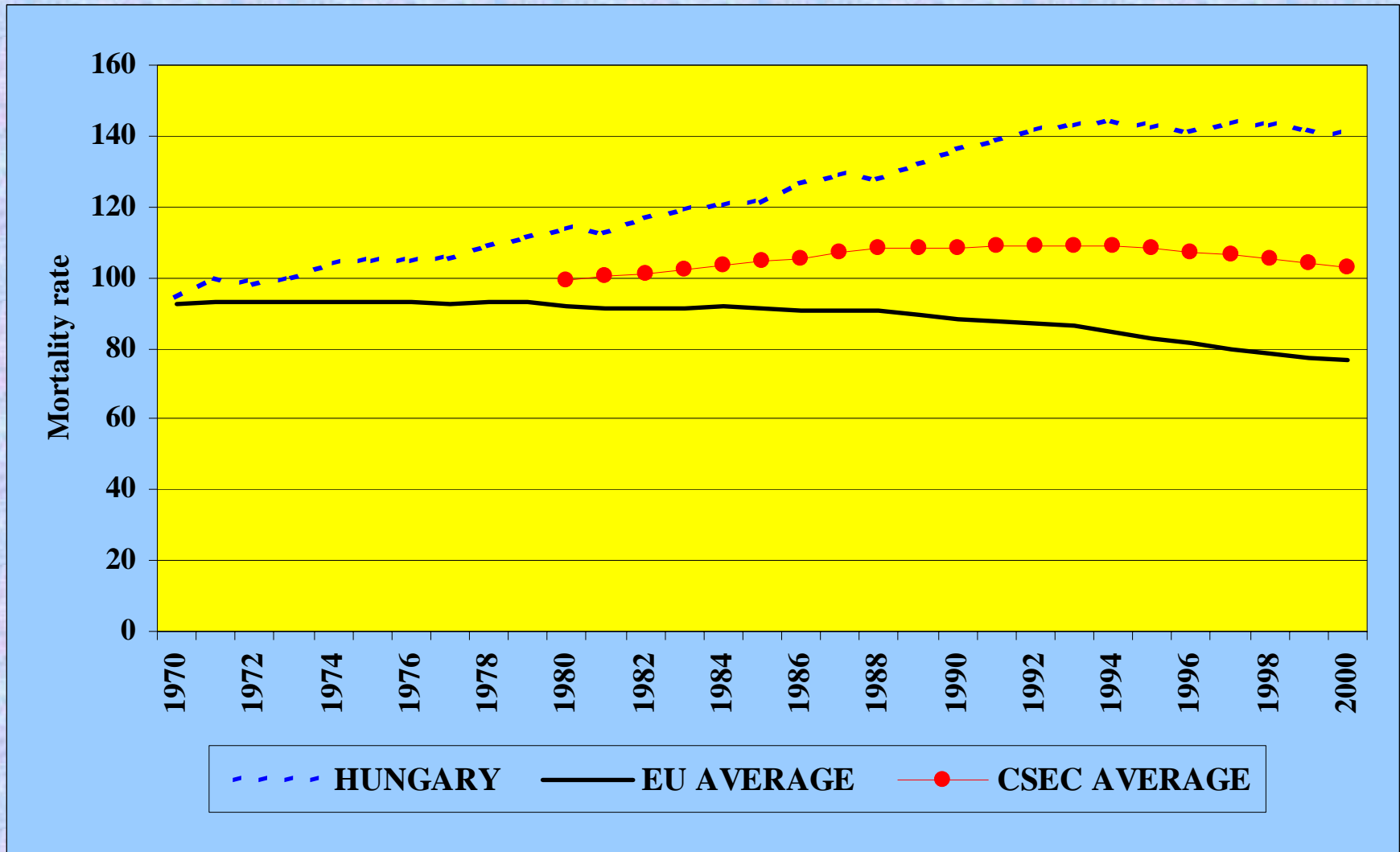
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Main issues

- **Health status of the Hungarian population**
- **National Public Health Programme**
- **Nation wide organized cancer screening programmes**
 - **Medicine**
 - **Economics**

Standardized mortality rates, malignant neoplasms, 0-64, both sexes, per 100.000



Cancer mortality rate in Hungary

Cancer type	No.	1999	2000	2001	No.
Breast	1	2 356	2 316	2 304	1
Colorectal (C18-C21)	2	2 314	2 372	2 258	2
Lung	3	2 086	2 097	2 161	3
Gastric	4	952	911	850	5
Lymphopoetic (C81-C95)	5	949	908	945	4
Pancreatic	6	791	757	780	6
Ovarian	7	637	652	617	8
Gall bladder	8	608	577	619	7
Cervical	9	520	496	465	10
Uterine	10	500	481	539	9
Hepatic	11	429	383	347	12
Kidney	12	354	363	330	13
Brain	13	339	256	373	11
Urinary bladder	14	216	215	233	14
Melanoma	15	158	144	137	15
Total		15 028	14 765	14 744	

Women

Cancer type	No.	1999	2000	2001	No.
Lung	1	7 883	7 824	7 902	1
Colorectal (C18-C21)	2	4 912	4 910	4 852	2
Breast	3	2 387	2 356	2 342	3
Gastric	4	2 306	2 167	2 166	4
Lymphopoetic	5	1 997	1 895	1 936	5
Oral	6	1 618	1 688	1 737	6
Pancreatic	7	1 562	1 546	1 561	7
Prostatic	8	1 387	1 399	1 372	8
Hepatic	9	972	946	893	9
Esophageal	10	923	843	675	13
Gall bladder	11	867	815	862	10
Urinary bladder	12	795	722	842	11
Brain	13	712	723	756	12
Total		34 255	33 679	33 757	

**Both
sexes**

Cancer type	No.	1999	2000	2001	No.
Lung	1	5 797	5 727	5 741	1
Colorectal (C18-C21)	2	2 598	2 514	2 594	2
Prostatic	3	1 387	1 399	1 316	5
Oral (C00-C14)	4	1 361	1 413	1 372	4
Gastric	5	1 354	1 256	1 432	3
Lymphopoetic (C81-C95)	6	1 048	987	991	6
Pancreatic	7	771	789	781	7
Esophageal	8	607	588	566	9
Laryngeal	9	591	536	525	11
Urinary bladder	10	579	600	609	8
Hepatic	11	543	563	546	10
Kidney	12	497	475	475	12
Brain	13	373	367	383	13
Gall bladder	14	259	266	243	14
Melanoma	15	157	170	188	15
Total		19 227	18 914	19 013	

Men

**Source: Otto Sz. POR,
2003, 9(2): 126–130.**

Efforts, programmes and tools against cancer mortality in Hungary

- **National Public Health Programme**
- **National Cancer Control Programme**
- **Established a National Public Health School**
- **National Cancer Registry**
- **National Oncological R&D Consortium**
- **Nation wide organized screening programmes**
- **Development of oncologic and oncoradiologic care**
- **Development of palliative care and hospice**

National Public Health Programme 1. (2002)

- **Creating a health promoting social environment**
 - **Healthy youth**
 - **Improving the health of the elderly**
 - **Equal opportunities for health**
 - **Health promotion in settings of daily life**
- **Programs of healthy lifestyles, reducing risk factors to human health**
 - **Cutting back tobacco smoking**
 - **Alcohol and drug prevention**
 - **Healthy nutrition and food safety**
 - **Promoting physical activity**
 - **Public health and epidemiological safety**
 - **International Environmental Health Action Programme**

National Public Health Programme 2. (2002)

- **Preventing avoidable mortality, morbidity and disability**
 - Reducing morbidity and mortality due to coronary artery diseases and cerebrovascular diseases
 - Reducing morbidity and mortality due to neoplasms
 - Strengthening mental health
 - Reducing locomotor diseases
 - Preventing AIDS
- **Strengthening the institutional system of healthcare and public health to improve health**
 - Public health screening programmes
 - Improving the provision of care
 - Developing resources
 - Monitoring – Information technology

Comparison of organized screening programmes

Type of screening	European consensus (*)	Hungarian programme
breast	mammography	mammography
	women aged 50-69	women aged 45-65
	2-3 years interval	2 years interval
		(January 2002)
cervix	Pap smears	Pap smears
	women aged 30-60	women aged 25-65
	3-5 years interval	3 years interval
		(September 2003)
colorectal	Faecal occult blood test (FOTB) (+ immunology ?)	Faecal occult blood test (FOTB) (+ immunology ?)
	people aged 50-74	people aged 45-65
	1-2 years interval	2 years interval
		(Pilots since June 2004)

* Advisory Committee on Cancer Prevention. Recommendation on cancer screening in the European Union. *Eur J Cancer* 2000; 36:1473-78.

Regulatory framework of the national breast cancer screening programme

- **Ministry of Health**

- Legal regulation
- Communication (marketing)

- **National Health Insurance Fund Administration (NHIFA)**

- Selection of women aged 45-65
- Data transfer to NPHA

- **National Public Health Authority (NPHA)**

- Programme management
- Local coordination
- Feed-back and quality control

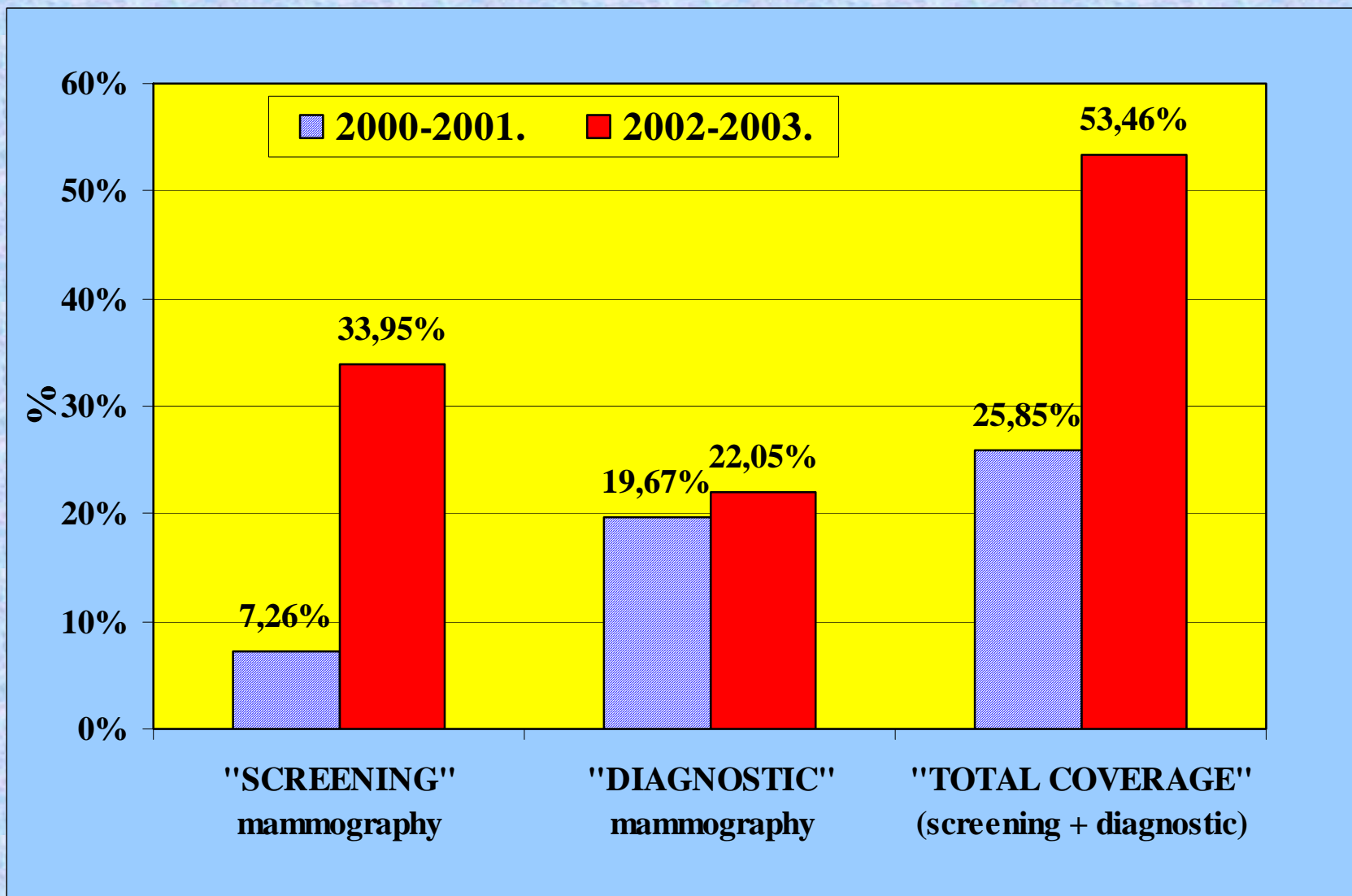
- **Service provider (mammography center)**

- Call and re-call of women
- Mammography screening
- Management of further diagnosis and treatment

- **NHIFA**

- Financing
- Monitoring

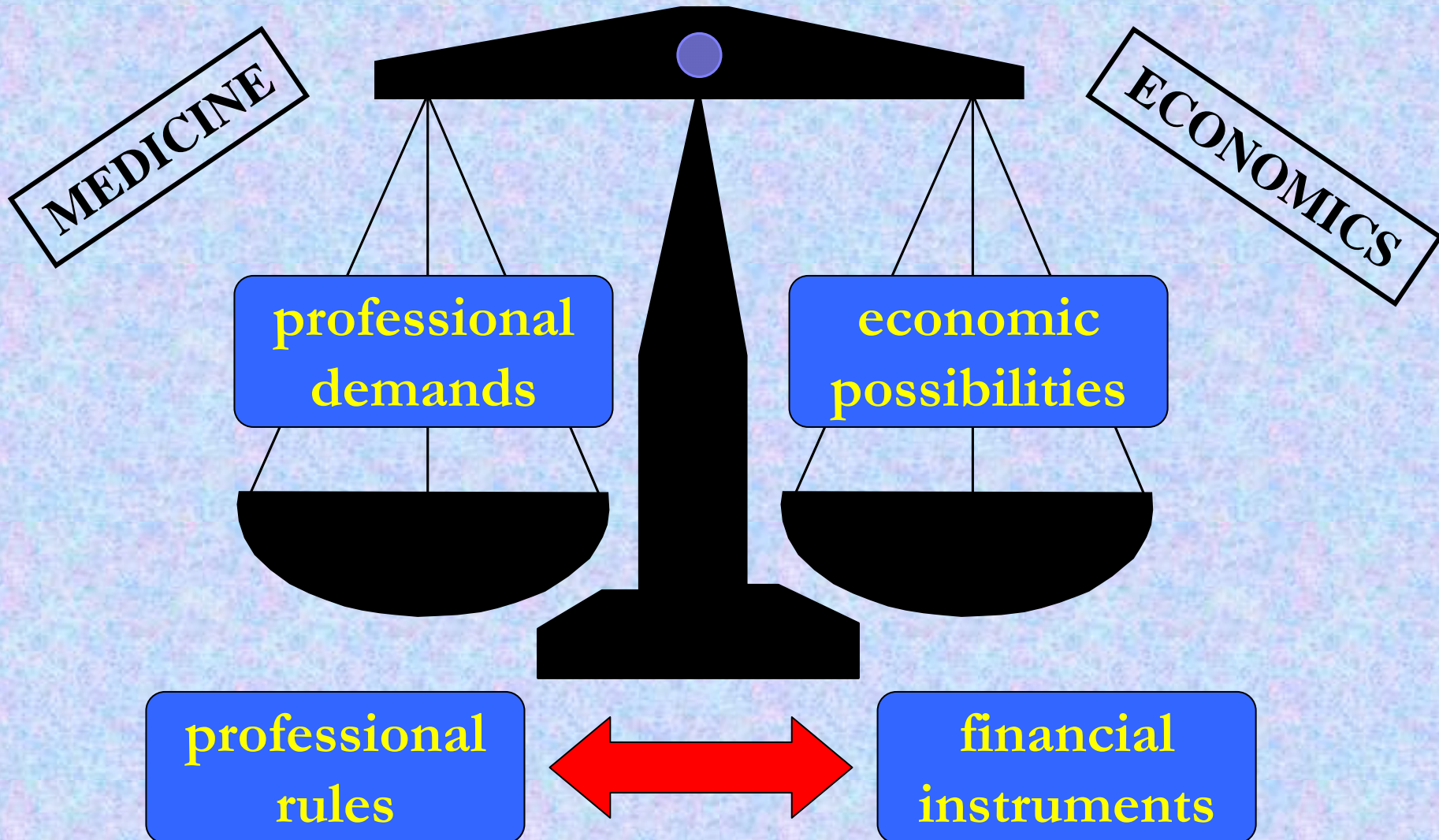
Screening rate: opportunistic and organized breast cancer screening



Critical points of decision making

- **Breast cancer screening:**
 - Number of mammography machines
- **Cervical cancer screening**
 - Screening interval (1 versus 3 years)
- **Colorectal cancer screening**
 - Gradual implementation with pilot areas

Decision making in health economics and health care financing

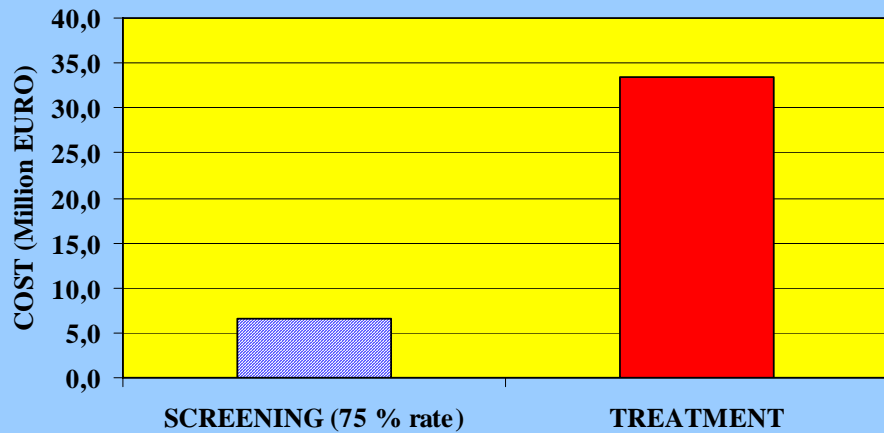


Annual health insurance cost of treatment of breast, cervical and colorectal cancer in Hungary (2001)

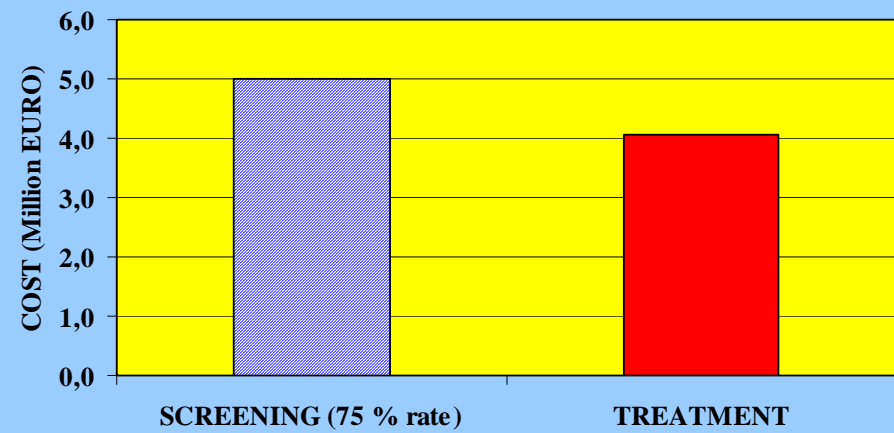
(EURO)	BREAST		CERVIX		COLORECTAL	
	EURO	%	EURO	%	EURO	%
outpatient care	3.341.051 EUR	10,0%	425.706 EUR	10,5%	2.109.102 EUR	5,4%
acute inpatient care	17.993.398 EUR	53,8%	2.344.823 EUR	57,7%	29.018.103 EUR	74,7%
chronic inpatient care	105.672 EUR	0,3%	22.209 EUR	0,5%	1.444.142 EUR	3,7%
sickness-pay	2.536.390 EUR	7,6%	643.998 EUR	15,9%	1.443.480 EUR	3,7%
drugs (outpatient care)	6.138.325 EUR	18,4%	624.303 EUR	15,4%	2.519.298 EUR	6,5%
drugs (special permit)	3.311.486 EUR	9,9%	--	--	2.337.541 EUR	6,0%
total:	33.426.321 EUR	100,0%	4.061.039 EUR	100,0%	38.871.666 EUR	100,0%

Annual cost of treatment and screening (at 75 % participation rate) of breast, cervical and colorectal cc.

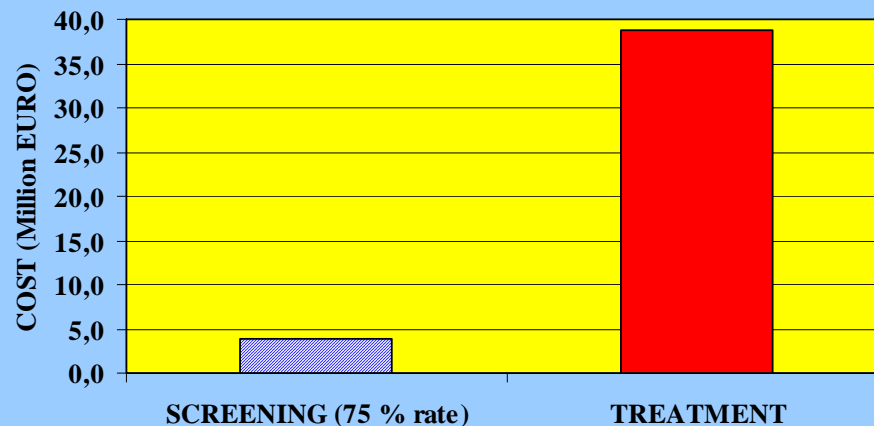
BREAST CANCER



CERVICAL CANCER



COLORECTAL CANCER



Number of lives and life years can be saved during the organized screening programmes

		BREAST			CERVIX		COLORECTAL	
Mortality decline		10%	20%	30%	19,6%	38,4%	10%	20%
LIVES saved	Total	509	1.074	1.582	292	594	718	1.462
	NPV	365	772	1.139	209	428	515	1.050
LIFE YEARS saved	Total	10.684	22.556	33.230	6.707	13.653	9.340	19.007
	NPV	7.661	16.203	23.915	4.817	9.843	6.697	13.652

Estimations for a 10 years public health programme.

NPV: nett present value.

„League table”: Cost of one life year saved during a 10 years programme in various scenarios

TYPE OF SCREENING	AGE-GROUP AND INTERVALL	EXPECTED MORTALITY DECLINE	EURO/LIFE YEAR SAVED
Breast	Age 45-65, 2 years	30%	1.057 EUR
Breast	Age 45-65, 2 years	20%	1.560 EUR
Breast	Age 45-65, 2 years	10%	3.299 EUR
Cervix	Age 25-65, 3 years	38,4%	1.052 EUR
Cervix	Age 25-65, 3 years	19,6%	2.149 EUR
Colorectal	Age 45-65, 2 years	20%	1.200 EUR
Colorectal	Age 45-65, 2 years	10%	2.446 EUR

Conclusions

- **Improving the health status of the population**
- **Evidence based screening programmes in line with the recommendations of the European Union**
- **Inter-disciplinary approach**
- **Health economics analysis**
- **„Rich” and „poor” country: Money is never enough!**

Thank you for your kind attention !

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