

**'The Financials of CRC Screening - Better Investments to Save More Lives'
Saving Lives with the Thematic Network on CRC Screening in the EU!**

Wednesday 7 October at 10.00 CET, Brussels time

COST-SAVINGS FROM COLORECTAL CANCER SCREENING. The case of the Basque Region

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Non conflicts of interest

THE BASQUE COUNTRY PROGRAMME



- POPULATION BASED – Free of taxes
- Men and Women 50-69 y (601,500 people)
- FIT biennial. Cut-off 20 μ g Hb/g
- Colonoscopy as confirmatory test
- Centralized coordination

COMPLETE COVERAGE FROM 2014

SENDING KITS BY POST

PRIMARY CARE INVOLVEMENT

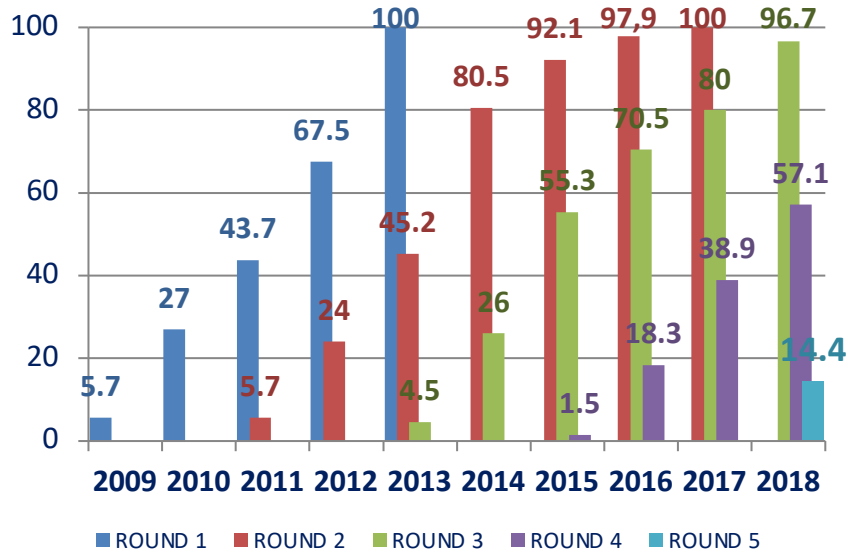
DATA BASE LINKED WITH MEDICAL RECORD, CANCER AND MORTALITY REGISTRIES

QUALITY CONTROL – PROCESS AND RESULTS

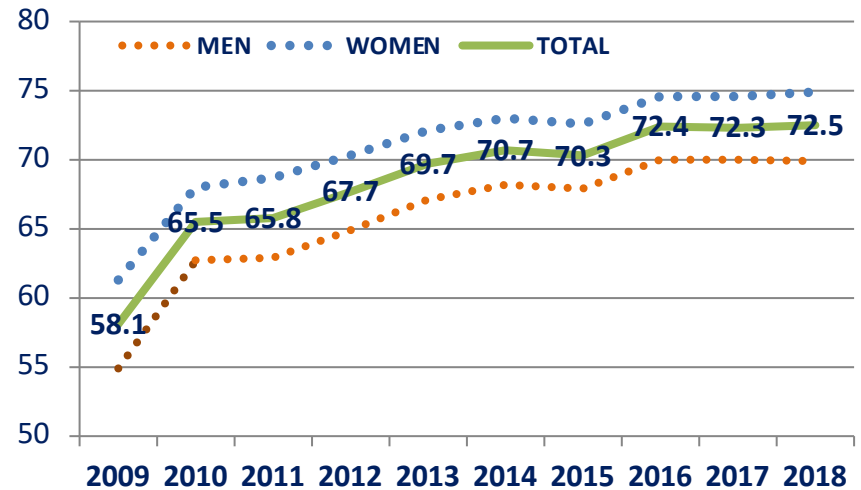
AUTHORITIES AND SOCIETY COMMITMENT

MAIN INDICATORS

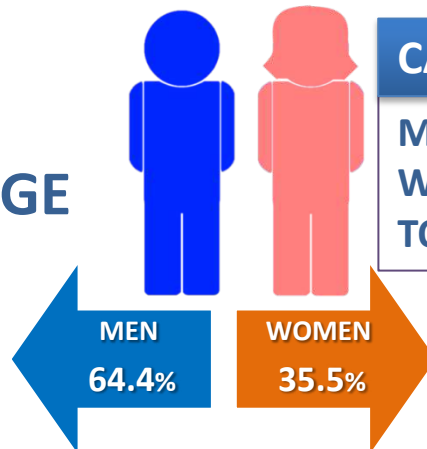
INVITATION COVERAGE



PARTICIPATION RATE



70% INITIAL STAGE



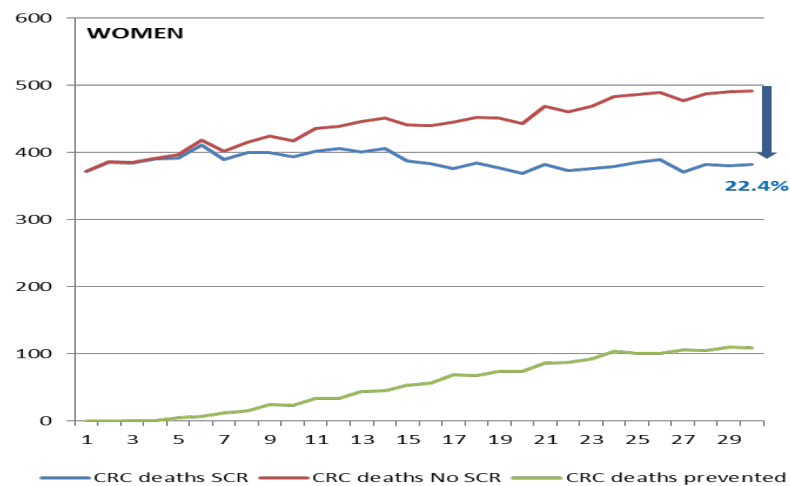
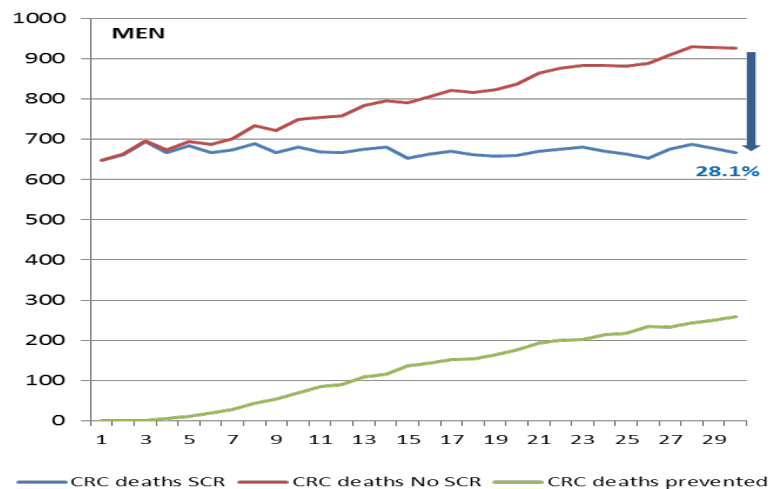
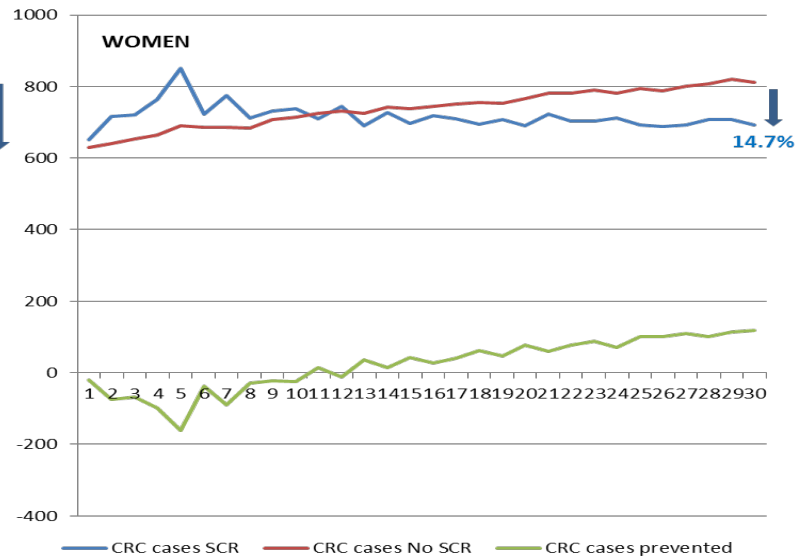
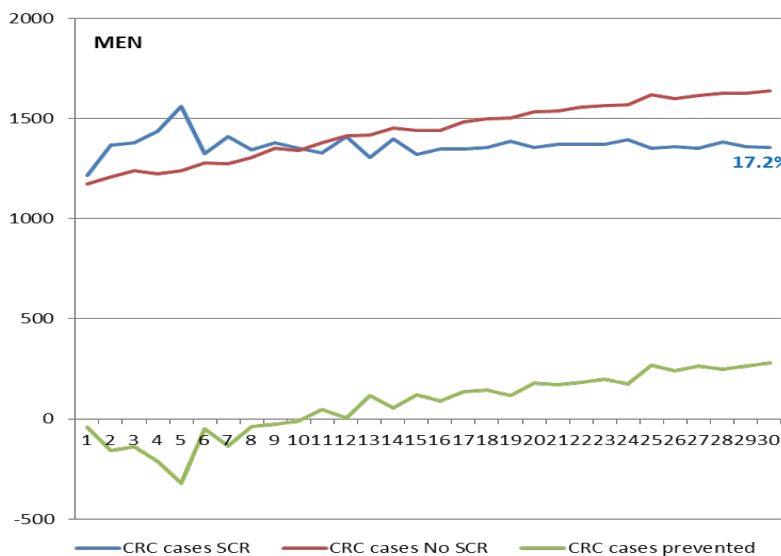
CANCER DETECTED

MEN :	2.202
WOMEN:	1.215
TOTAL:	3,417

+

26,972 Advanced Adenomas
detected and resected

DECREASING INCIDENCE AND MORTALITY (SCREENING VS NON-SCREENING). MISCAN-COLON MODEL BASQUE COUNTRY DATABASE



COST-EFFECTIVENESS STUDY. MISCAN MODEL. BASQUE COUNTRY DATA

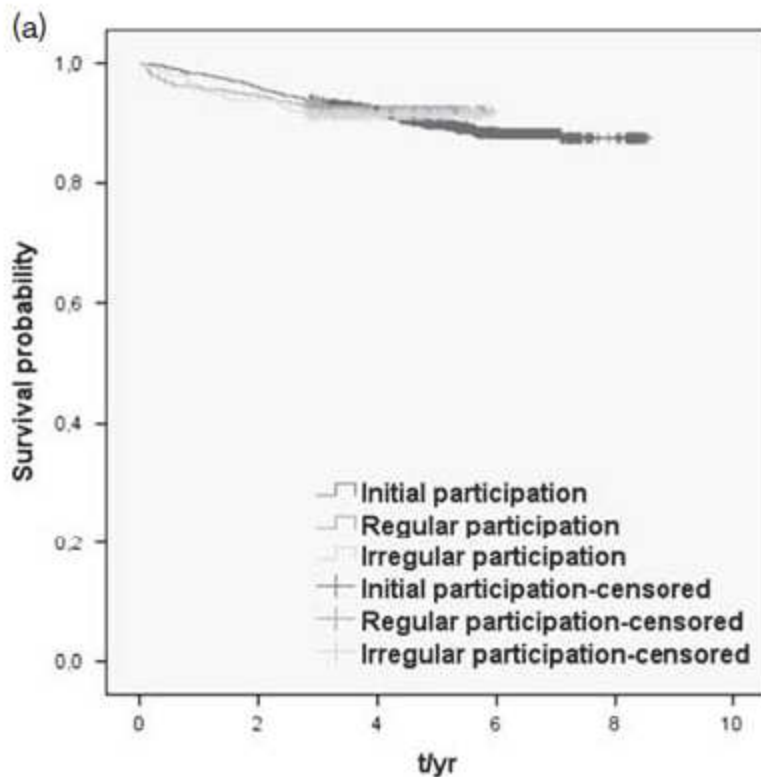
Table 2 Sensitivity analysis for cost-effectiveness analysis of the implementation of colorectal cancer screening programme in the Basque population

Cost per invitation	Adenoma prevalence	Screened population costs		Incremental costs		QALYs gained	ICER
		Treatment cost	Total costs	Treatment cost	Total costs		
€6.05 per invitation	Base case						
	Men	1199.9	1317.0	-179.1	-81.7	37,132.5	Dominant
	Women	664.2	740.2	-77.1	-11.4	19,532.3	Dominant
	Total	1864.1	2057.2	-256.3	-93.1	56,664.8	Dominant
	Prevalence Bibliography						
	Men	1227.5	1318.9	-168.6	-97.2	36,616.9	Dominant
	Women	661.0	726.9	-77.6	-21.8	20,438.5	Dominant
	Total	1888.5	2045.7	-246.2	-119.0	57,055.4	Dominant
€15.00 per invitation	Base case - Total	1864.1	2103.2	-256.3	-47.1	56,664.8	Dominant
€20.00 per invitation	Base case - Total	1864.1	2128.9	-256.3	-21.4	56,664.8	Dominant
€25.00 per invitation	Base case - Total	1864.1	2154.6	-256.3	4.2	56,664.8	74.1
€30.00 per invitation	Base case - Total	1864.1	2180.3	-256.3	30.0	56,664.8	529.4
€40.00 per invitation	Base case - Total	1864.1	2231.8	-256.3	81.5	56,664.8	1438.3
€50.00 per invitation	Base case - Total	1864.1	2283.2	-256.3	132.9	56,664.8	2345.4

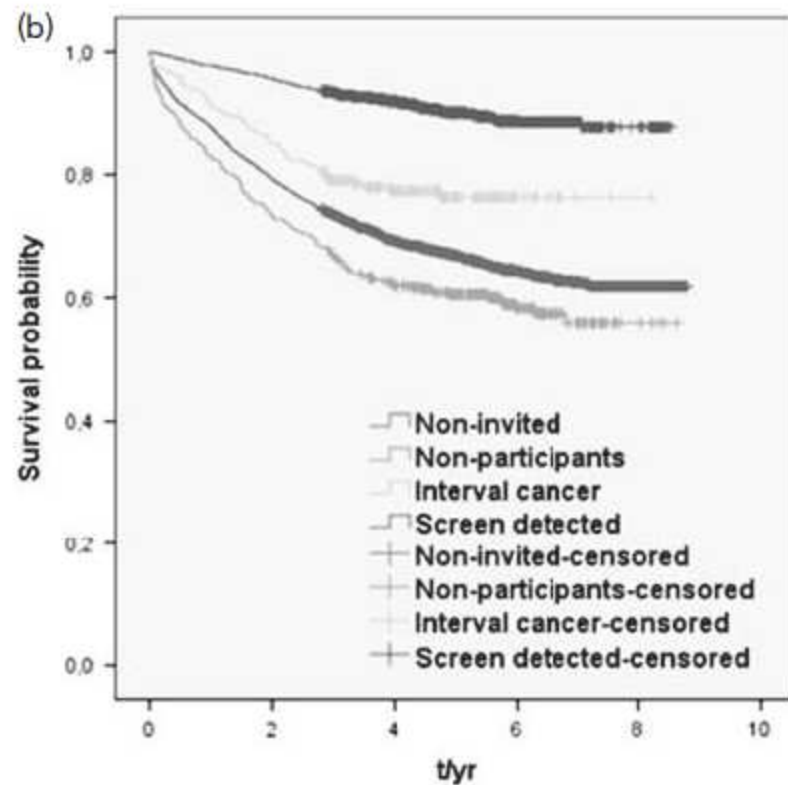
ICER incremental cost effectiveness ratio

Arrospide A, Idigoras I, Mar J, de Koning H, van der Meulen M, Soto-Gordoa M et al. Cost-effectiveness and budget impact analyses of a colorectal cancer screening programme in a high adenoma prevalence scenario using MISCAN-Colon microsimulation model. *BMC Cancer* 2018; 18: 464. <https://doi.org/10.1186/s12885-018-4362-1>

CRC SURVIVAL RATES IN POPULATION 50-69y BY TYPE OF DETECTION (2009-2014) . BASQUE COUNTRY



Participant	1-yr survival	3-yr survival	5-yr survival	P Value
Initial	98.3%	93.6%	92.0%	0.970
Regular	96.3%	93.1%	91.6%	
Irregular	95.7%	91.5%	91.5%	



	1-yr survival	3-yr survival	5-yr survival	P Value
Non-invited (n=3,111)	87.6%	73.4%	66.9%	<0.001
Non-participants (n=414)	83.1%	66.7%	60.5%	
Screen detected (n=2,145)	97.8%	93.4%	90.1%	
Interval cancer (n=239)	91.2%	79.0%	76.3%	

COST-EFFECTIVENESS STUDY. EU-TOPIA PROJECT BASQUE COUNTRY DATA

EU·TOPIA

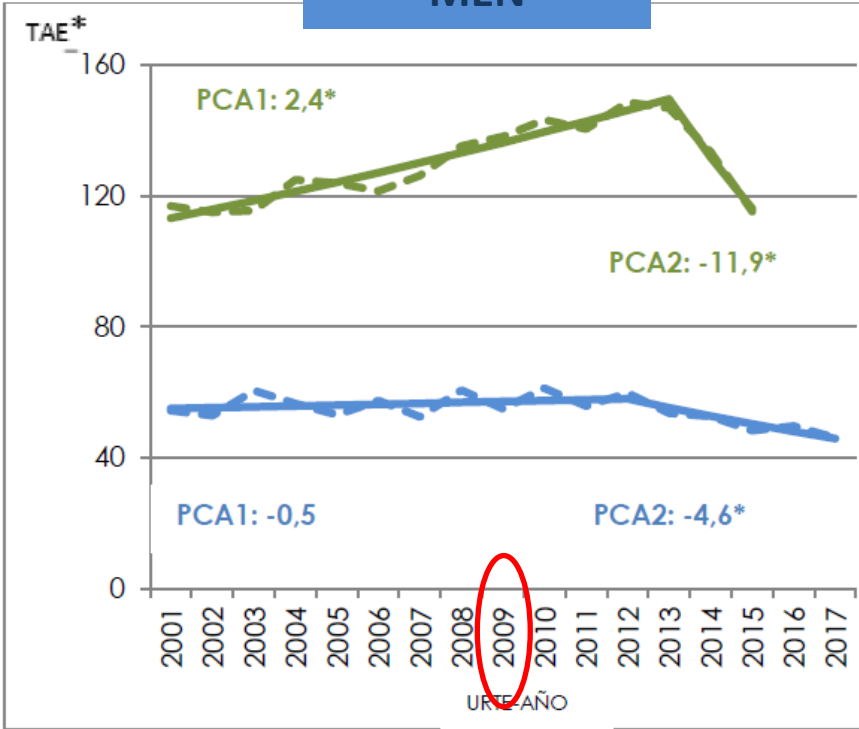
Cost Effectiveness results

	No screening	Screening
Primary screening costs	0	1,020,492,596
Costs for diagnostic follow-up	0	10,054,639
Costs for surveillance	0	12,577,525
Costs for cancer care	3,488,068	3,192,772
Total costs	3,488,069	1,046,317,550
Life-years in the population	194,319,569	194,557,870
Quality-adjusted life-years (QALY)	176,076,344	174,672,953
Costs/LYG vs no screening	ref	4,376
Cost/QALY gained vs no screening	ref	Dominated
Incremental costs / LYG	ref	4,376
Incremental cost / QALY gained	ref	Dominated

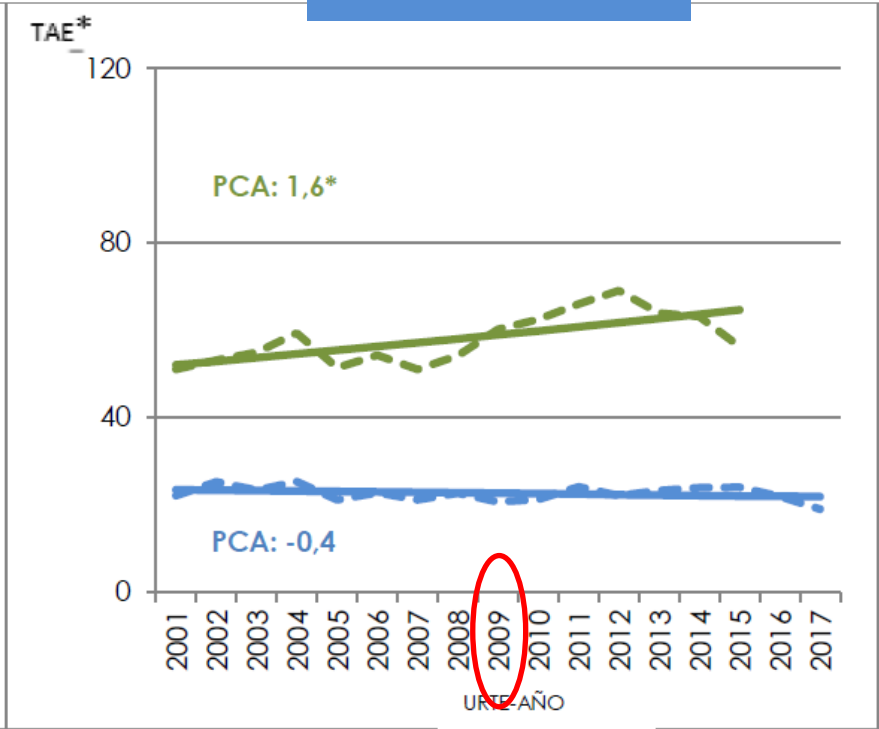
<https://eu-topia.org/>

CRC INCIDENCE AND MORTALITY TRENDS IN THE BASQUE COUNTRY

MEN



WOMEN



— Incidence

— Mortality

SOURCE: The Basque Country Cancer Registry

CHALLENGES

- **STUDYING AND DECREASING INEQUALITIES IN CRC SCREENING**

Mosquera I, Mendizabal N, Martín U, Bacigalupe A, Aldasoro E, Portillo I from the Desberdinak Group. Inequalities in participation in colorectal cancer screening programmes: a systematic review. European Journal of Public Health 2020; 30; 3: 558–567. Available from: <https://doi.org/10.1093/eurpub/ckz236>.

- **OVERCOME BARRIERS TO PARTICIPATE IN PREVENTIVE PROGRAMMES**

- **EXTENDING THE INVITATION TO 74**

- **DECREASING HARMS AND SIDE-EFFECTS**

- **PARTICIPATION IN JOINT ACTIONS (CANCON AND IPAAC).**

<https://www.ipaac.eu/en/work-packages/wp5/>

- **PARTICIPATION IN HORIZON 2020 EU-TOPIA AND NEW PROJECTS**

CONCLUSIONS

**TO CONTINUE AND EXTEND THE COLORECTAL
SCREENING PROGRAMMES IN THE EU**

SAVES LIVES: A COST-EFFECTIVE STRATEGY

PLEASE, INVEST IN LIVES