

La búsqueda de
sinergias en
la coordinación
para la evaluación
de tecnologías
y medicamentos

Madrid, 22 Abril 2010

Real Academia Nacional de Medicina

Encuentro
"A propósito de la
Cuarta Garantía"



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Los problemas de los sistemas sanitarios

- Incremento de los costes
- Falta de asociación entre incremento de los costes y mejoras en el estado de salud
- La inquietud sobre la sostenibilidad
- ¿Podremos seguir incorporando innovación?
- Evaluar la incorporación

Aumento y evolución del gasto sanitario

	% Servicios hospitalarios y especializados	% Servicios primarios de salud	% Servicios de Salud Pública	% Servicios colectivos de salud	% Farmacia	% Otras prestaciones sociales	% Gasto de capital
1960	42,85	30,01	0,54	5,92	11,22	1,50	7,96
1961	43,05	29,87	0,52	6,13	11,25	1,72	7,46
1962	38,50	25,55	0,43	7,31	12,54	1,47	14,19
1963	40,00	26,06	0,77	7,40	13,11	1,43	7,62
1964	38,12	29,57	0,18	7,39	12,01	1,27	11,45

1976	46,70	22,86	0,18	3,10	20,55	1,11	5,49
1977	50,69	21,93	0,14	2,75	18,82	1,09	4,58
1978	52,98	21,06	0,14	2,62	18,89	1,21	3,09
1979	54,18	20,07	0,15	2,62	17,67	1,33	3,17
1980	54,94	20,93	0,13	2,24	16,81	1,23	3,72

1995	55,86	16,33	1,01	3,41	18,88	1,58	2,94
1996	55,72	16,06	1,08	3,28	19,54	1,65	2,68
1997	54,82	16,05	1,13	2,77	20,78	1,58	2,87
1998	54,28	15,83	1,21	2,75	20,96	1,63	3,33
1999	53,59	15,85	1,33	2,71	21,51	1,61	3,39
2000	53,15	15,69	1,58	2,75	21,76	1,65	3,42
2001*	52,72	15,66	1,56	2,74	21,81	1,60	3,91
2002*(A)	51,79	15,45	1,73	3,01	22,41	1,62	4,00



Cambio tecnológico y gasto sanitario

Table 2.

Estimated Contributions of Selected Factors to Growth in Real Health Care Spending Per Capita, 1940 to 1990

(Percent)

	Smith, Heffler, and Freeland (2000)	Cutler (1995)	Newhouse (1992)
Aging of the Population	2	2	2 ^a
Changes in Third-Party Payment	10	13	10 ^b
Personal Income Growth	11–18	5	<23
Prices in the Health Care Sector	11–22	19	*
Administrative Costs	2–10	10	*
Defensive Medicine and Supplier-Related Costs			0
Technology-Related Changes			>65

>50% se debe al cambio tecnológico

Sources: Congressional Budget Office, "The Impact of Technological Change on Health Care Costs," *Journal of Health Economics*, vol. 12, no. 3 (1993), pp. 3–22; Joseph P. Newhouse, "Medical Care Costs: How Much Health Care Can We Afford?," *Journal of Economic Perspectives*, vol. 6, no. 3 (Summer 1992), pp. 3–22.

Notes: Amounts in the table represent the estimated percentage share of long-term growth that each factor accounts for.

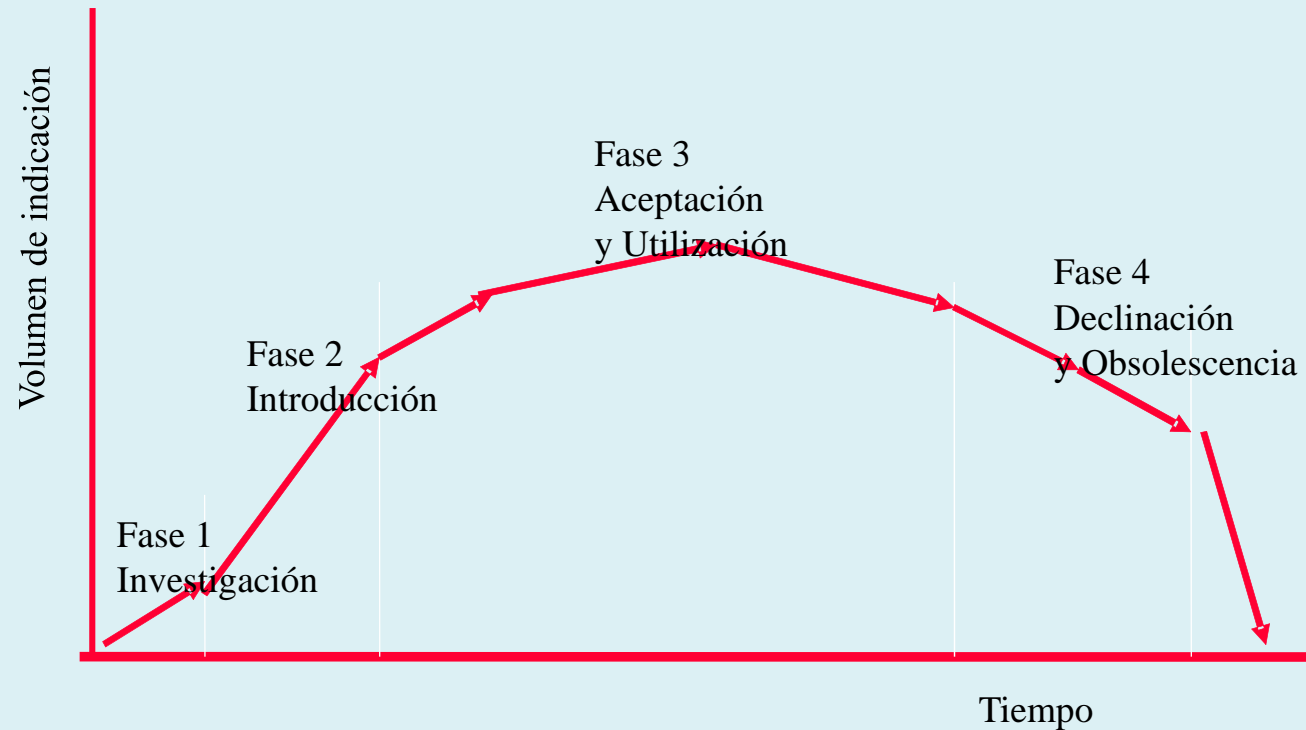
< = less than; > = greater than; * = not estimated.

a. Represents data for 1950 to 1987.

b. Represents data for 1950 to 1980.

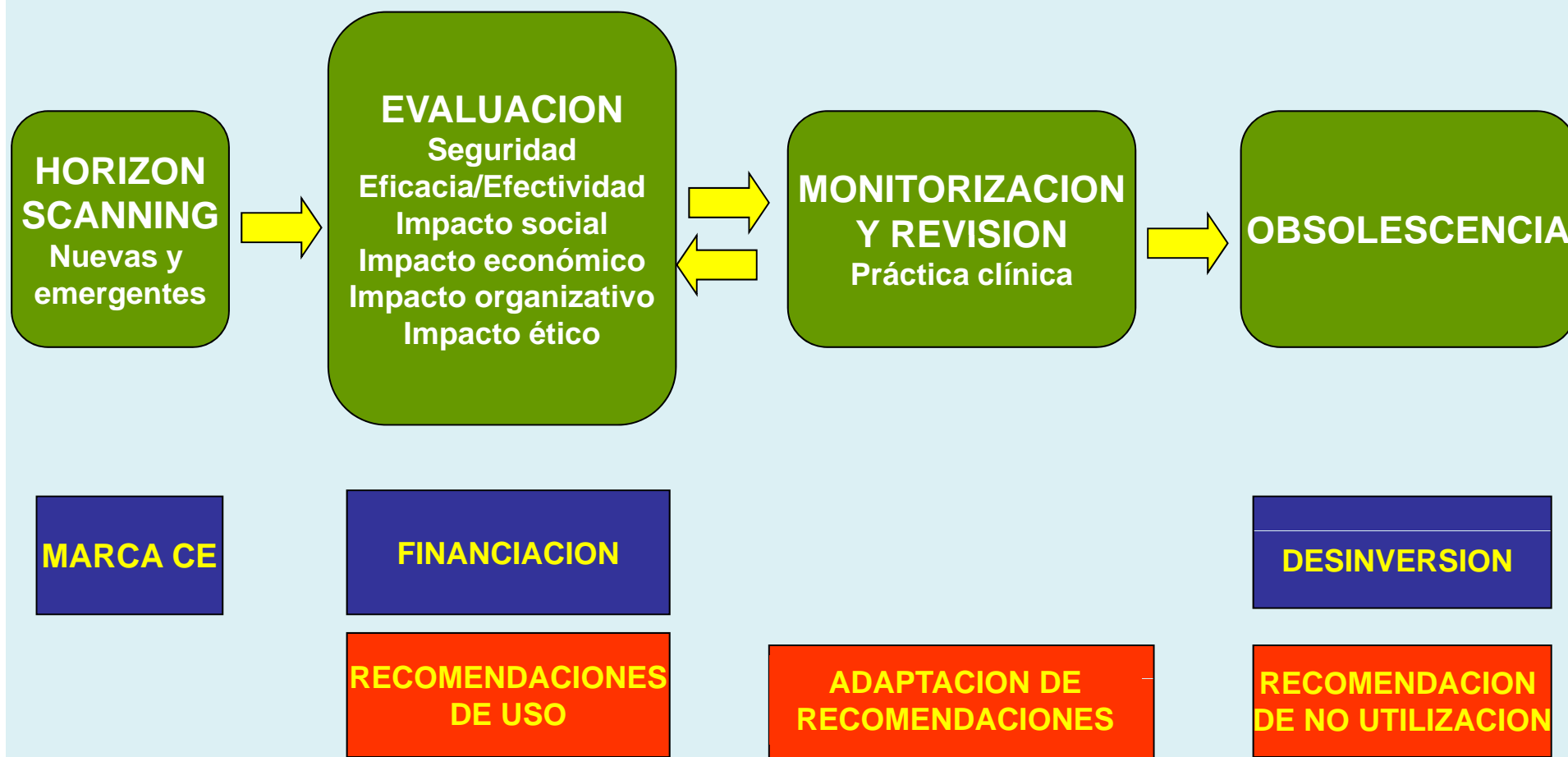


El ciclo de vida de las tecnologías





Fases en la evaluación de tecnologías

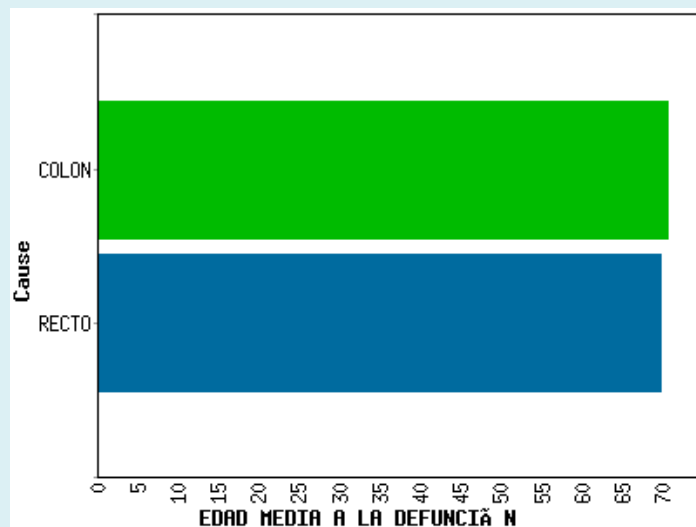




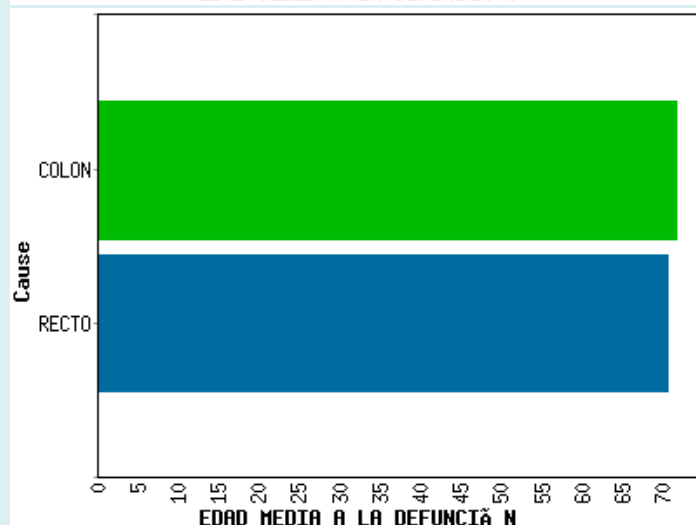
Cáncer de colon: evolución del coste de los tratamiento y de la supervivencia

	Tratamiento	Supervivencia	Coste
1960	No quimioterapia	8 meses	0
1960-2000	Fluoracilo + Leucovirin	12 meses	US\$ 63
2000	Fluoracilo + Lirinotecan + Oxaliplatino	21 meses	US\$ 11.889
2004	Bevacizumab y cetuximab	+ 21 meses	US\$ 21.033

Cáncer de colon y recto: evolución de la edad media de la defunción



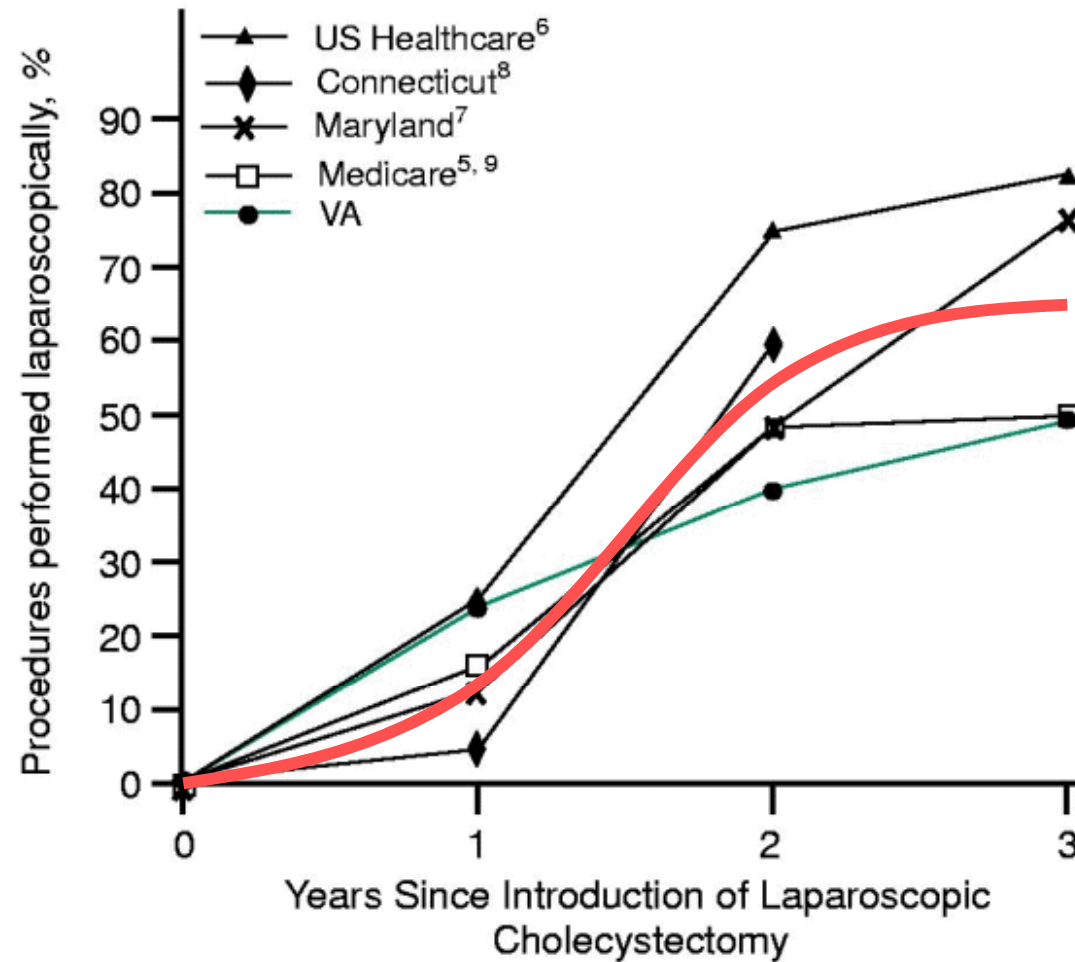
1997



2007

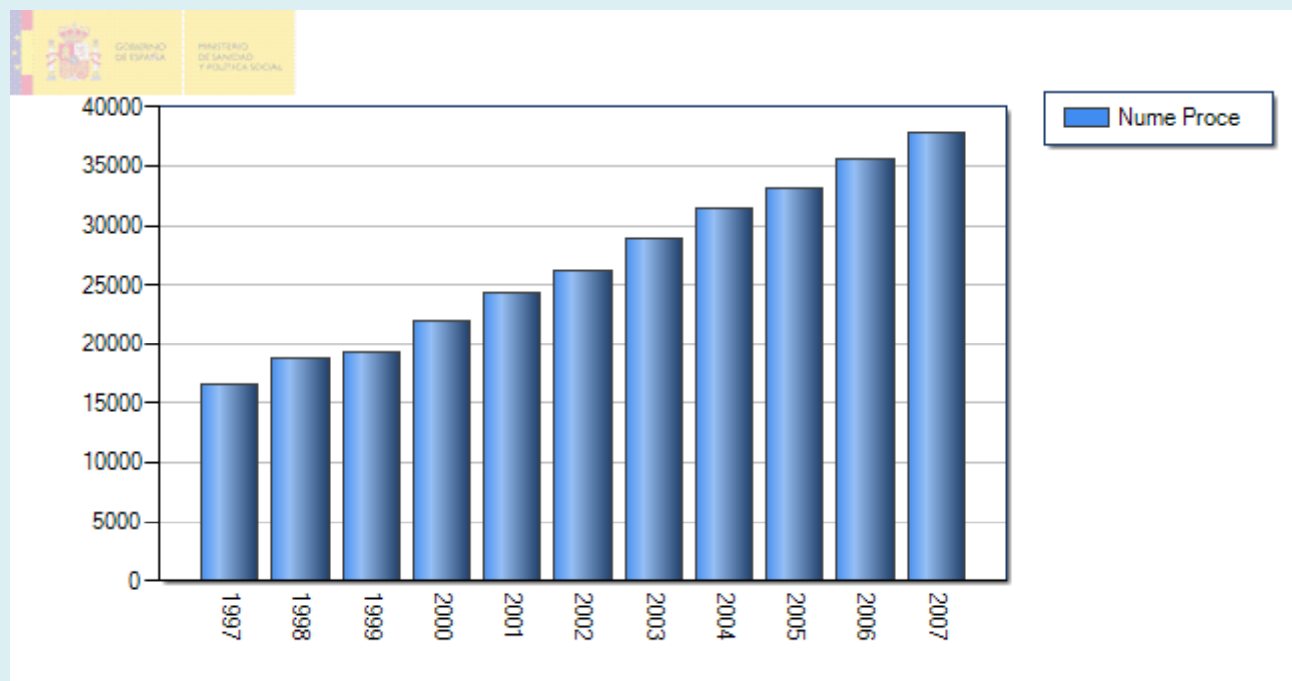


Colecistectomía: abierta y laparoscópica





Colecistectomías con laparoscopia en España



GRD 494: 3.132,47 €

118.151.499,69 €

(¿Podría reducirse un 30%?)



Complicaciones en el aprendizaje de la colecistectomía laparoscópica

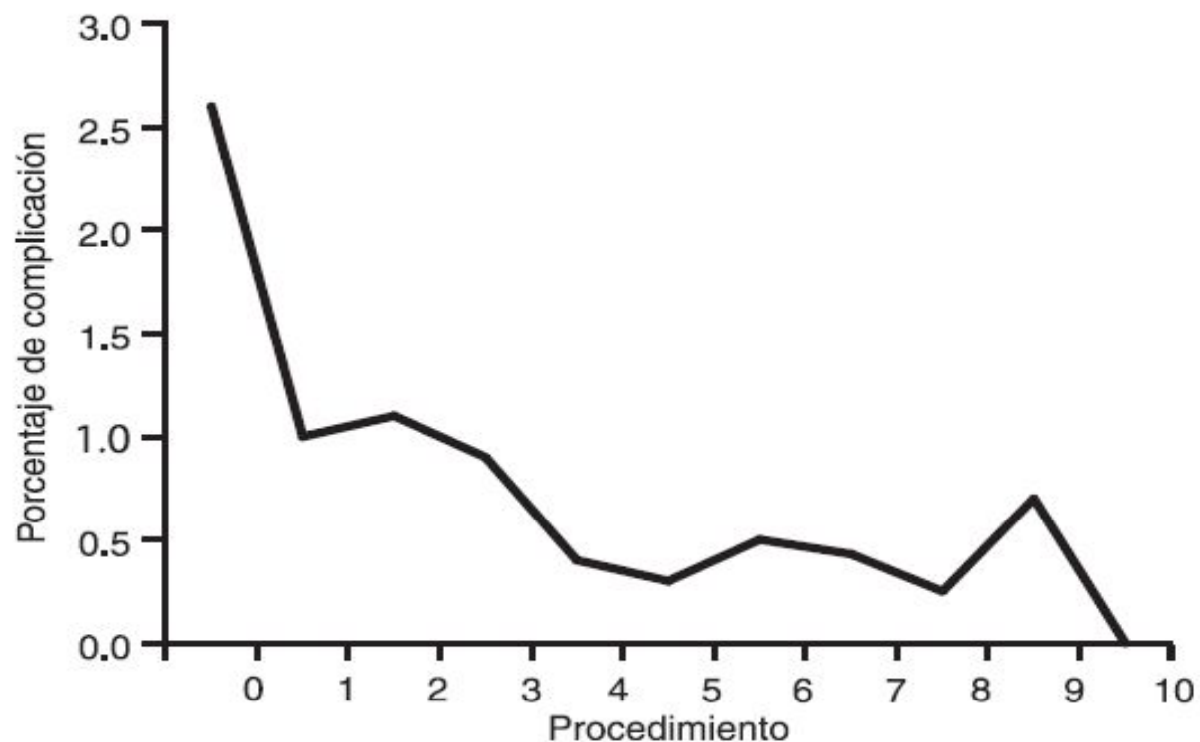


Figura 5. Curva del porcentaje de complicación de cada procedimiento quirúrgico.



Colecistectomía abierta y laparoscópica: mortalidad

YEAR	TYPE OF CHOLECYSTECTOMY			UNADJUSTED ODDS RATIO (95% CONFIDENCE INTERVAL)†
	ALL	OPEN	LAPAROSCOPIC	

% who died in the hospital

**MENOR RIESGO INDIVIDUAL
MAYOR RIESGO POBLACIONAL**

1988	1.17	1.17	—	—
1989	0.84	0.84	—	—
1990	0.71	0.80	0.17‡	4.7 (1.1–28.1)
1991	0.65	1.21	0.10§	12.3 (4.8–34.8)
1992	0.56¶	2.04	0.18§	11.8 (6.2–22.6)

*Operative mortality was defined as the percentage of patients with a primary procedure code for either an open or a laparoscopic procedure who died during the hospitalization.

†Denotes the odds of operative mortality with open as compared with laparoscopic cholecystectomy.

‡P < 0.05 by the chi-square test for the comparison with open cholecystectomy.

§P < 0.01 by the chi-square test for the comparison with open cholecystectomy.

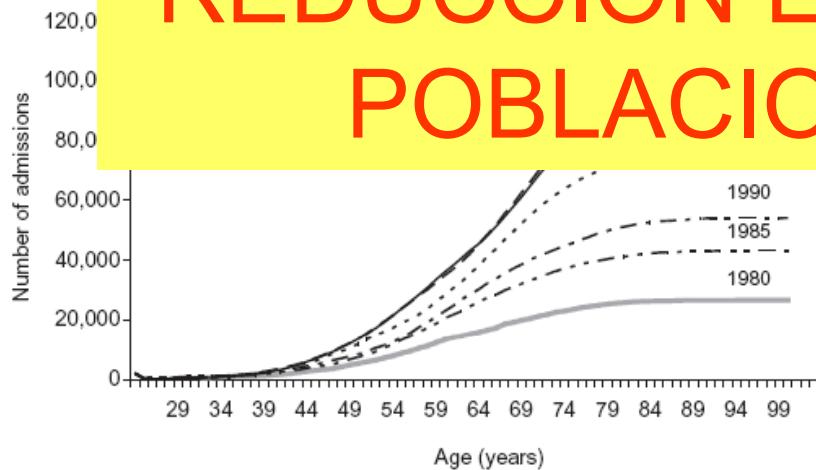
¶P < 0.05 by the chi-square test for the comparison with the 1989 value.

||P < 0.01 by the chi-square test for the comparison with the 1990 value.



EIC: ↑ hospitalizaciones, y ↓ mortalidad intrahospitalaria

¿MAS ICP SE ASOCIA CON UNA REDUCCION EN LA MORTALIDAD POBLACIONAL POR EIC?



Year	Odds ratio	CI at 95%
1985	1.07	0.88–1.31
1990	0.86	0.72–1.04
1995	0.62	0.53–0.73
2000	0.40	0.34–0.47
2003	0.32	0.27–0.37

CI, confidence interval.

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VALUE IN HEALTH

The Impact of Medical Technology on Health: A Longitudinal Analysis of Ischemic Heart Disease

Beatriz G. López-Valcárcel, PhD, Jaime Pinilla, PhD
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ICP: Evolución en el tiempo

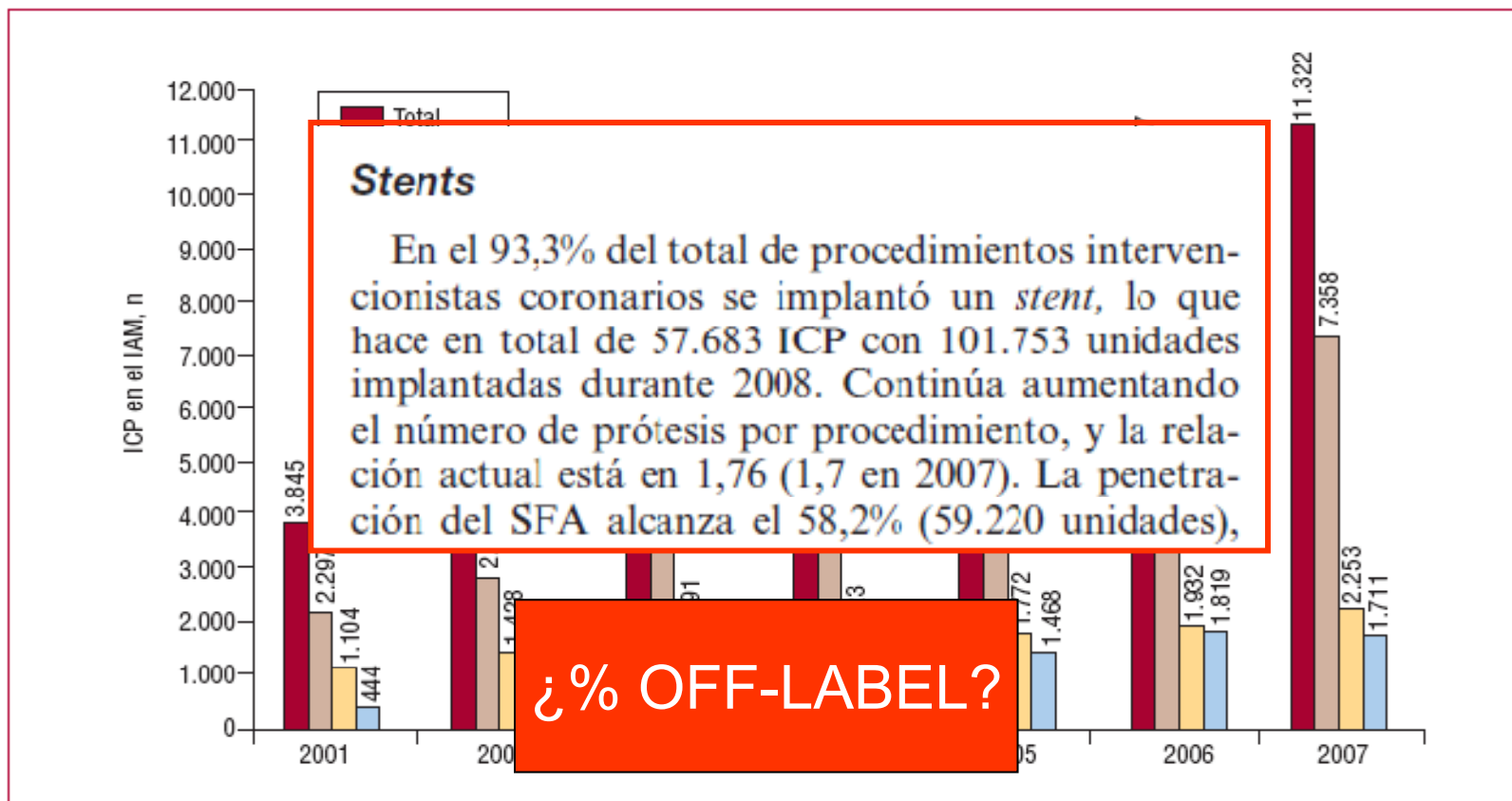


Fig. 9. Evolución de los tipos de intervención coronaria percutánea (ICP) en el infarto agudo de miocardio (IAM).



DES-BMS: Coste-efectividad con datos poblacionales

International Journal of Technology Assessment in Health Care, 25:2 (2009), 196–207.
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doi:10.1017/S0266462309000254

Economic evaluation of drug-eluting stents compared to bare metal stents using a large prospective study in Ontario

Objectives: To determine the cost-effectiveness (CE) and cost-utility (CU) of drug-eluting stents (DES) compared to bare metal stents (BMS) in Ontario using a large prospective “real-world” cohort study and determine the extent to which results vary by patient risk subgroups.

Methods: A field evaluation was conducted based on all stent procedures in the province of Ontario between December 1, 2003, and March 31, 2005, with a minimum subject follow-up of 1 year. Effectiveness data from the study using a propensity-score matched cohort were combined with resource utilization and cost data and quality of life (QOL) data from the published literature in a decision analytic modeling framework to determine 2-year cost-effectiveness (cost per revascularization avoided) and cost-utility (cost per quality-adjusted life-year ([QALY] gained). Stochastic model parameter uncertainty was expressed using probability distributions and analyzed using a probabilistic model.

Modeling assumptions were assessed using traditional deterministic sensitivity analysis.

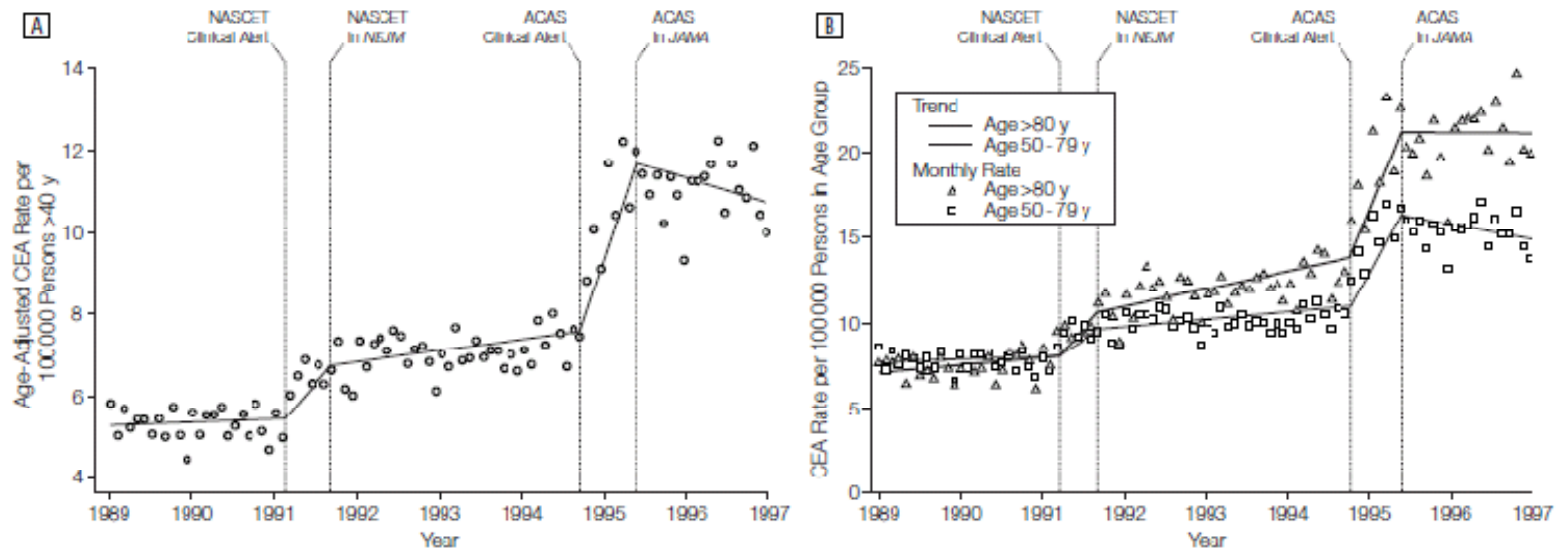
Results: Significant differences in revascularization rates were found for patients with two or more high risk factors. Despite these differences, the CE and CU of DES remained high (e.g., \$419,000 per QALY gained in the most favorable patient risk subgroup). In sensitivity analysis, the difference in cost between DES and BMS had an impact on the CE and CU results. For example, at a price differential of \$500, the CU of DES was \$20,000/QALY for one patient subgroup and DES was dominant (i.e., less costly and more effective) in another.

Conclusions: At current prices, the CE/CU of DES compared with BMS is high even in patient high risk subgroups. As the relative price of DES decrease, the value for money attractiveness of DES increases, especially for selected high risk patients.



Endarterectomía: efecto de la “innovación”

Figure 1. Carotid Endarterectomy (CEA) Rates



A, Age-adjusted CEA rate by month. B, CEA rate vs time, stratified by age. NASCET indicates North American Symptomatic Carotid Endarterectomy Trial; *NEJM*, *The New England Journal of Medicine*; and ACAS, Asymptomatic Carotid Atherosclerosis Study.

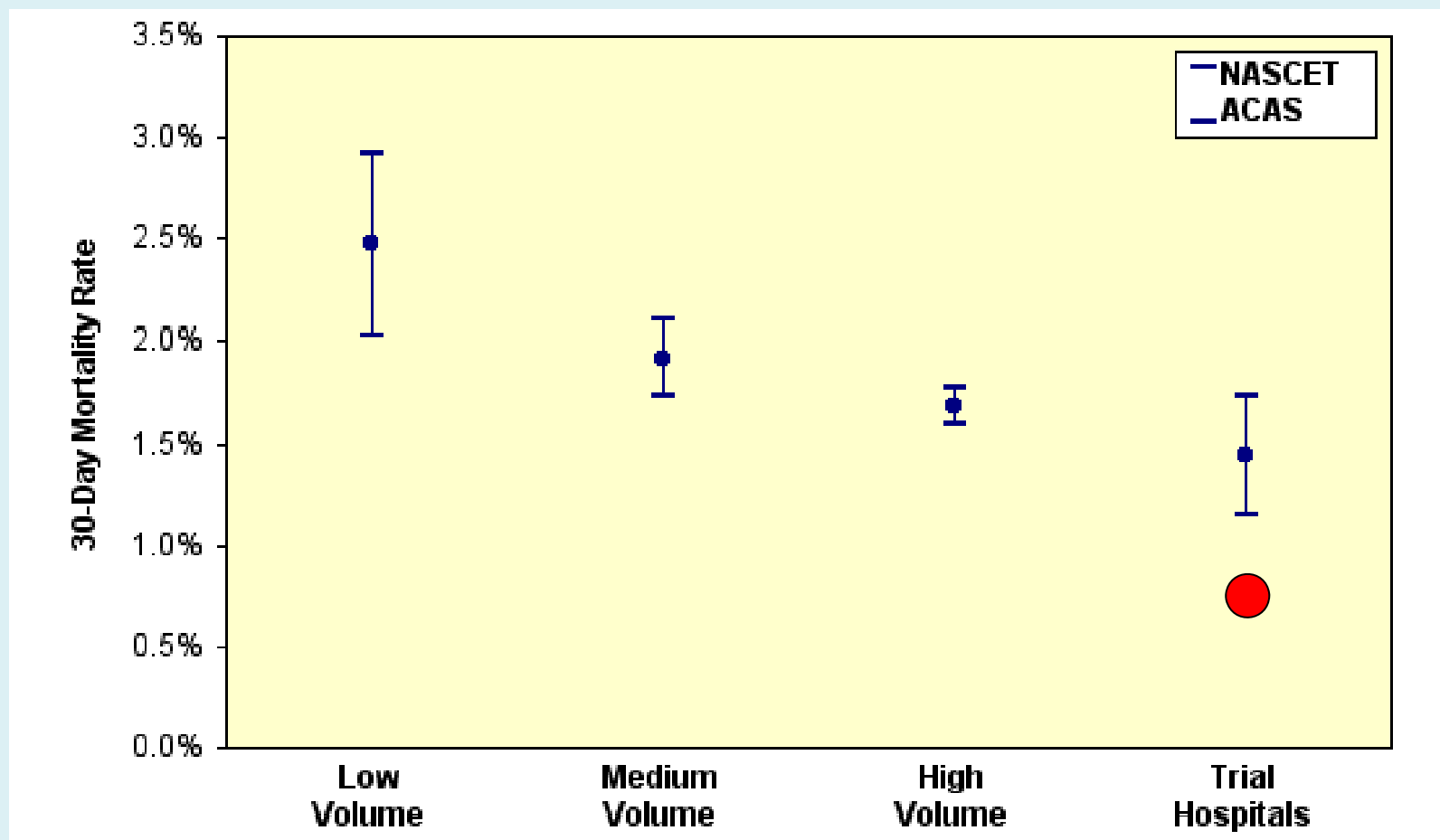


Endarterectomía: dilución de su beneficio

	ASINTOMATICOS	SÍNTOMAS ESTENOSIS MODERADA	SINTOMAS ESTENOSIS GRAVE
EFICACIA			
NNT	38	23	9
EFFECTIVIDAD			
NNT	63	29	10

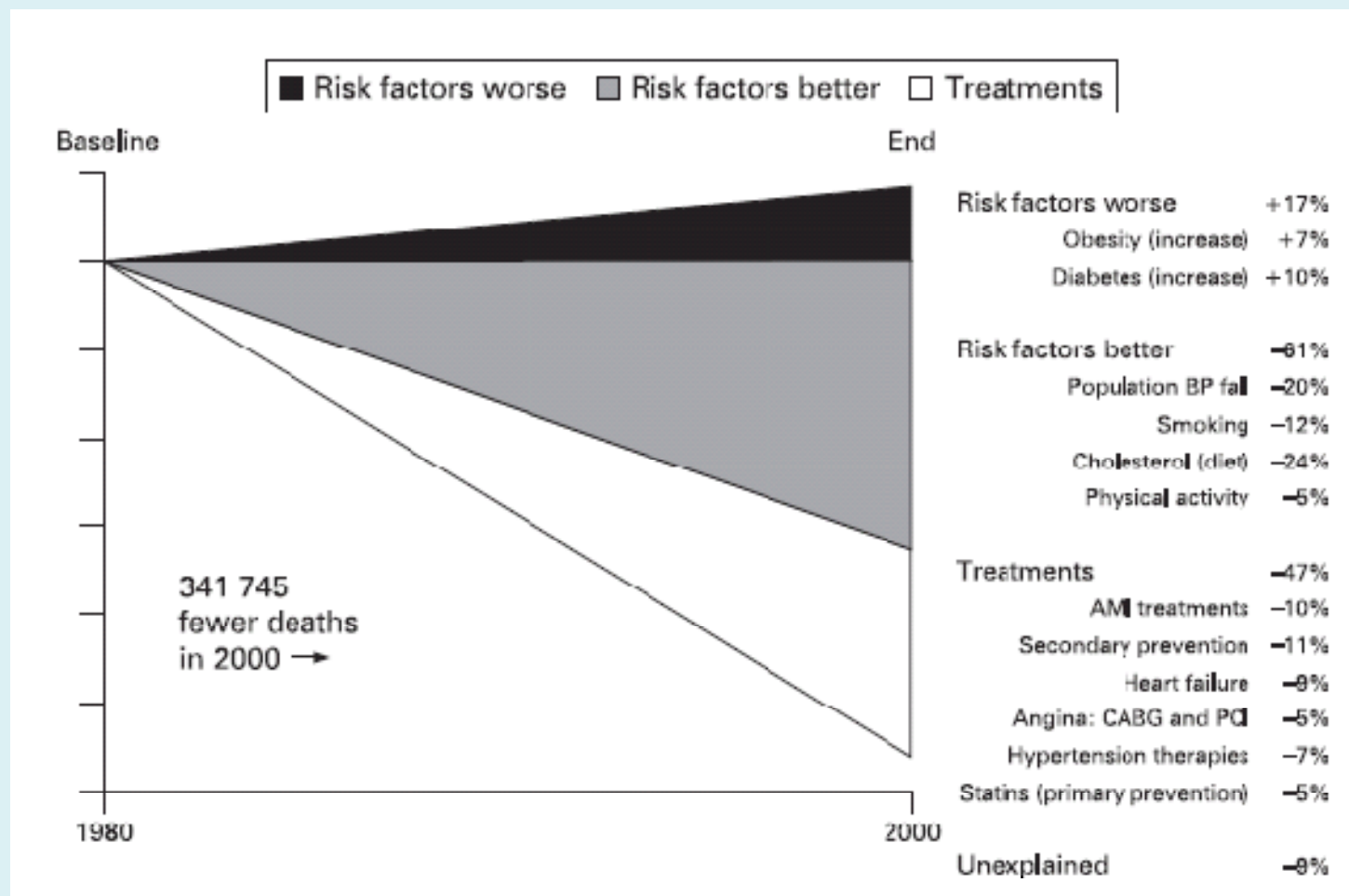


Endarteriectomía carotídea: resultados en condiciones reales



Wennberg D, JAMA 1998

Mortalidad por EIC



What explains declining coronary mortality? Lessons and warnings

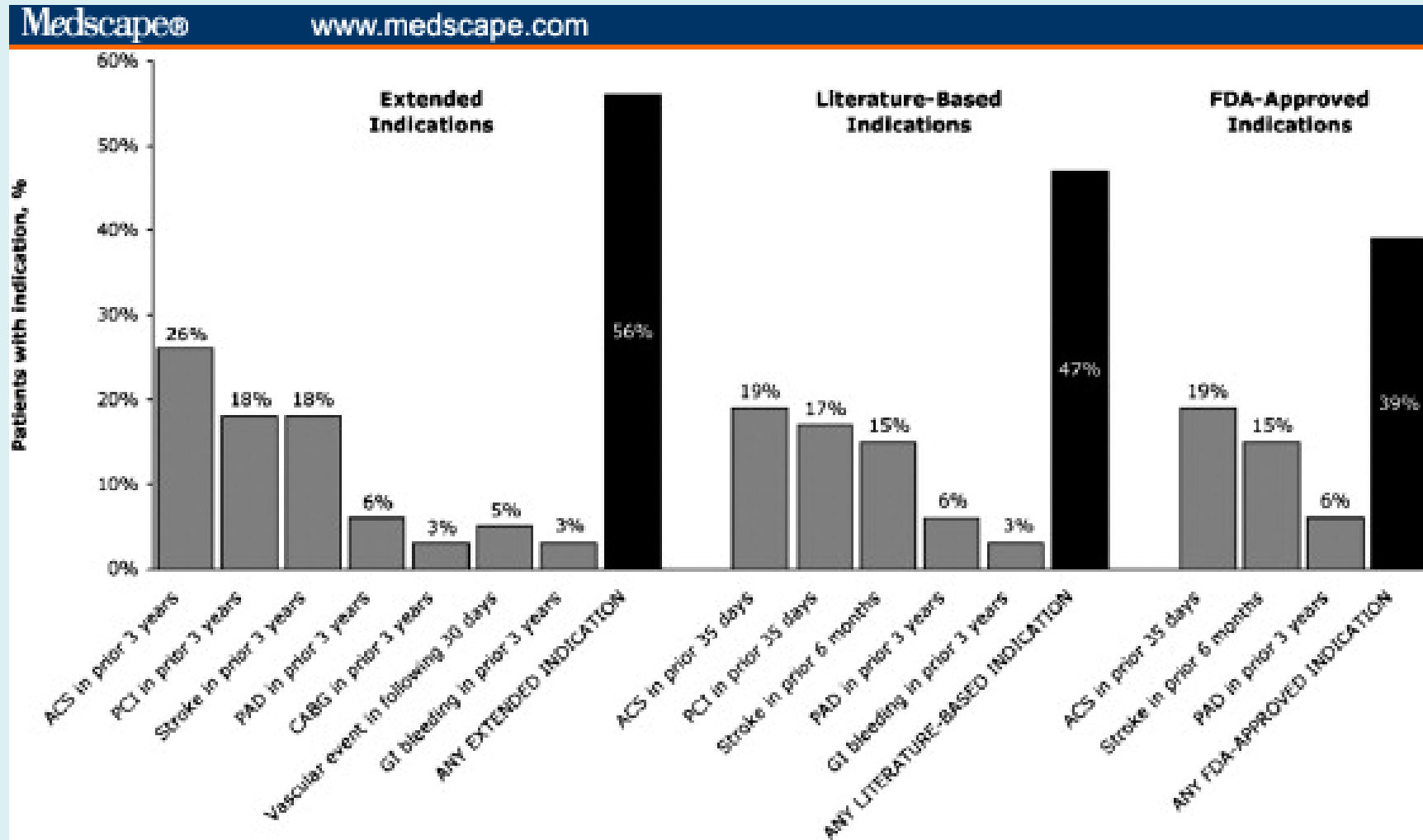
Simon Capewell, Martin O'Flaherty



¿Control de la HTA?

ESTUDIO	AUTOR	AÑO	ENTORNO	MUESTRA	EDAD	MUJERES	CONTROL
CARDIORISC	Banegas	2003-04	1.126 médicos	12.897	59	47,3%	51,6%
QUALIHTA	Felip	2003-04	61 unidades de HTA	5.133	64	49,1%	51,7%
CONTROLPRES	Coca	2003	200 médico	3.337	64	50,3%	38,8%
PREVENCAT	Alvarez	2002-03	267 médicos	2.649	64	51,6%	40,0%
PRESCAP	Listerri	2002	3.426 médicos de AP	12.754	63	57,2%	36,1%
	Segade	2001	12 CAP	681	68	62,8	54,8%
DISEHTAC II	Benítez	2001	12 CAP	990	65	58,9%	32,4%
CLUE	Banegas	2000	47 unidades de HTA	4.049	59	50,6%	42%
DISEHTAC	Dalfó	1998	31 CAP	2.240	65	61,2%	38,8%

Clopidogrel: Uso extendido





Clopidogrel: ¿cuánto podemos ahorrar?

UTILIZACIÓN DE MEDICAMENTOS
EN EL SISTEMA NACIONAL DE
SALUD 2008



CONSEJO GENERAL
DE COLEGIOS OFICIALES
DE FARMACÉUTICOS

~ 235m €

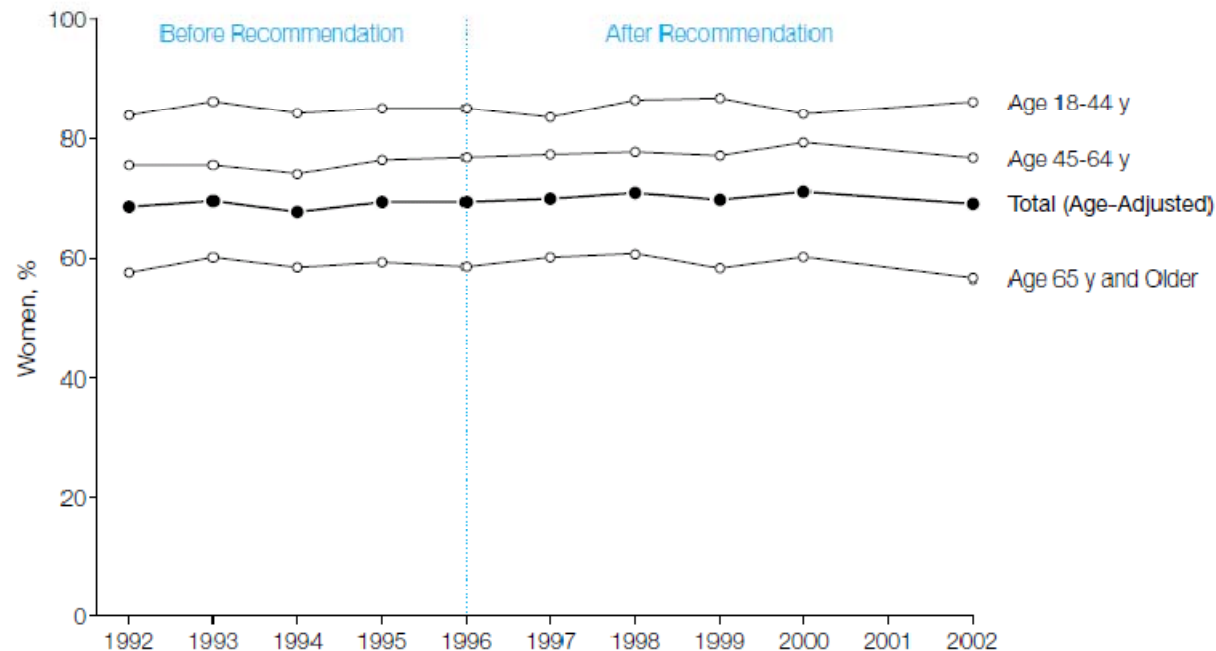
¿Podemos ahorrar un 40%?

Principios Activos	% PVPIva	% PVPIva acumulado	PVPIva/envase (euros)
ATORVASTATINA	4,43%	4,43%	41,64
CLOPIDOGREL	2,15%	6,58%	57,98
OMEPRAZOL	1,85%	8,44%	5,07
RISPERIDONA	1,58%	10,02%	96,56
OLANZAPINA	1,30%	11,32%	122,02
TIOTROPIO,BROMURO	1,29%	12,61%	53,03
VENLAFAXINA	1,17%	13,79%	47,52
PANTOPRAZOL	1,13%	14,92%	25,45
RISEDRONICO, ACIDO	1,12%	16,03%	39,43
ESCITALOPRAM	1,08%	17,11%	33,05



Realmente, ¿es en beneficio de los pacientes?

Figure. Percentage of Women With a History of Hysterectomy Who Reported Receiving a Papanicolaou Smear in the Past 3 Years Before and After the US Preventive Services Task Force Recommendation*



The US Preventive Services Task Force recommendation states, "Women who have undergone a hysterectomy in which the cervix was removed do not require Pap testing, unless the hysterectomy was performed because of cervical cancer or its precursors."⁷

*For all years, SE for total sample was less than 1%, for each subgroup, less than 3%.



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- La inquietud sobre la sostenibilidad
- ¿Podremos seguir incorporando innovación?
- Evaluar la incorporación
- **La necesidad de la Quinta Garantía**



Niveles de evaluación

- Macro: definición de prestaciones

- Meso: oferta

- Micro: decisiones clínicas

¿Dónde está la solución?