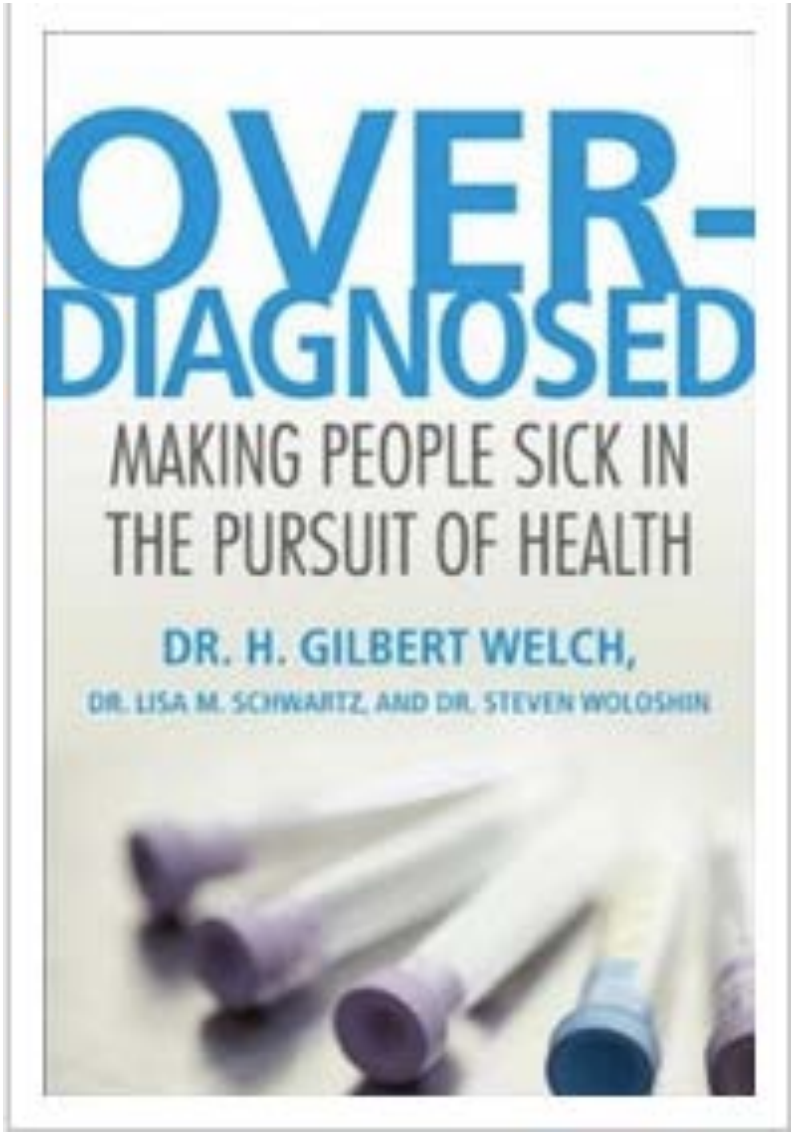
Més pot ser pitjor: Epidèmia de sobrediagnòstic i sobretractaments?

Andreu Segura
Metge de Salut Pública
Igualada, 14 de maig 2014


OVER-
DIAGNOSED
MAKING PEOPLE SICK IN
THE PURSUIT OF HEALTH
DR. H. GILBERT WELCH,
DR. LISA M. SCHWARTZ, AND DR. STEVEN WOLOSHIN

Propòsits

El paper del diagnòstic

Què entenem per sobrediagnòstic?

Per què n'hi ha…tant

Alguns exemples

Ens convé fer alguna cosa?

Propòsits

El paper del diagnòstic a la història de la medicina

Dimensió pràctica:

- Atinar amb el tractament
- Precisar el pronòstic

Dimensió epistemològica:

- Reconèixer les malalties com a “éssers”
- Descobrir les “lleis” de la fisiopatologia

Què entenem per sobrediagnòstic?

No és un diagnòstic erroni.

No és un fals positiu.

És un diagnòstic inapropiat.

És una interpretació inadequada.

I sobre tractament (o lo mejor es enemigo de lo bueno)

Routine *vs* selective episiotomy: a randomised controlled trial

Argentine Episiotomy Trial Collaborative Group

Summary

Episiotomy is a widely-done intervention in childbirth, regardless of poor scientific evidence of its benefits. This randomised controlled trial compares selective with routine use of a mediolateral episiotomy for women having first and second deliveries in 8 public maternity units in Argentina.

2606 women participated; 1555 were nulliparous (778 in the selective group and 777 in the routine group) and 1051 primiparous (520 in the selective group and 531 in the routine group). The two interventions compared were selective (limited to specified maternal or fetal indications), and routine episiotomy (following the hospital's previous policy).

Episiotomy was done in 30·1% of deliveries in the selective, and 82·6% in the routine group. The main outcome measure was severe perineal trauma. Severe perineal trauma was uncommon in both groups but was slightly less frequent in the selective group (1·2% *vs* 1·5%). Anterior perineal trauma was more common in the selective group but posterior perineal surgical repair, perineal pain, healing complications, and dehiscence were all less frequent in the selective group. Routine episiotomy should be abandoned and episiotomy rates above 30% cannot be justified.

Lancet 1993; **342:** 1517–18

Routine *vs* selective episiotomy: a randomised controlled trial

Argentine Episiotomy Trial Collaborative Group

	Selective n/A (%)	Routine n/A (%)	RR (95% CI)
At delivery			
Vaginal middle and/or upper third tear	38/1271 (2·9)	28/1278 (2·2)	1·38 (0·84–2·21)
Anterior perineal trauma	230/1197 (19·2)	101/139 (8·1)	2·36 (1·89–2·94)
Posterior perineal surgical repair	817/1296 (63·1)	1138/1291 (88·1)	0·72 (0·68–0·75)
Apgar score <7 at first minute	43/1306 (3·3)	39/1293 (3·0)	1·09 0·71–1·67)
At discharge			
Perineal pain	371/1207 (30·7)	516/1215 (42·5)	0·72 (0·65–0·81)
Haematoma	47/1148 (4·1)	49/1148 (4·3)	0·96 (0·65–1·42)
At seventh day post-partum			
Healing complications	114/555 (20·5)	168/564 (29·8)	0·69 (0·56–0·85)
Local infection	9/555 (1·6)	10/578 (1·8)	0·91 (0·37–2·21)
Dehiscence	25/557 (4·5)	53/561 (9·4)	0·45 (0·30–0·75)

n = number. A = number of patients assessed.

Obstinación terapéutica

Recomendación o aplicación de maniobras de prevención, pruebas diagnósticas o tratamientos que o bien carecen de utilidad, o bien resultan intolerables u onerosos

Antonio Pardo, Bioética y Ciencias de la Salud 2001

Sobrediagnóstico, un problema clínico, ético y social

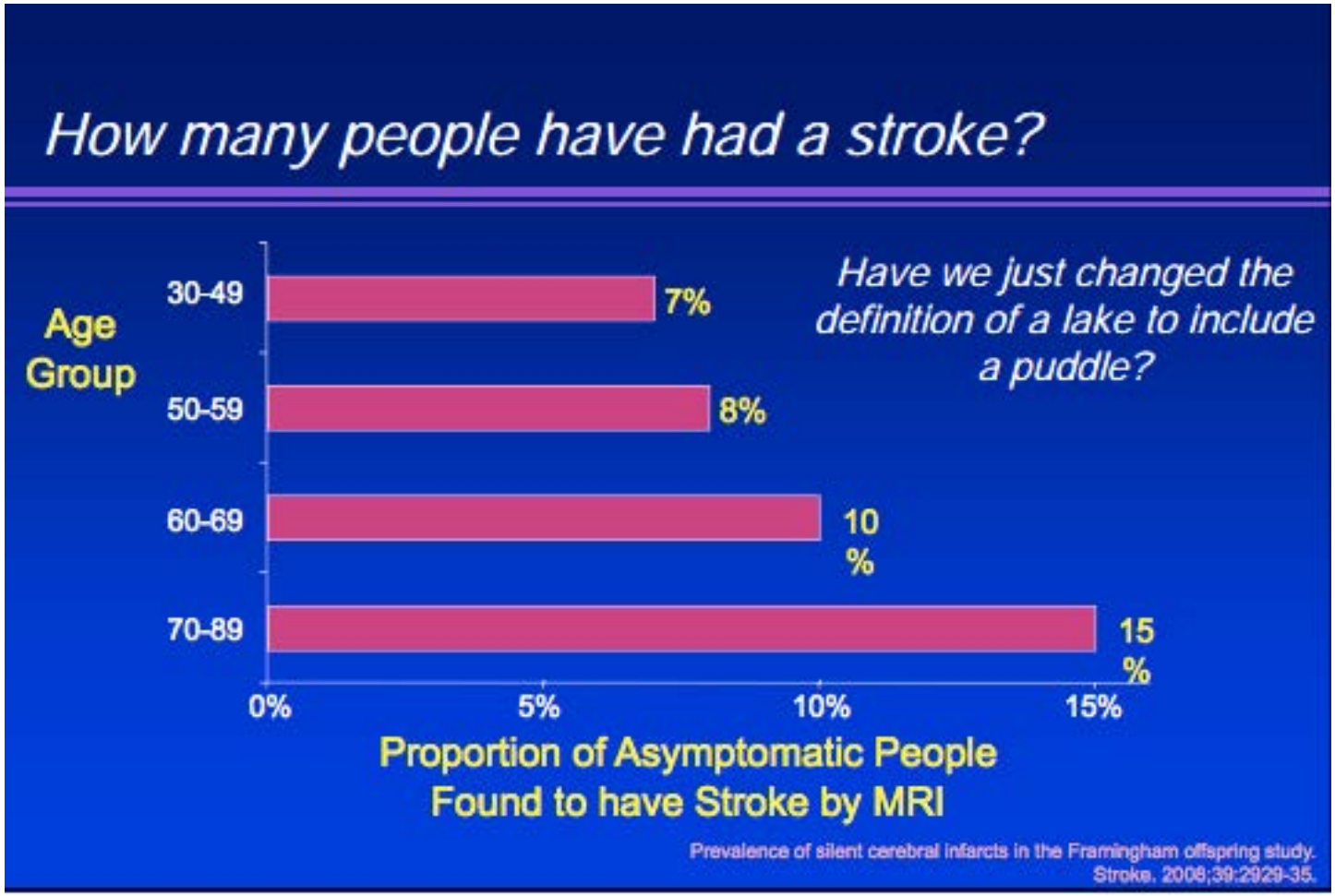
Juan Gérvas[a] y Mercedes Pérez Fernández[b]

- Diagnosticar acertada y oportunamente da prestigio y reputación a los médicos, pues es una actividad central en su profesión.
- El diagnóstico es importante porque se liga al pronóstico y permite establecer pautas de tratamiento y seguimiento que modifican a mejor (en el sentido deseado por el paciente y la sociedad) el curso natural de los acontecimientos.
- El diagnóstico es, pues, una actividad importante porque conlleva más beneficios que daños. No se justifica el diagnóstico que provoca más perjuicios que beneficios.
- El sobrediagnóstico es un diagnóstico cierto que conlleva más daños que beneficios. El sobrediagnóstico no es un falso diagnóstico en el sentido de falso positivo. No hay error diagnóstico en el sobrediagnóstico.
- El sobrediagnóstico es un error pronóstico. El sobrediagnóstico atribuye el mismo pronóstico a diagnósticos similares por sus características pero de impacto muy distinto en la vida del paciente.
- Hay sobrediagnósticos por errores en la consideración de variaciones de la normalidad. Así, es posible llevar una vida sana por completo a pesar de tener cáncer y/o mutaciones genéticas patológicas.
- Hay sobrediagnóstico por avances tecnológicos que llevan a poder diagnosticar eventos desconocidos que en su expresión clínica son siempre una enfermedad. Así, es posible tener microémbolos pulmonares en una tomografía espiral multicorte y estar sano, y/o tener herniación cerebral sin ninguna consecuencia clínica.
- Hay sobrediagnóstico cuando el diagnóstico no modifica ni la calidad ni la expectativa de vida. Así, sería sobrediagnóstico el diagnosticar esclerosis lateral amiotrófica inicial en un paciente con cáncer de pulmón y terminal.
- Hay sobrediagnóstico cuando el diagnóstico es casual, sin impacto en la vida del paciente. Así, los incidentalomas y/o los resultados anormales tipo hiperuricemia en los chequeos.
- Hay sobrediagnóstico cuando se diagnostican enfermedades inventadas o cuyos límites se amplían sin que añada nada el consiguiente tratamiento. Así, en el diagnóstico de andropausia, prehipertensión y otros.

FMC. 2014;21(3):137-42

Per què n'hi ha?……tant


there are more of these
Then
Now


How many people have had a stroke?
Age Group
30-49
50-59
60-69
70-89
7%
8%
10 %
15 %
0%
5%
10%
15%
Proportion of Asymptomatic People Found to have Stroke by MRI
Have we just changed the definition of a lake to include a puddle?
Prevalence of silent cerebral infarcts in the Framingham offspring study. Stroke. 2008;39:2929-35.

Changing Disease Definitions: Implications for Disease Prevalence

Analysis of the Third National Health and Nutrition Examination Survey, 1988–1994

LISA M. SCHWARTZ, MD, MS
STEVEN WOLOSHIN, MD, MS

Effective Clinical Practice • March/April 1999 Volume 2 Number 2

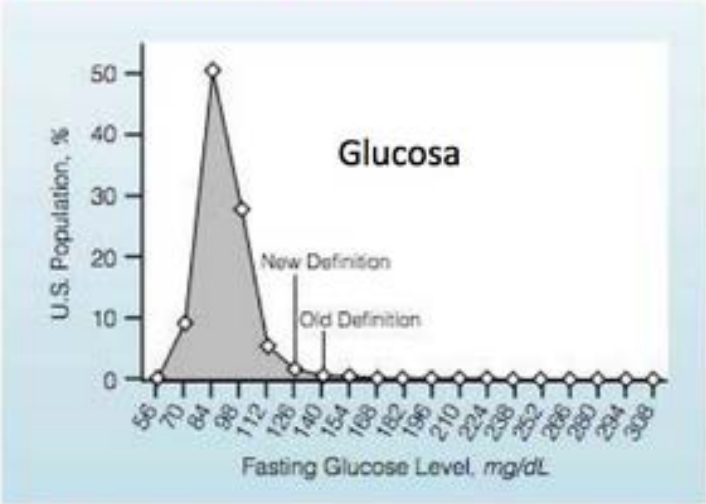


FIGURE 2. Distribution of fasting glucose levels for the U.S. adult population and two definitions for diabetes.

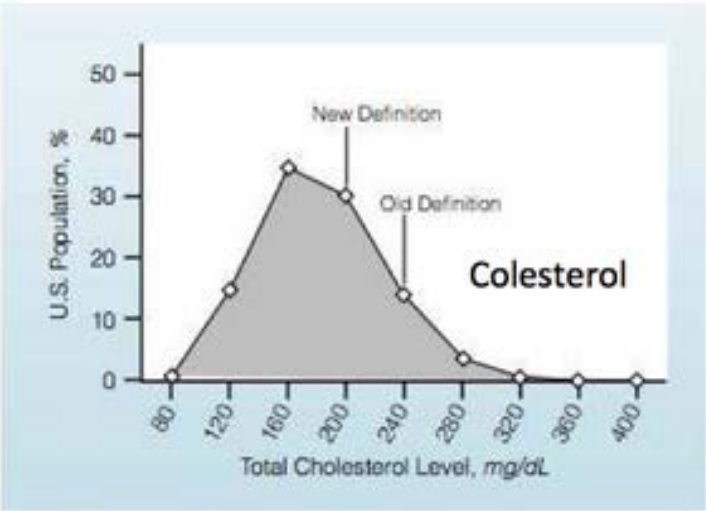


FIGURE 4. Distribution of total serum cholesterol levels for the U.S. adult population and two definitions for hypercholesterolemia.

	Viejas cifras	Nuevas cifras	Casos nuevos	Incremento
Diabetes	11.697.000	13.378.000	1.681.000	14%
Colesterol	49.480.000	92.127.000	42.647.000	86%

Changing Disease Definitions: Implications for Disease Prevalence

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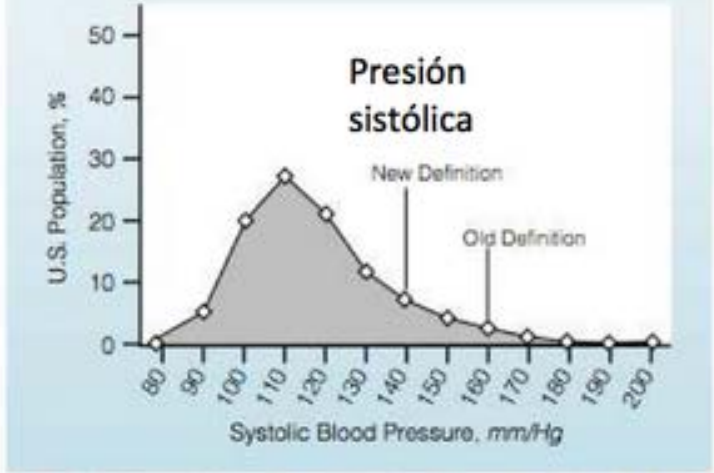


FIGURE 3. Distribution of systolic blood pressure for the U.S. adult population and two definitions for hypertension.

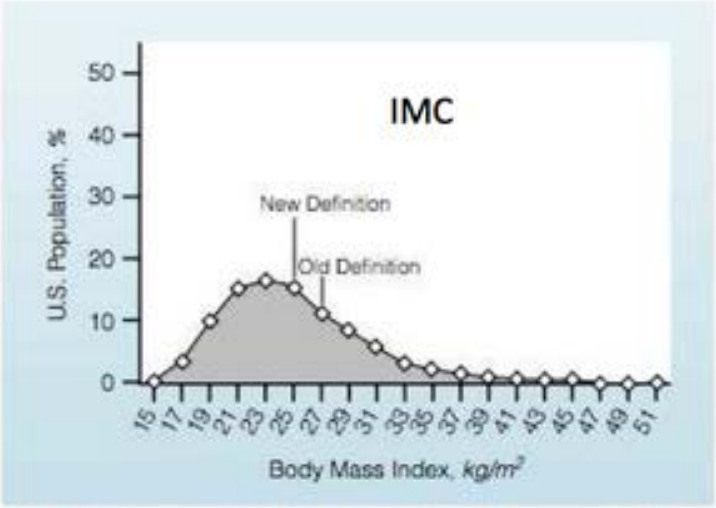
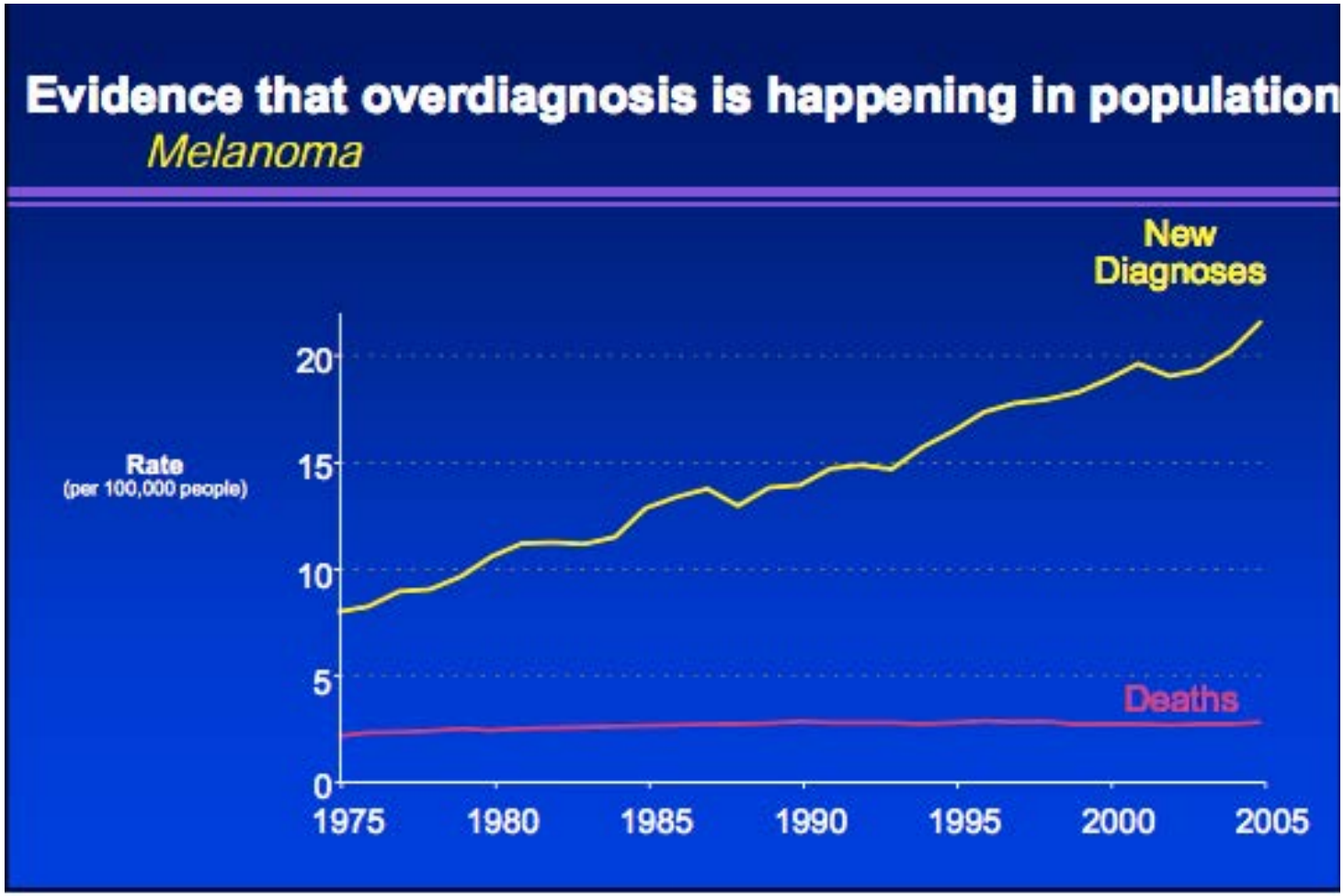
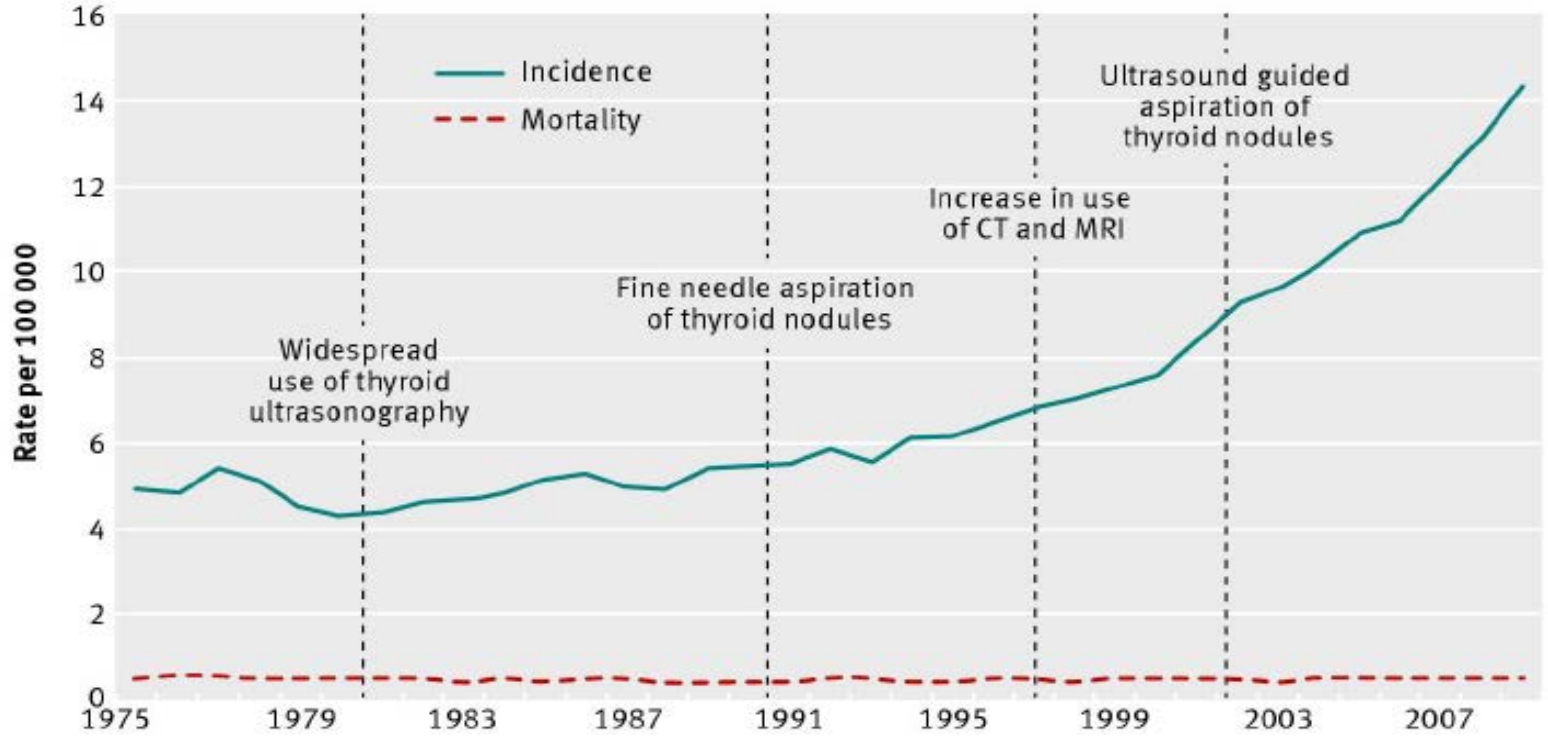


FIGURE 5. Distribution of body mass index for the U.S. adult population and two definitions for being overweight.

	Viejas cifras	Nuevas cifras	Casos nuevos	Incremento
Hipertensión	38.690.000	52.180.000	13.490.000	35%
Sobrepeso	70.608.000	100.100.000	29.492.000	29%


Evidence that overdiagnosis is happening in population
Melanoma
New Diagnoses
Deaths
Rate
(per 100,000 people)
20
15
10
5
0
1975
1980
1985
1990
1995
2000
2005

Thyroid cancer: zealous imaging has increased detection and treatment of low risk tumours



Incidence of and mortality from thyroid cancer in the US, 1975-2009[3] and advent of new technologies

BMJ 2013;347:f4706 doi: 10.1136/bmj.f4706 (Published 27 August 2013)

Thyroid cancer: zealous imaging has increased detection and treatment of low risk tumours

Juan P Brito *instructor of medicine*[1 2], John C Morris *professor*[1], Victor M Montori *professor*[1 2]

Thyroid cancer	Proportion of all thyroid cancers	Change in incidence over past three decades	Change in mortality over past three decades	Mortality	Treatment		
					Type of intervention	Benefits	Harms
Papillary	85%	3-fold increase	Unchanged	1-2% at 20 years	Thyroidectomy/radioactive iodine/thyroid hormone replacement	Unclear, possible decrease in mortality from 0 to 2/1000 patients compared with active surveillance	Anxiety, insurability, need for lifelong thyroid replacement, cost, burden of follow-up, complication from surgery and radioactive iodine
Follicular	11%	Unchanged	Unchanged	10-20% at 10 years	Thyroidectomy/radioactive iodine/thyroid hormone replacement	Clear benefit in mortality (50% reduction in cancer death rate on average)	
Medullary	3%	Unchanged	Unchanged	25-50% at 10 years	Thyroidectomy/thyroid hormone replacement	Some patients can be cured with surgery	Anxiety, insurability, need for lifelong thyroid replacement, cost, burden of follow-up, complication from surgery
Anaplastic	1%	Unchanged	Unchanged	90% at 5 years	Thyroidectomy/chemotherapy/thyroid hormone replacement	Some benefit (prolongs survival by months)	As above plus side effects from chemotherapy

BMJ 2013;347:f4706 doi: 10.1136/bmj.f4706 (Published 27 August 2013)

Thyroid cancer: zealous imaging has increased detection and treatment of low risk tumours

Juan P Brito *instructor of medicine*[1 2], John C Morris *professor*[1], Victor M Montori *professor*[1 2]

Clinical context—Thyroid cancer is the most common endocrine malignancy and one of the fastest growing diagnoses

Diagnostic change—Introduction of neck ultrasonography into routine endocrinological practice in the 1980s with guided biopsy in the late 1990s, plus increased use of computed tomography and magnetic resonance imaging for other conditions

Rationale for change—New imaging methods allow the detection and biopsy of thyroid nodules as small as 2 mm

Leap of faith—Patients with small papillary cancers will benefit from their removal

Increase in disease—Worldwide increase in incidence of thyroid cancer since the early 1980s but with considerable variation between countries. In the US the incidence of thyroid cancer has increased from 3.6 cases/100 000 population in 1973 to 11.6 cases/100 000 in 2009. Small papillary thyroid cancers, the most indolent form of thyroid cancer, account for 90% of cases

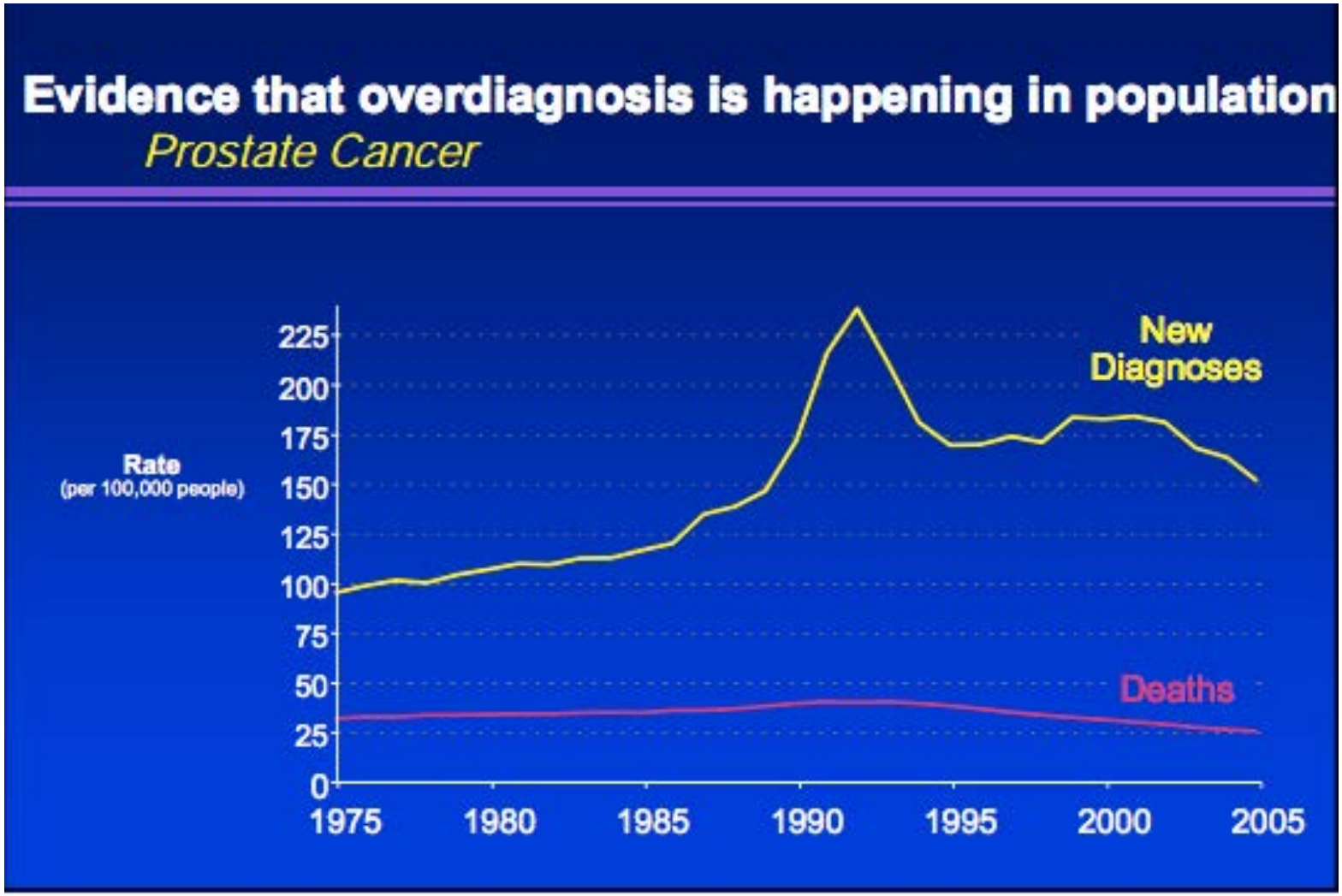
Evidence of overdiagnosis—The expanding gap between the incidence of thyroid cancer and stable death rates from papillary thyroid cancer (0.5/100 000 in 1979 and 2009). Observational evidence shows that small papillary thyroid cancers, which are a common autopsy finding, may never progress to cause symptoms or death

Harms from overdiagnosis—Patients having thyroidectomy experience physical complications, financial and psychosocial burdens, and need lifelong thyroid replacement therapy

Limitations—Inference about overdiagnosis of thyroid cancer is based on epidemiological and observational evidence

Conclusion – The incidence of small and indolent thyroid cancer is increasing, exposing patients to treatments inconsistent with their prognosis. We suggest a term that conveys the favourable prognosis for low risk thyroid cancers (micropapillary lesions of indolent course or microPLICs) and call for research to identify the appropriate care for these patients

BMJ 2013;347:f4706 doi: 10.1136/bmj.f4706 (Published 27 August 2013)

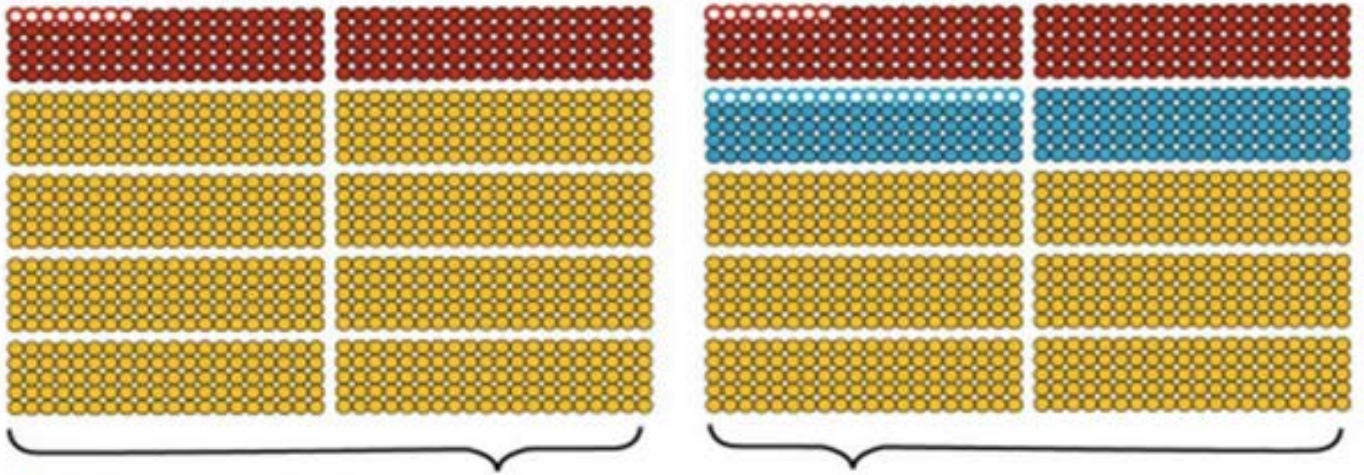

Evidence that overdiagnosis is happening in population
Prostate Cancer
Rate
(per 100,000 people)
225
200
175
150
125
100
75
50
25
0
1975
1980
1985
1990
1995
2000
2005
New Diagnoses
Deaths

Detección precoz del Cáncer de Próstata mediante **PSA** y **tacto rectal**

Adaptación al español del original en inglés

HARDING CENTER FOR RISK LITERACY

Número de hombres de 50 o más años que han participado o no en el cribado durante 10 años.



	1.000 hombres SIN cribado	1.000 hombres CON cribado
Fallecidos por cáncer de próstata:	8	8
Fallecidos por cualquier causa:	200	200
Diagnosticados y tratados sin necesidad de cáncer de próstata:	0	20
Hombres sin cáncer que sufrieron falsa alarma y biopsia:	0	180
Hombres vivos y sin daño:	800	600

Source:
Djulbegovic M, Beyth AJ, Neuberger MM, et al. (2010). *British Medical Journal*, 341:c4543.

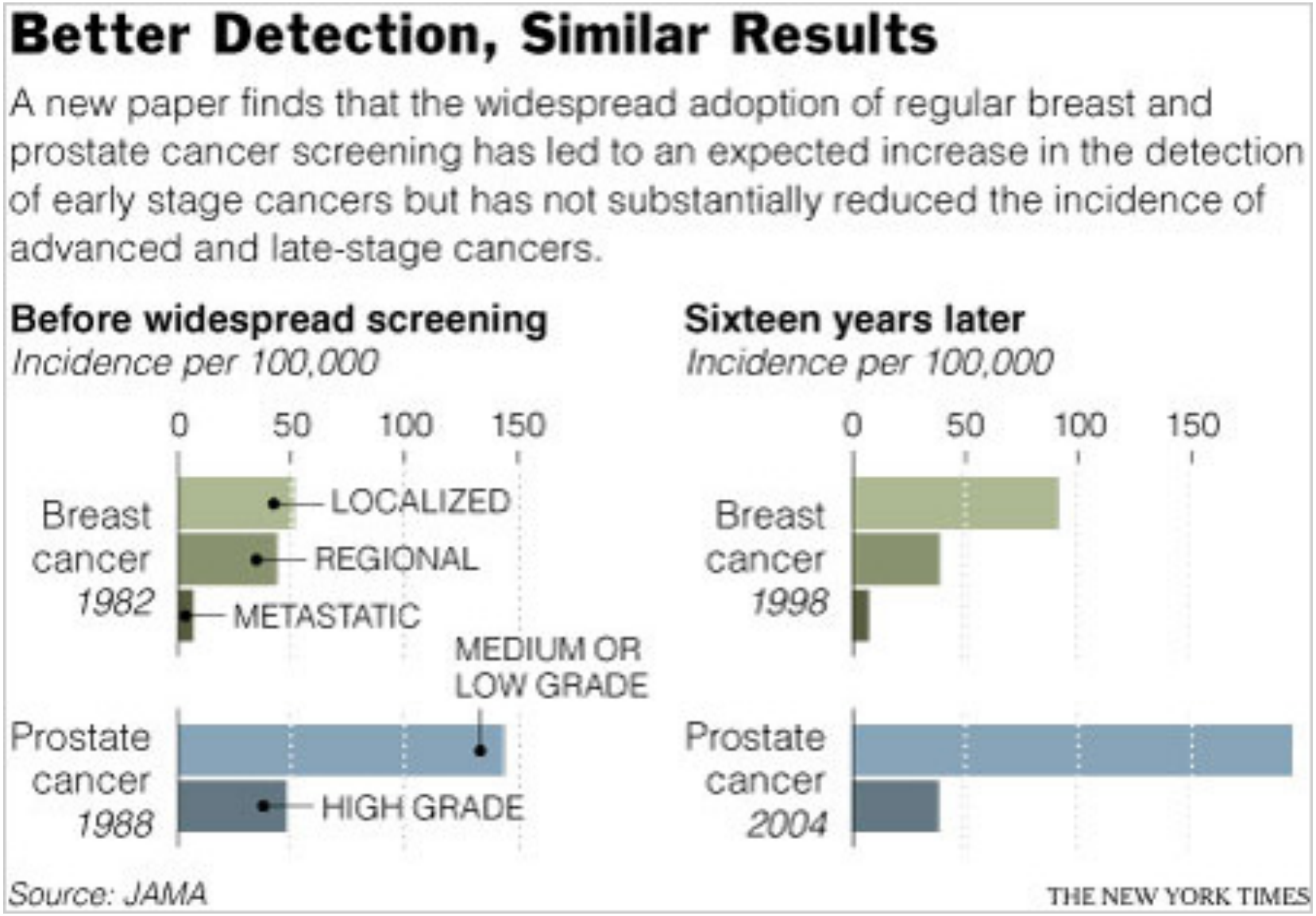
Detección precoz del cáncer de mama mediante cribado por mamografía: riesgos y beneficios

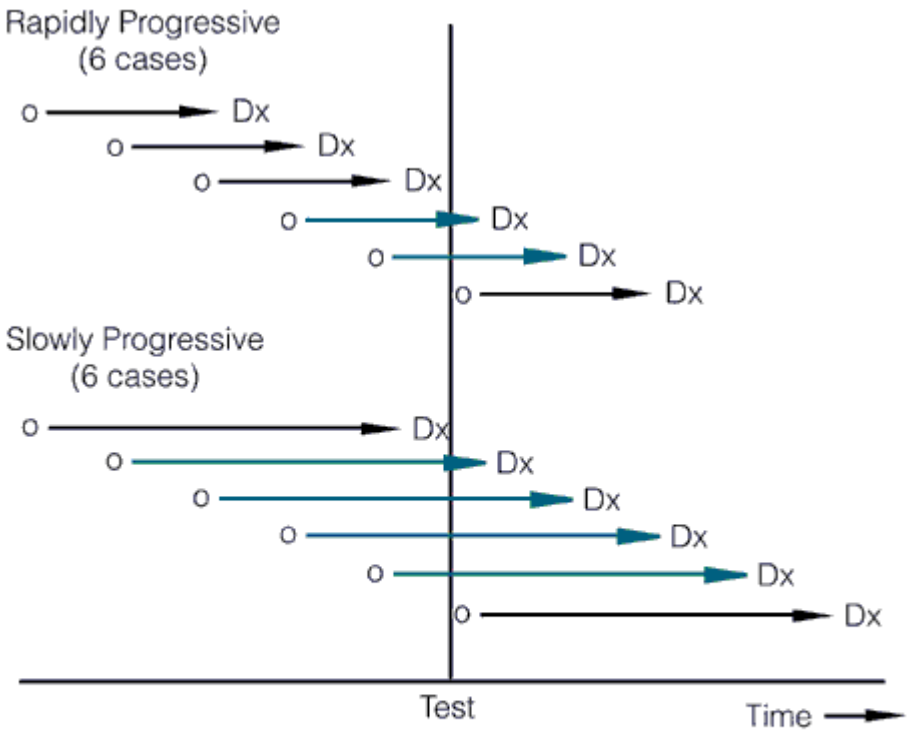
Número de mujeres, de 50 años o más, que se sometieron o no al cribado mediante mamografías durante 10 años	**2.000 mujeres *Sin* cribado**	**2.000 mujeres *Con* cribado**
Beneficios		
¿Cuántas mujeres fallecieron por cáncer de mama?	8	7*
¿Cuántas mujeres fallecieron por todo tipo de cáncer?	43	43
Daños		
¿Con qué frecuencia se produjeron falsos diagnósticos, a menudo asociados a meses de espera hasta que todo se aclaró?	-	200
¿Cuántas mujeres fueron diagnosticadas y operadas de cáncer de mama sin tenerlo**?	-	10

*Esto significa que alrededor de 7 de cada 2.000 mujeres (de 50 o más años de edad) a las que se les hicieron mamografías de cribado, murieron de cáncer de mama durante esos 10 años, una menos que sin cribado.
** Extirpación completa o parcial de la mama.

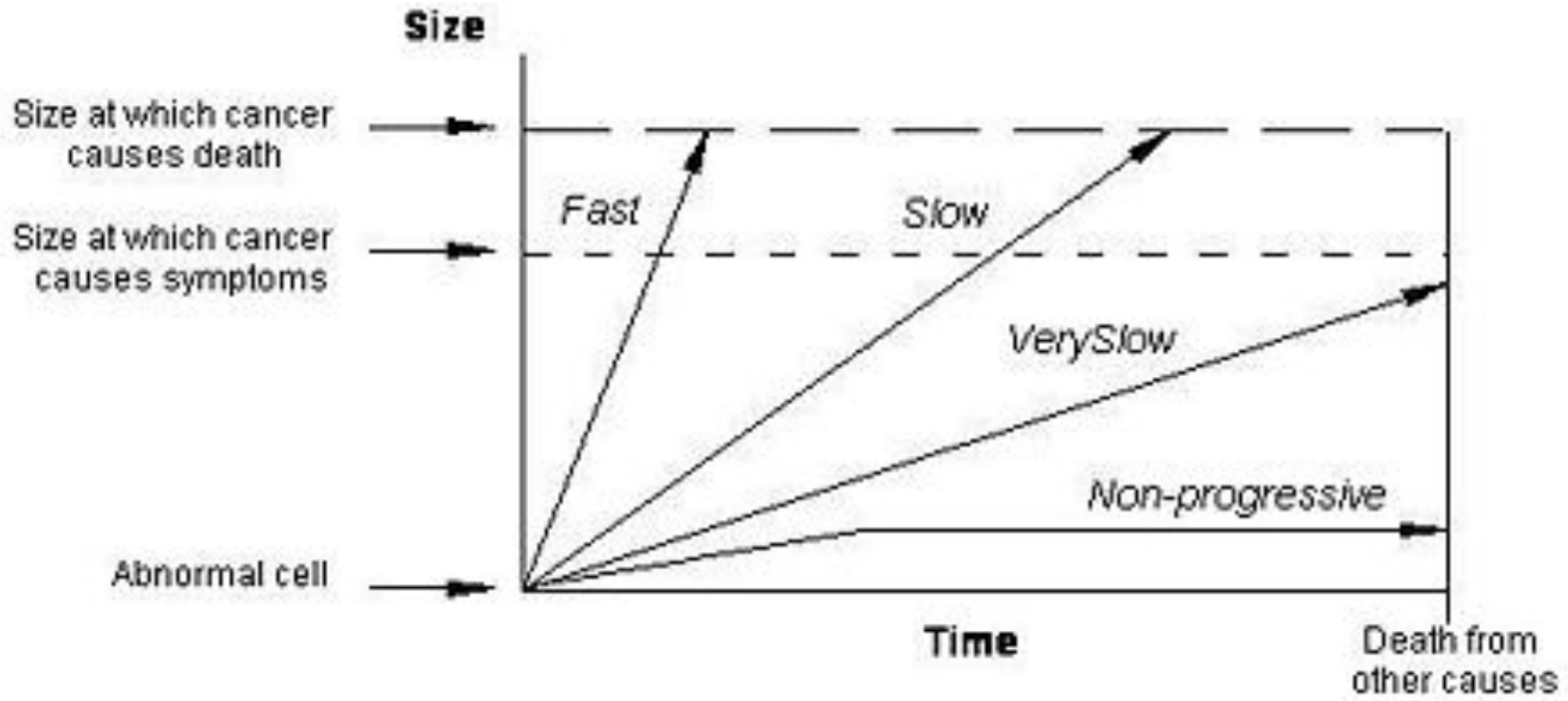
Fuente: Gøtzsche PC, Nielsen M. Screening for breast cancer with mammography. Cochrane Database Syst Rev. 2011 Jan 19;(1):CD001877. Review.

Adaptado al español de Risks and benefits of mammography screening -Harding Center for Risk Literacy- por sanoysalvo.es.

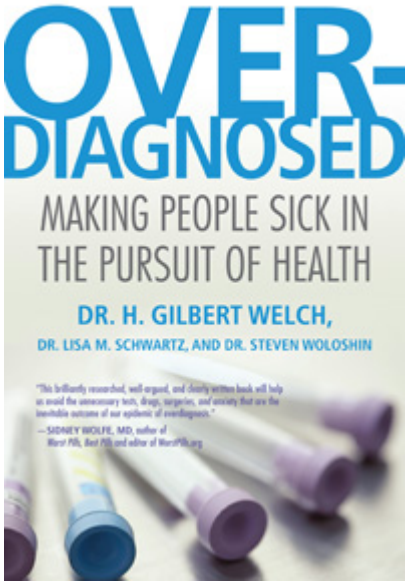

Better Detection, Similar Results
A new paper finds that the widespread adoption of regular breast and prostate cancer screening has led to an expected increase in the detection of early stage cancers but has not substantially reduced the incidence of advanced and late-stage cancers.
Before widespread screening
Incidence per 100,000
0
50
100
150
Breast cancer 1982
LOCALIZED
REGIONAL
METASTATIC
MEDIUM OR LOW GRADE
Prostate cancer 1988
HIGH GRADE
Sixteen years later
Incidence per 100,000
0
50
100
150
Breast cancer 1998
Prostate cancer 2004
Source: JAMA
THE NEW YORK TIMES



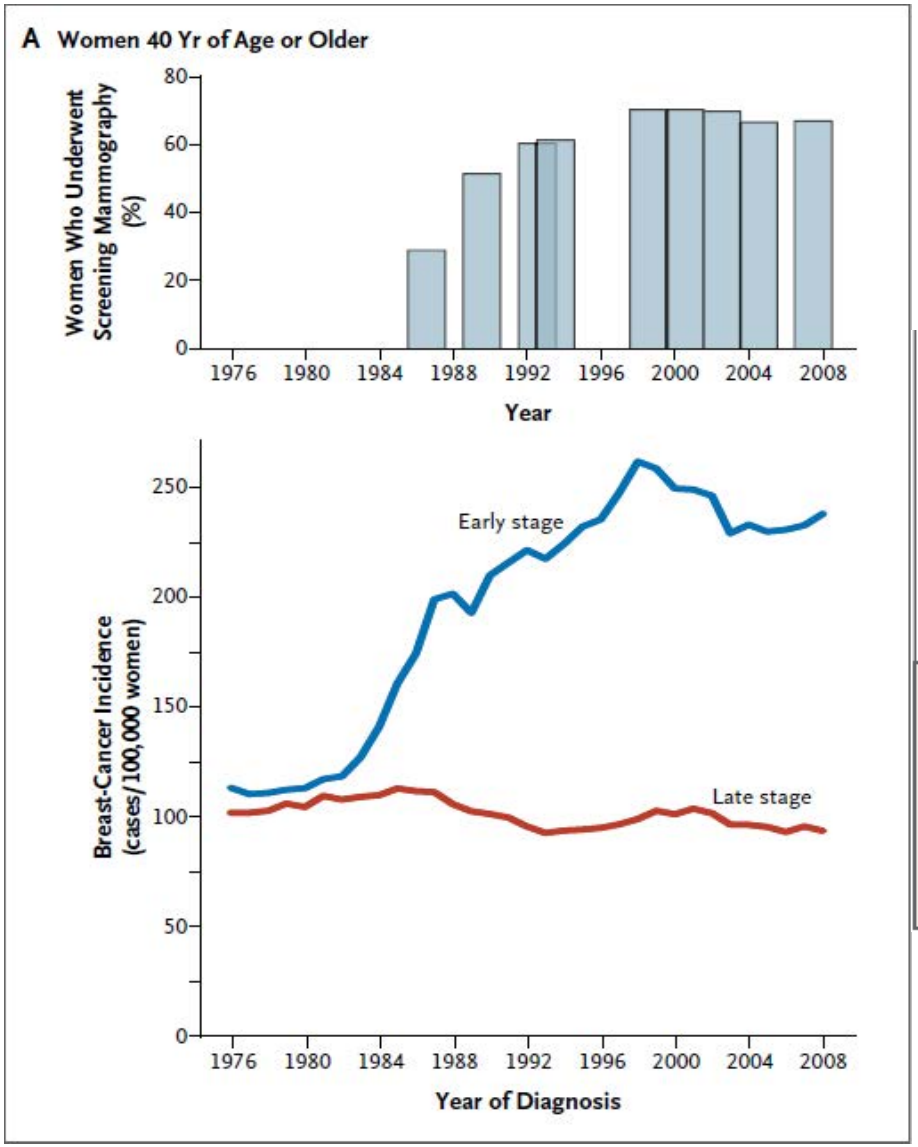
o = Time of disease onset.
Dx = Time when disease is clinically obvious without testing.



Cancer screening is most useful in detecting slowly progressing cancers but can cause overdiagnosis if very slow or non-progressive cancers are detected.



In breast cancer, for every death prevented by mammography, 2 to 10 women are overdiagnosed and treated unnecessarily, 5 to 15 are diagnosed earlier without any effect on final outcome, 250-500 will have a false alarm and half of these will be biopsied. 999 out of 1000 women do not benefit from mammography. A study in Norway showed that screening resulted in 22% *more* diagnoses of invasive cancer; apparently some invasive breast cancers in the unscreened group had spontaneously regressed.



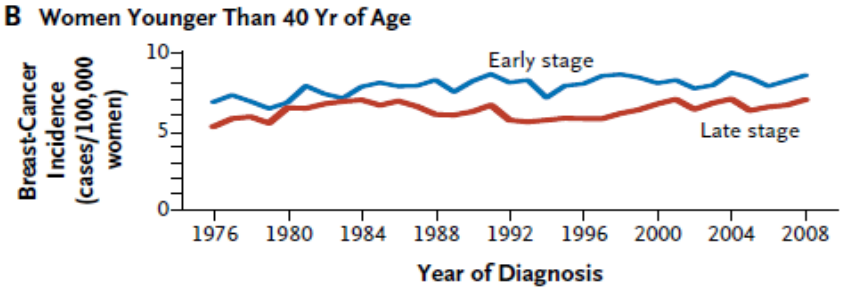


Figure 1. Use of Screening Mammography and Incidence of Stage-Specific Breast Cancer in the United States, 1976–2008.

Panel A shows the self-reported use of screening mammography and the incidence of stage-specific breast cancer among women 40 years of age or older. Panel B shows the incidence of stage-specific breast cancer among women who generally did not have exposure to screening mammography — those younger than 40 years of age.

Table 1. Absolute Change in the Incidence of Stage-Specific Breast Cancer among Women 40 Years of Age or Older after the Introduction of Screening Mammography.*

Variable	Annual Breast-Cancer Incidence			Women Affected over the Three Decades†
	Before Mammography (1976–1978)	Three Decades Later (2006–2008)	Absolute Change	
	number of cases per 100,000 women			*estimated number of women*
Increase in cases of early-stage breast cancer				
DCIS	7	56	50	573,000
Localized disease	105	178	72	1,012,000
Total	112	234	122	1,585,000
Decrease in cases of late-stage breast cancer				
Regional disease	85	78	−8‡	59,000
Distant disease	17	17	0§	8,000
Total	102	94	−8	67,000

* DCIS denotes ductal carcinoma in situ.
† These data exclude excess cases associated with hormone-replacement therapy.
‡ Because of rounding, the absolute change appears to be inconsistent with the subtracted values for annual breast-cancer incidence. See Table S1 in the Supplementary Appendix for precise values.
§ Without rounding, the absolute change is −0.3.

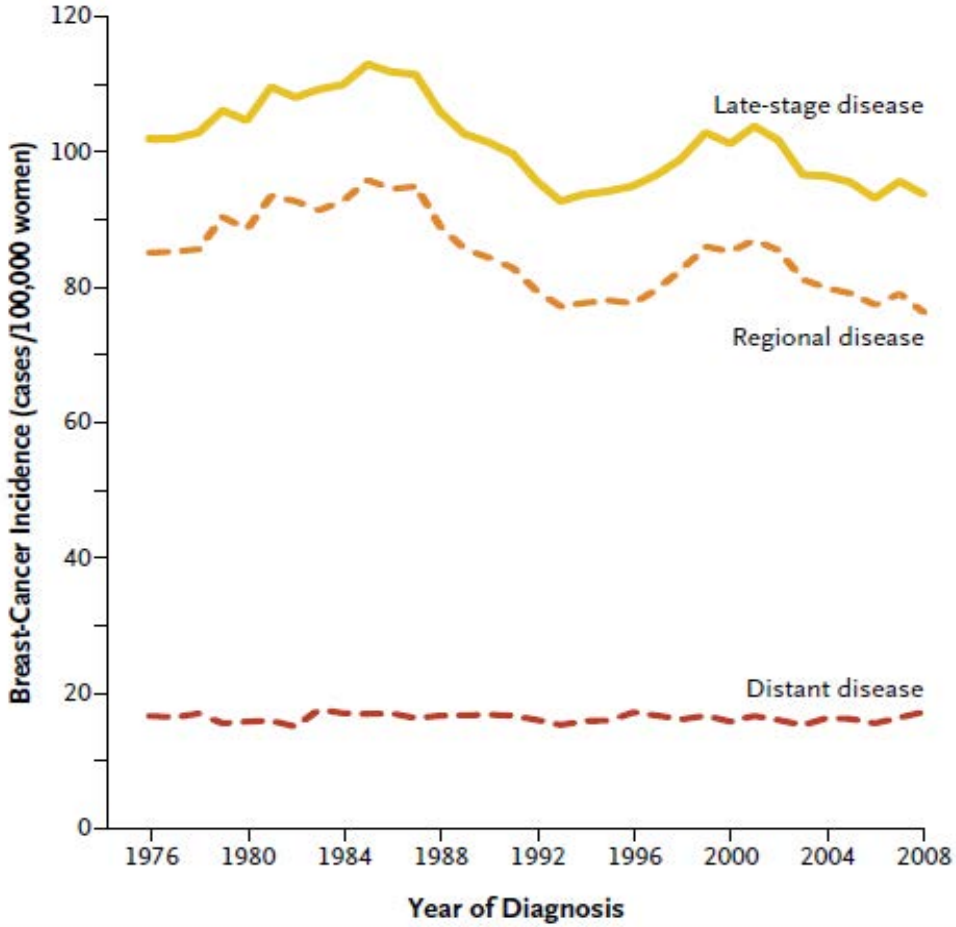


Figure 2. Trends in the Annual Incidence of Late-Stage Breast Cancer and Its Two Components (Regional and Distant Disease) among U.S. Women 40 Years of Age or Older, 1976–2008.

The benefits and harms of breast cancer screening: an independent review

Review

*Independent UK Panel on Breast Cancer Screening**

Lancet 2012; 380: 1778–86
Published Online
October 30, 2012
http://dx.doi.org/10.1016/S0140-6736(12)61611-0
See **Editorial** page 1714

*Members listed at end of paper
Correspondence to:
Prof Sir Michael Marmot, UCL Department of Epidemiology and Public Health, UCL, London, WC1E 7HB, UK
m.marmot@ucl.ac.uk

Panel concludes that screening reduces breast cancer mortality but that some overdiagnosis occurs. Since the estimates provided are from studies with many limitations and whose relevance to present-day screening programmes can be questioned, they have substantial uncertainty and should be regarded only as an approximate guide. If these figures are used directly, for every 10 000 UK women aged 50 years invited to screening for the next 20 years, 43 deaths from breast cancer would be prevented and 129 cases of breast cancer, invasive and non-invasive, would be overdiagnosed; that is one breast cancer death prevented for about every three overdiagnosed cases identified and treated. Of the roughly 307 000 women aged 50–52 years who are invited to begin screening every year, just over 1% would have an overdiagnosed cancer in the next 20 years. Evidence from a focus group organised by Cancer Research UK and attended by some members of the Panel showed that many women feel that accepting the offer of breast screening is worthwhile, which agrees with the results of previous similar studies. Information should be made available in a transparent and objective way to women invited to screening so that they can make informed decisions.

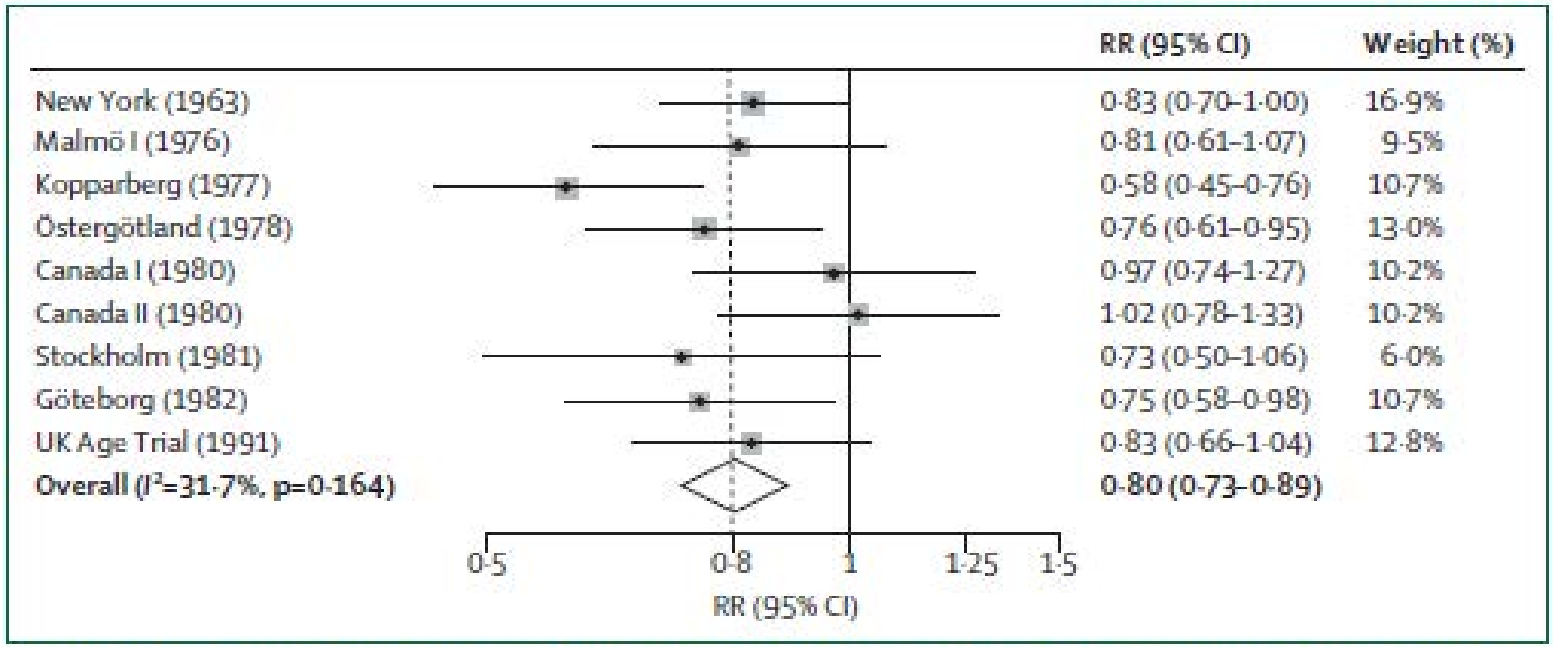


***Figure 1:* Meta-analysis of breast cancer mortality after 13 years of follow-up in breast cancer screening trials**
Adapted from the Cochrane Review.[5] RR=relative risk. Malmö II is excluded because follow-up of about 13 years was not available; the Swedish Two County (Kopparberg and Östergötland) and Canada I and II trials are split into their component parts; the Edinburgh trial is excluded because of severe imbalances between randomised groups. Weights are from random-effects analysis.

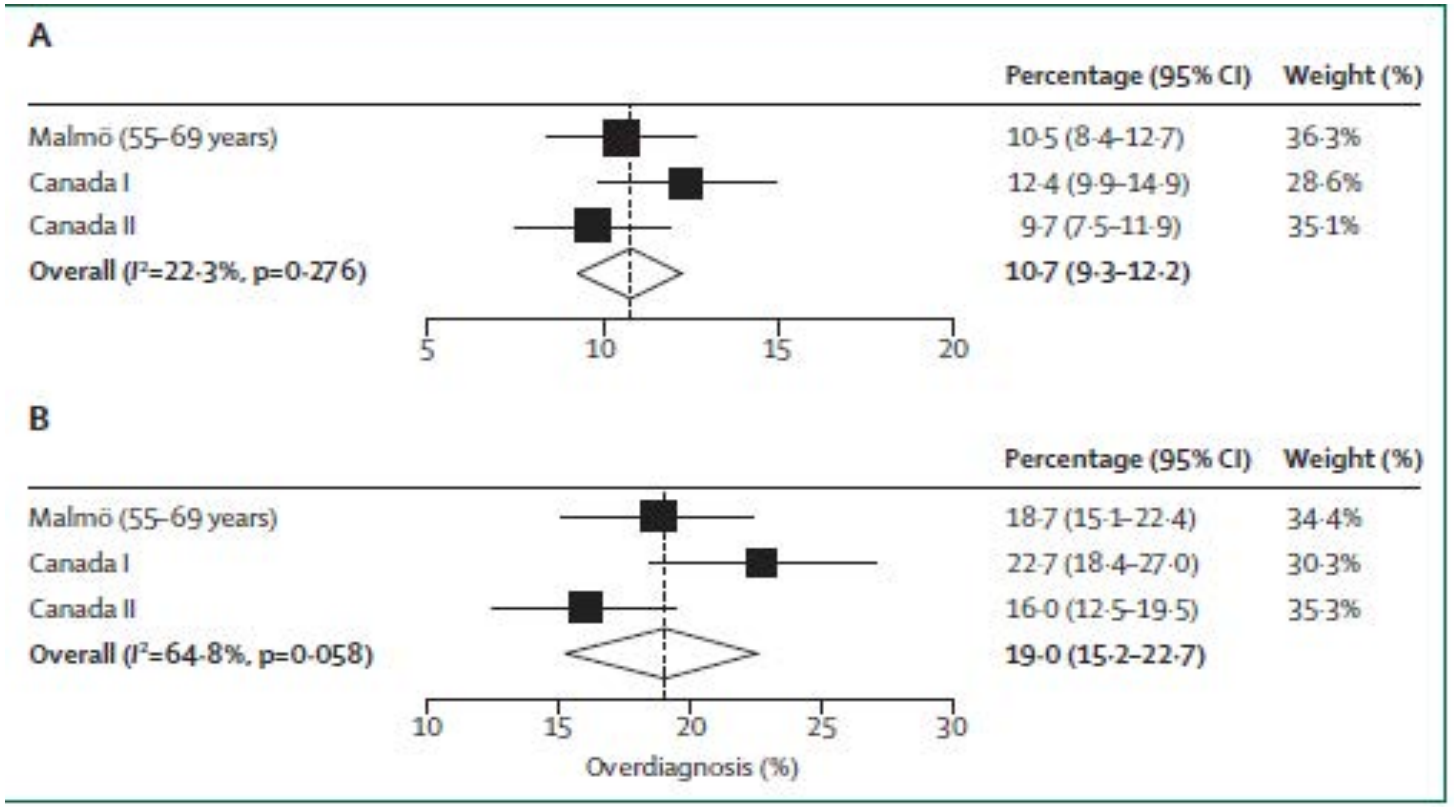
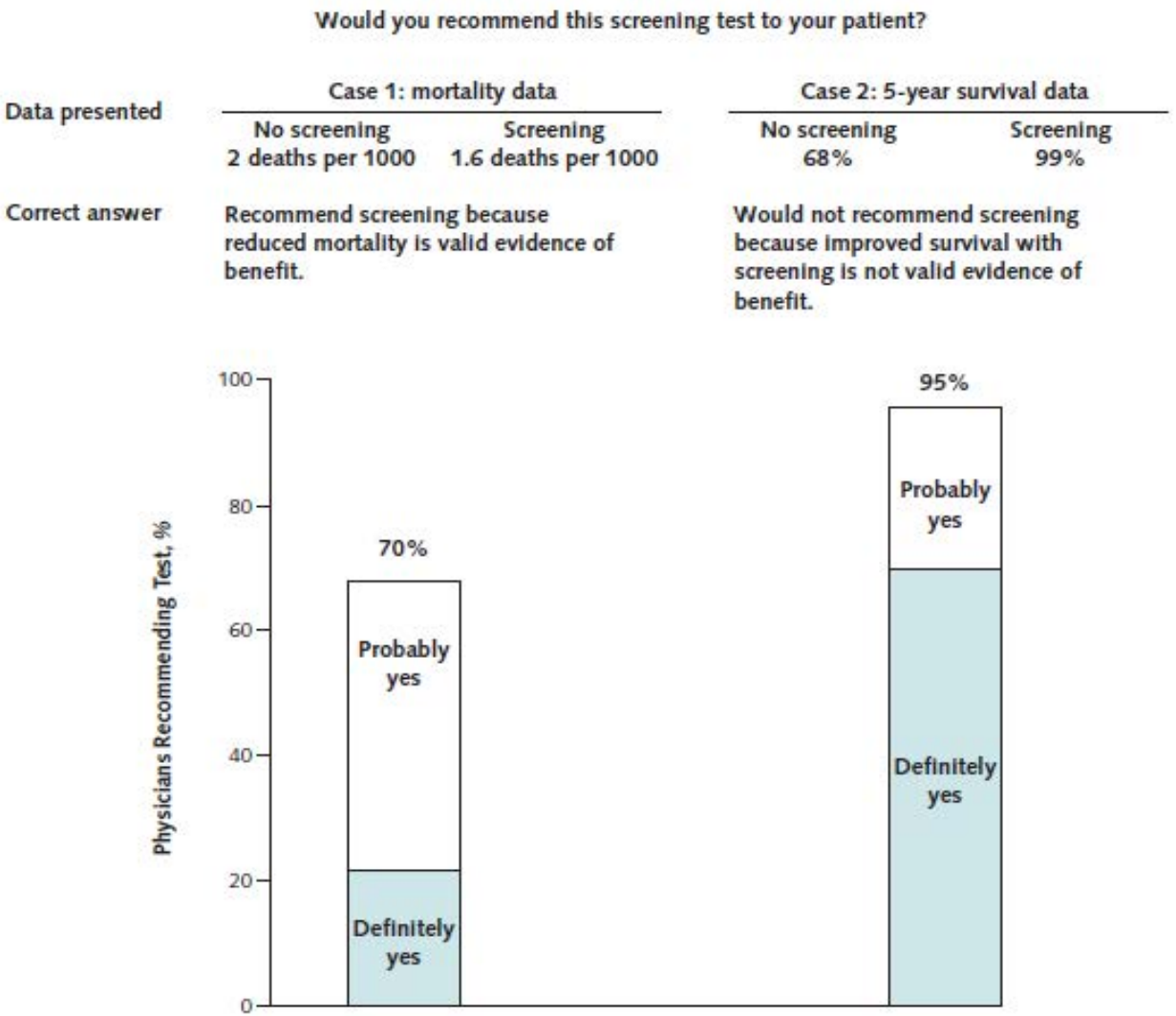


Figure 2: **Meta-analysis of estimates of overdiagnosis from trials without systematic end-of-study screening of the control group**

(A) Excess cancers as a proportion of cancers diagnosed over long-term follow-up in women invited for screening. (B) Excess cancers as a proportion of cancers diagnosed during the screening period in women invited for screening. Weights are from random-effects analysis.

Figure 4. **Proportion of physicians who would recommend a screening test on the basis of survival versus mortality rates.**



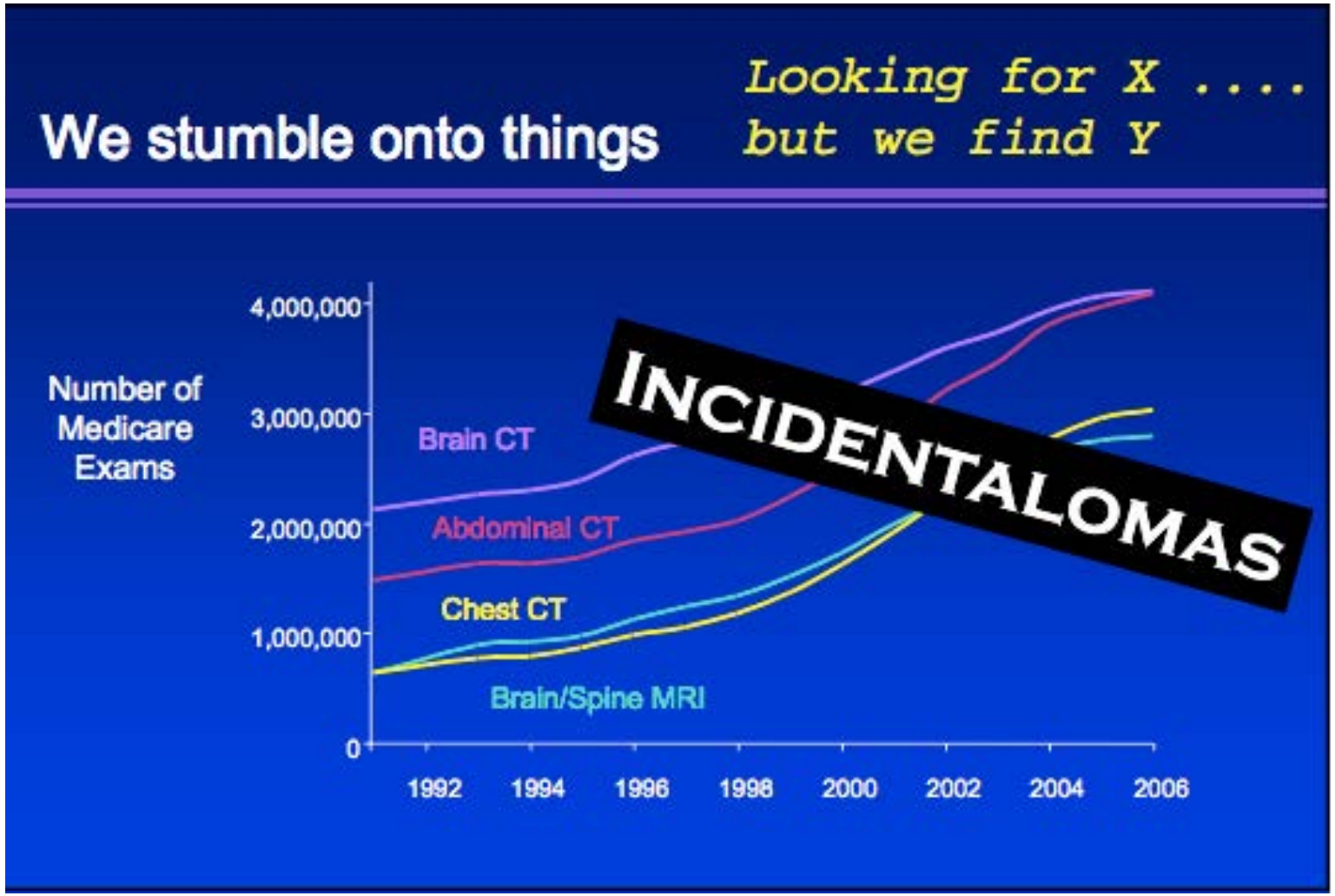
Whole-body CT screening

1192 Asymptomatic Volunteers (mean age 54)

86% had at least one abnormality

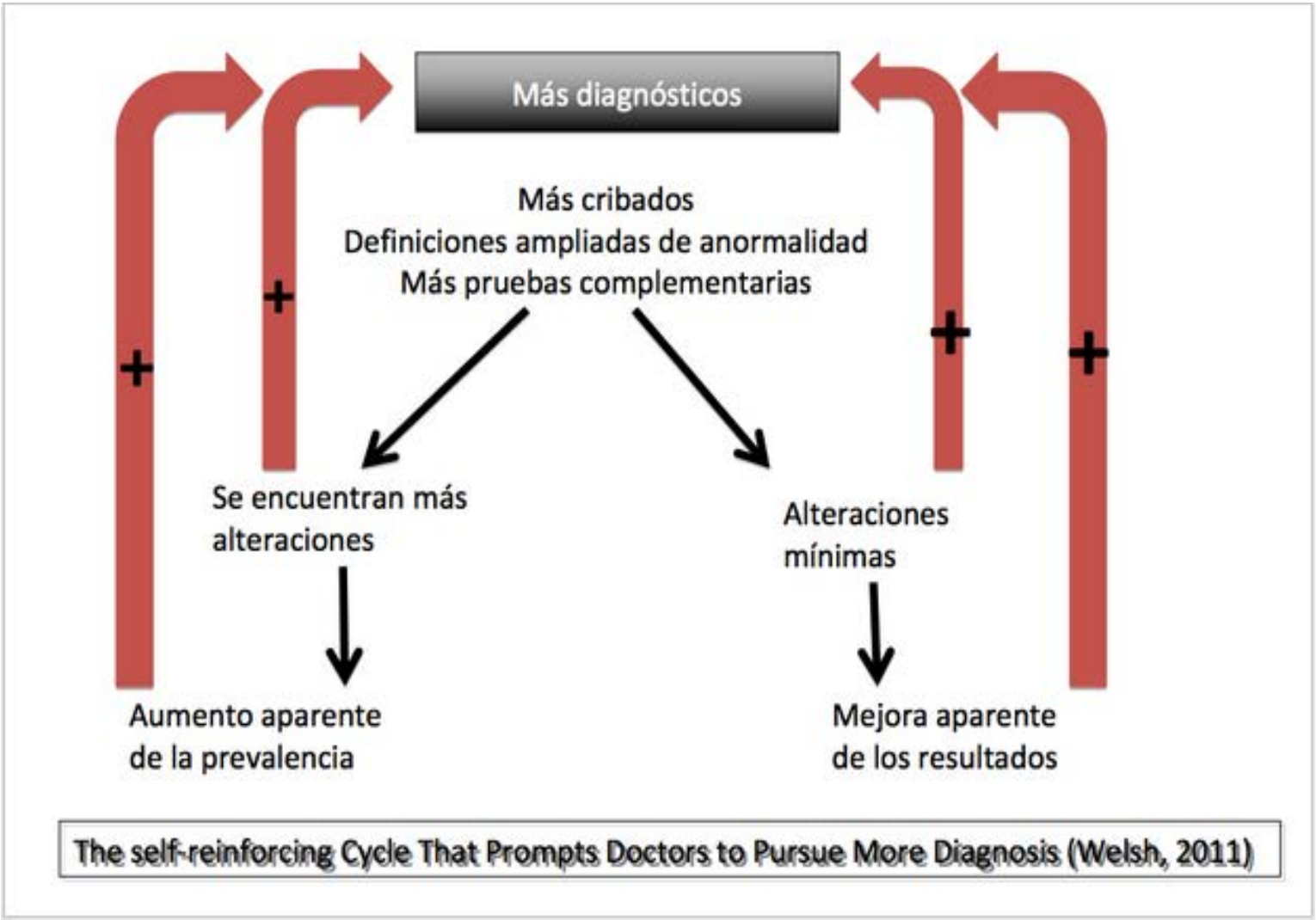
average patient had 2.8 abnormalities

Whole-body CT screening. Radiology. 2005;237:385-94.

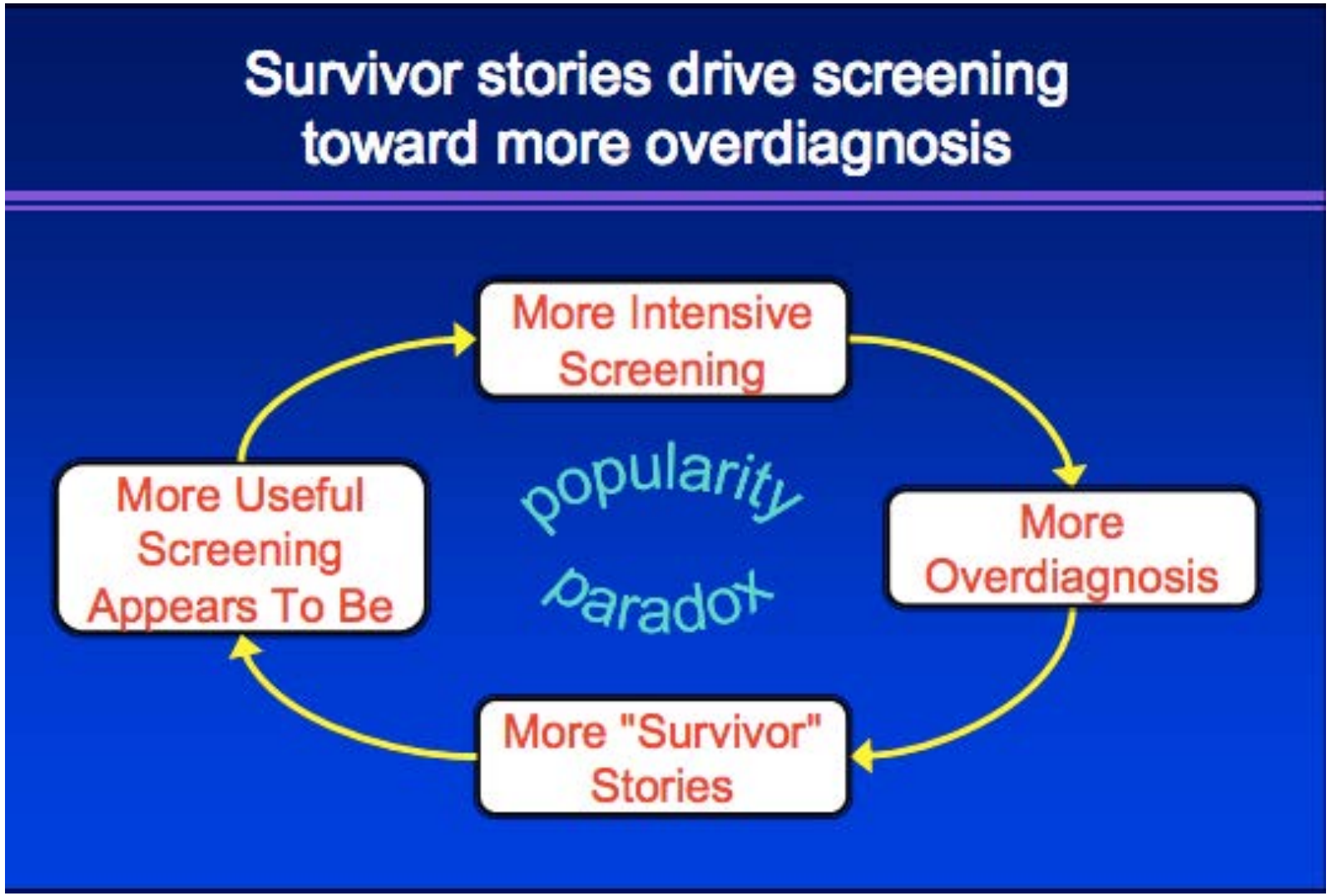

We stumble onto things
Looking for X ....
but we find Y
Number of Medicare Exams
4,000,000
3,000,000
2,000,000
1,000,000
0
Brain CT
Abdominal CT
Chest CT
Brain/Spine MRI
INCIDENTALOMAS
1992
1994
1996
1998
2000
2002
2004
2006

Chance that an incidentaloma represents a lethal cancer

Organ	% with incidentaloma on CT scan (a)	10-year risk of cancer death (b)	Chance that incidentaloma is lethal cancer (c = b/a)	Chance that incidentaloma is NOT lethal cancer (d = 1 - c)
Lung (smoker)	50%	1.8%	3.6%	96.4%
Lung (non-smoker)	15%	0.1%	0.7%	99.3%
Kidney	23%	0.05%	0.2%	99.8%
Liver	15%	0.08%	0.5%	99.5%
Thyroid	67% (by ultrasound)	0.005%	<0.01%	> 99.99%



The self-reinforcing Cycle That Prompts Doctors to Pursue More Diagnosis (Welsh, 2011)


Survivor stories drive screening toward more overdiagnosis
More Intensive Screening
More Overdiagnosis
More "Survivor" Stories
More Useful Screening Appears To Be
popularity paradox

NEUROBLASTOMA SCREENING AT ONE YEAR OF AGE

FREIMUT H. SCHILLING, M.D., CLAUDIA SPIX, PH.D., FRANK BERTHOLD, M.D., RUDOLF ERTTMANN, M.D., NATALJA FEHSE, M.D., BARBARA HERO, M.D., GISELA KLEIN, PH.D., JOHANNES SANDER, M.D., KERSTIN SCHWARZ, M.D., JOERN TREUNER, M.D., ULRICH ZORN, PH.D., AND JOERG MICHAELIS, M.D.

Background Neuroblastoma is the second most common type of childhood tumor. It is not known whether screening for neuroblastoma at one year of age reduces the incidence of metastatic disease or mortality due to neuroblastoma.

Methods We offered urine screening for neuroblastoma at approximately one year of age to 2,581,188 children in 6 of 16 German states from 1995 to 2000. A total of 2,117,600 eligible children in the remaining states served as controls. We compared the two groups in terms of the incidence of disseminated disease and mortality from neuroblastoma.

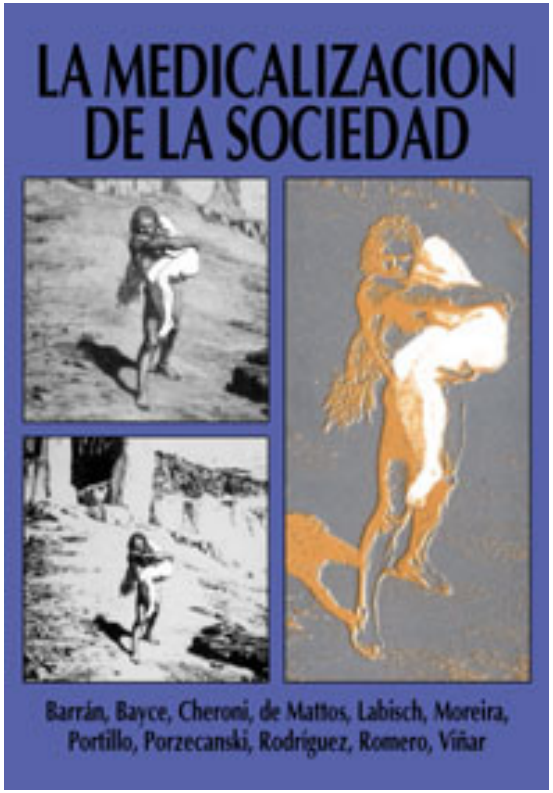
Results A total of 1,475,773 children (61.2 percent of those who were born between July 1, 1994, and October 31, 1999) underwent screening. In this group, neuroblastoma was detected by screening in 149 children, of whom 3 have died. Fifty-five children who had negative screening tests were subsequently given a diagnosis of neuroblastoma; 14 of these children have died. The screened group and children in the control area had a similar incidence of stage 4 neuroblastoma (3.7 cases per 100,000 screened children [95 percent confidence interval, 2.7 to 4.7] and 3.8 per 100,000 controls [95 percent confidence interval, 2.9 to 4.6]) and a similar rate of death among children with neuroblastoma (1.3 deaths per 100,000 screened children [95 percent confidence interval, 0.7 to 1.8] and 1.2 per 100,000 controls [95 percent confidence interval, 0.7 to 1.7]). Comparison of the screened group and the children in the control area revealed substantial overdiagnosis in the former group (an estimated rate of 7 cases per 100,000 children [95 percent confidence interval, 4.6 to 9.2]); the overdiagnosis rate represents children who had neuroblastoma that was diagnosed by screening but who would not benefit from earlier diagnosis and treatment.

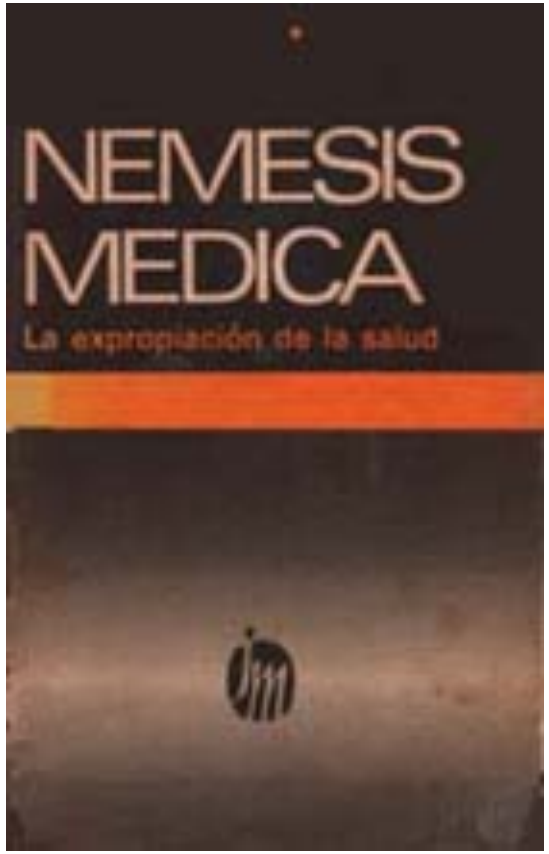
Conclusions The present findings do not support the usefulness of general screening for neuroblastoma at one year of age. (N Engl J Med 2002;346:1047-53.)

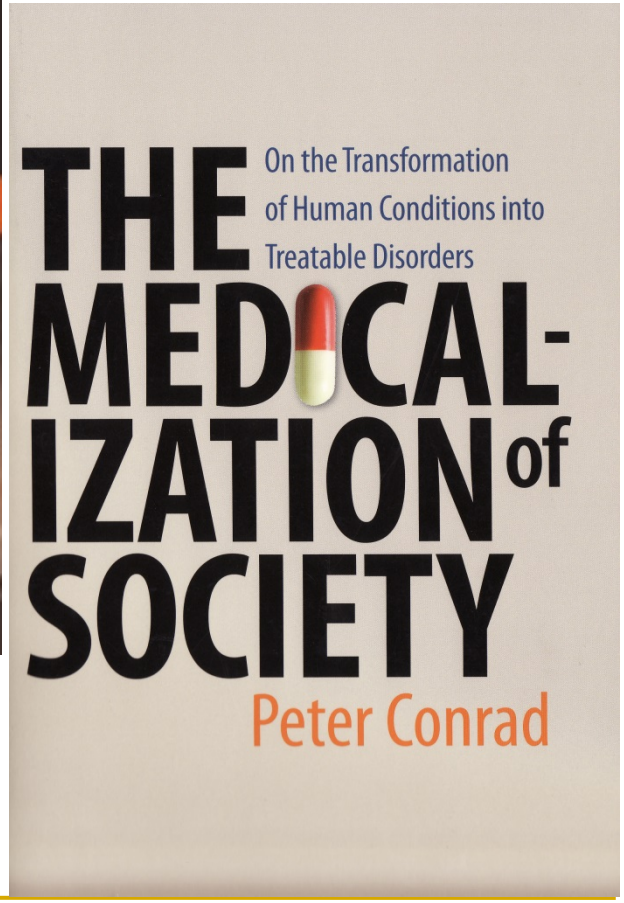
TABLE 5. ESTIMATED RATES OF CASES DETECTED EARLY AND EXCESS CASES NOT EXPLAINED BY EARLY DETECTION.*

DIAGNOSES	CONTROL AREA	SCREENED GROUP	DIFFERENCE BETWEEN GROUPS
		rate per 100,000 births (95% CI)	
At screening age (12–24 mo)	3.2 (2.4 to 3.9)	10.9 (9.3 to 12.6)	7.8 (5.9 to 9.6) (excess in the screened group)
After screening age (25–60 mo)	4.1 (3.2 to 5.0)	3.3 (2.3 to 4.3)	0.8 (−0.6 to 2.1) (cases detected early by screening)
Total (12–60 mo)	7.3 (6.1 to 8.5)	14.2 (12.2 to 16.1)	7.0 (4.6 to 9.2) (overdiagnosis — excess not explained by early detection)

*All children were born between 1994 and 1999. Apparent discrepancies are due to rounding.


LA MEDICALIZACION
DE LA SOCIEDAD
Barrán, Bayce, Cheroni, de Mattos, Labisch, Moreira,
Portillo, Porzecanski, Rodríguez, Romero, Viñar


NEMESIS
MEDICA
La expropiación de la salud


THE
On the Transformation
of Human Conditions into
Treatable Disorders
MEDICAL-
IZATION of
SOCIETY
Peter Conrad

Els costos de la medicalització

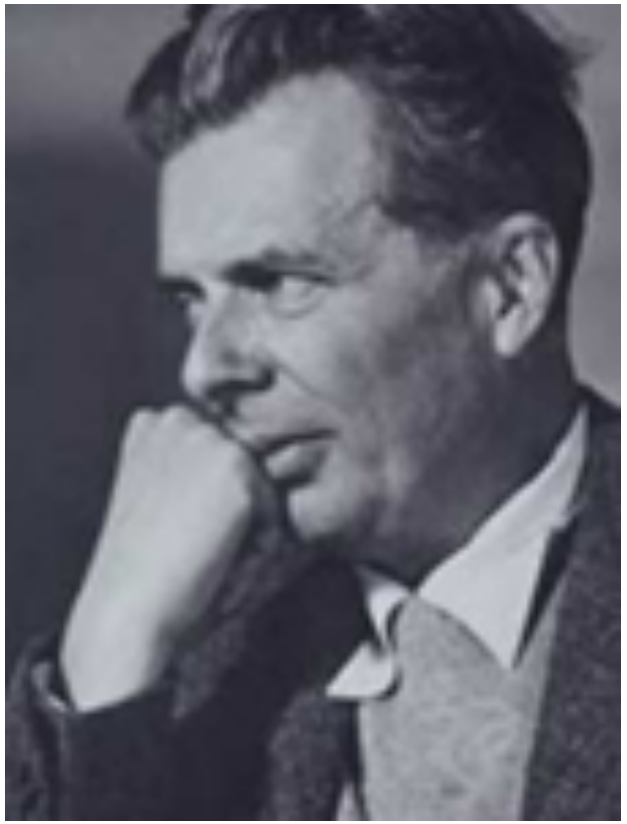
Als USA l'any 2005 els costos atrribuïbles a la medicalització "discutible" comportaren 77.100 milions de dòl·lars, el 3'9% de la despesa sanitària domèstica

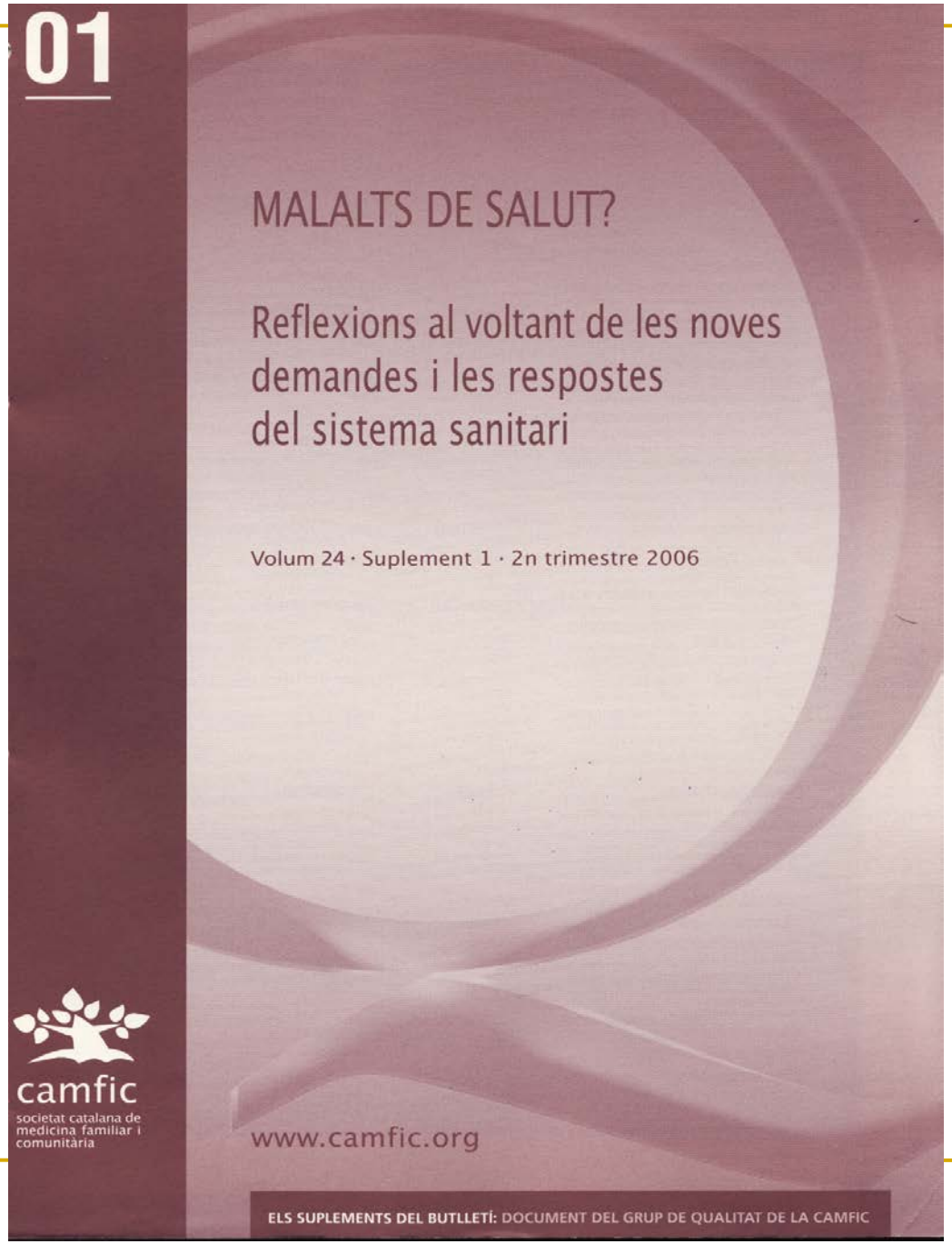
Conrad P, Mackie T,Mehrota A. Social Science & Medicine 2010.

"La investigación de las enfermedades ha avanzado tanto que es cada vez más difícil encontrar a alguien que esté completamente sano".

Aldous Huxley

Nueva visita a un mundo feliz, 1958.




01
MALALTS DE SALUT?
Reflexions al voltant de les noves demandes i les respostes del sistema sanitari
Volum 24 · Suplement 1 · 2n trimestre 2006
camfic
societat catalana de medicina familiar i comunitària
www.camfic.org
ELS SUPLEMENTS DEL BUTLLETÍ: DOCUMENT DEL GRUP DE QUALITAT DE LA CAMFIC


INNOVACIÓN
DANONE
Danaten
TENSIÓN ARTERIAL
DANONE
Danaten


DANONE
Danacol
Ayuda a REDUCIR EL COLESTEROL
Variedad Natural


DANONE
DENSIA
Ayuda a mantener tu Densidad Ósea


ACTIVIA
START
Pune lucrurile in ordine dupa sarbatori
cu Activia. Garantat in 14 zile.


LEADING
HEALTH
MAGAZINE
RECOMMENDS
TOP Sante
RECOMMENDED
DANONE
Actimel
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Click


Similia
VÓMITOS DEL
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Similia
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EMBARAZO
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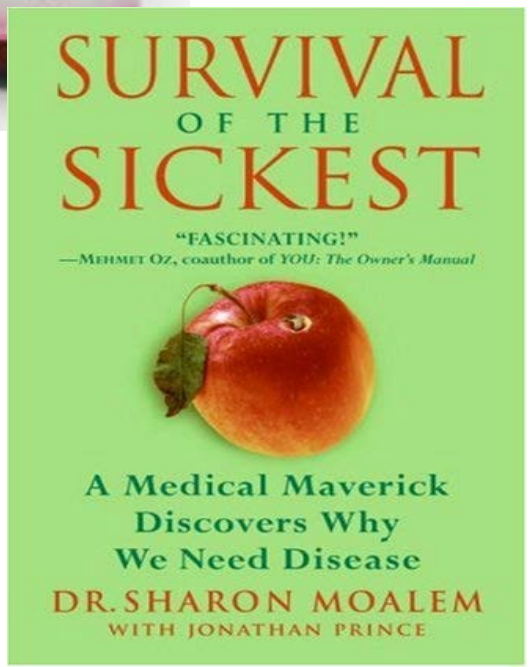
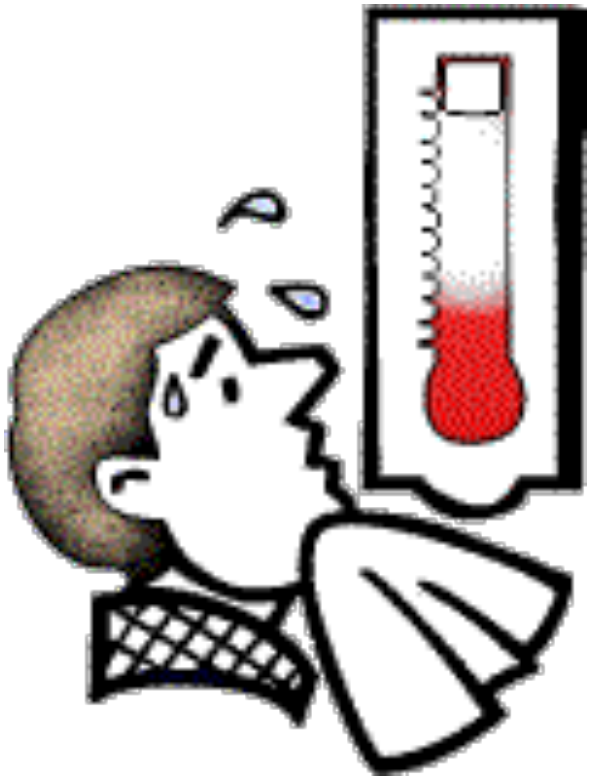

SURVIVAL
OF THE
SICKEST
"FASCINATING!"
—MEHMET OZ, coauthor of YOU: The Owner's Manual
A Medical Maverick
Discovers Why
We Need Disease
DR. SHARON MOALEM
WITH JONATHAN PRINCE



Merck has widely promoted hair loss as a medical problem, including advertising on buses

Selling sickness: the pharmaceutical industry and disease mongering

Ray Moynihan, Iona Heath, David Henry

A lot of money can be made from healthy people who believe they are sick. Pharmaceutical companies sponsor diseases and promote them to prescribers and consumers. Ray Moynihan, Iona Heath, and David Henry give examples of "disease mongering" and suggest how to prevent the growth of this practice

Summary points

Some forms of "medicalisation" may now be better described as "disease mongering"—extending the boundaries of treatable illness to expand markets for new products

Alliances of pharmaceutical manufacturers, doctors, and patients groups use the media to frame conditions as being widespread and severe

Disease mongering can include turning ordinary ailments into medical problems, seeing mild symptoms as serious, treating personal problems as medical, seeing risks as diseases, and framing prevalence estimates to maximise potential markets

Corporate funded information about disease should be replaced by independent information

Recommendations for "de-medicalising" normal conditions

- Move away from using corporate funded information on medical conditions/ diseases
- Generate independent accessible materials on conditions and diseases
- Widen notions of informed consent to include information about controversy surrounding the definitions of conditions and diseases

BMJ 2002;324:886–91

Procediments habituals per a fomentar el consumisme medicalitzador

Procediment	Exemple
Convertir variants normals en problemes mèdics	Calvicie androgénica
Transformar símptomes lleus en malalties greus	Síndrome del colon irritable
Considerar anormals característiques de la personalitat	Timidesa
Tractar els factors de risc com malalties	Osteopenia
Redefinir criteris (epidemiología creativa)	Disfunció erèctil

Elaboració pròpia
Font: Morell et al,

TRASTORNO POR DÉFICIT DE ATENCIÓN E HIPERACTIVIDAD EN JÓVENES Y ADULTOS:

PROBLEMAS PSICOLÓGICOS Y ADAPTATIVOS

Alfredo R. del Álamo.
Neuropsicólogo. Fundación SPF de Neurociencias.

alfredodelalamo@hotmail.com

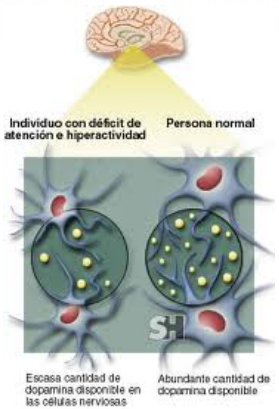
1- Presentación del TDAH infantil.

El Trastorno por Déficit de Atención e Hiperactividad (TDAH) ya aparece descrito anecdóticamente en el siglo XIX, pero su diagnóstico no fue codificado adecuadamente hasta principios de la década de 1980. Hoy día se considera un problema neurológico cerebral, multicausal y con notable base poligénica que crea en el paciente una vulnerabilidad del SNC ante diferentes estresores externos ya sea tempranos (intrauterinos) o/y perinatales (primer o como mucho segundo año de vida del niño) que más abajo detallaremos.

El **diagnóstico** de TDAH se realiza fundamentalmente a través de la evaluación de la conducta observable en un niño por los padres en casa y por el profesorado en la guardería o escuela, en coincidencia con criterios claves ya definidos en manuales clínicos (por ejemplo en la CIE-10 de la OMS o en la DSM-IV de la APA) y con el apoyo de escalas específicas de TDAH (tal como el Cuestionario de Conners para padres-PSQ y para profesores- TRS, el Cuestionario de DuPaul, el SNAP-IV, y las Escalas de McCarney, de Kendall-Wilcox y de Werry-Weiss-Peters), pruebas neuropsicológicas diversas y exploración neurológica para descartar otras patologías de base (RMN, SPECT, EEG, etc).

El TDAH es un trastorno que **se presenta** de forma bastante diversa según los niños afectados. Las tres posibles notas diagnósticas básicas son la desatención, la impulsividad y la hiperkinesia motora. No vamos a entrar en este trabajo en la descripción detallada de cada síntoma en la infancia. Clínicamente los pacientes se agrupan en: tipo hiperactivo-impulsivo puro (el menos frecuente de los tres tipos: 5% de los casos), tipo desatento puro (25% de los casos), y tipo mixto (el más frecuente: 70% de los casos).

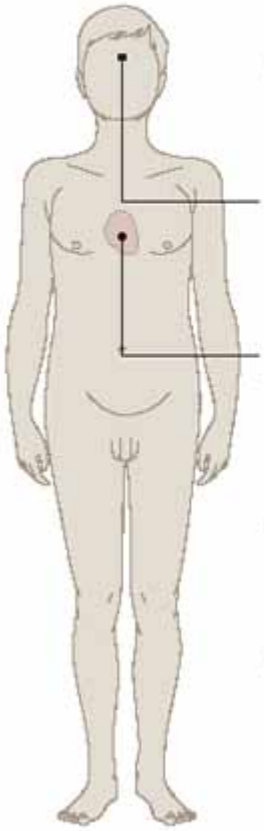
La **prevalencia** varía según autores y rigurosidad de los criterios diagnósticos: desde el 3-7% de la población infantil en la mayoría de los estudios, hasta el 15% de los escolares. Su incidencia es 3 a 5 veces más frecuente en los niños que en las niñas, dándose el caso que en los niños son más frecuentes (de forma comparativa) los síntomas hiperkinético-impulsivos, y en las niñas los síntomas de desatención. El



Los efectos del metilfenidato

El metilfenidato, al igual que las anfetaminas, puede producir dependencia. También causa un estado de alerta, locuacidad, euforia, irritabilidad, agresividad, agitación, impotencia y alucinaciones visuales y táctiles.

EN EL ORGANISMO



Se ingiere por vía oral y es rápidamente absorbido en el tracto gastrointestinal (1 a 2 horas).

Fiebre.

Dilatación pupilar.

Mal aliento y sequedad de boca.

Puede producir taquicardia, hipertensión arterial, alteraciones del ritmo cardíaco.

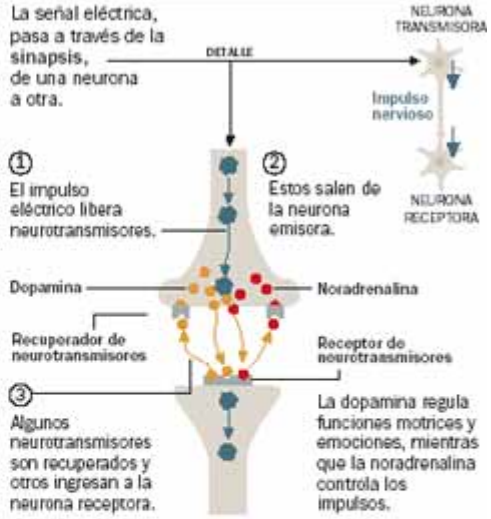
Disminución del apetito y pérdida de peso.

La administración prolongada puede provocar temblores y convulsiones.

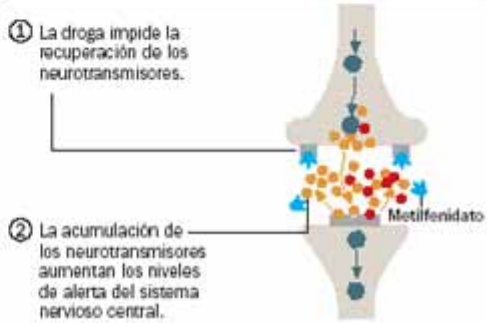
Aunque en pocos casos, puede producir la muerte del paciente.

EN EL CEREBRO

TRANSMISION NORMAL DEL IMPULSO NERVIOSO

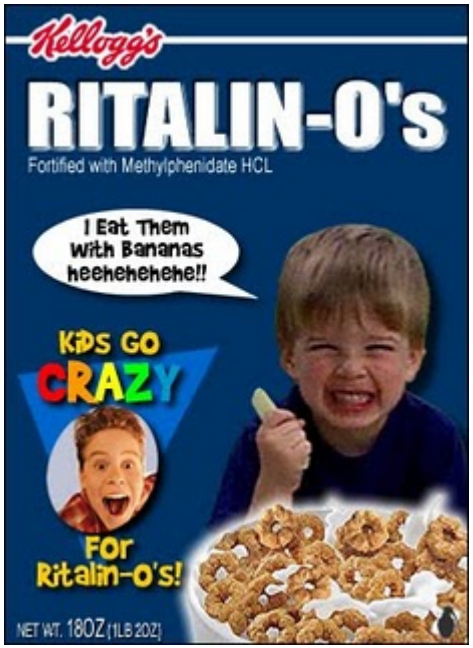


CUANDO SE TOMA METILFENIDATO



Fuente: DR. LEON RENSKOVSKI, NEUROPSIQUIATRA | MEDLINEPLUS MEDICAL ENCYCLOPEDIA

CLARIN



Shifting the focus in fracture prevention from osteoporosis to falls

Preventing fractures in older people is important. But **Teppo Järvinen and colleagues** believe that we should be putting our efforts into stopping falls not treating low bone mineral density

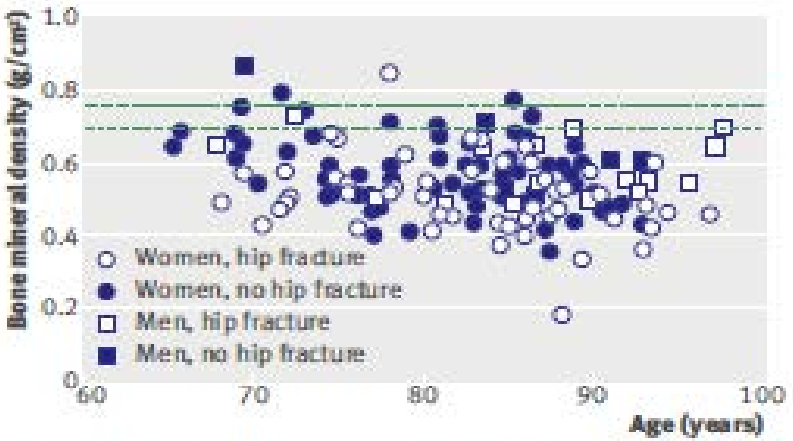
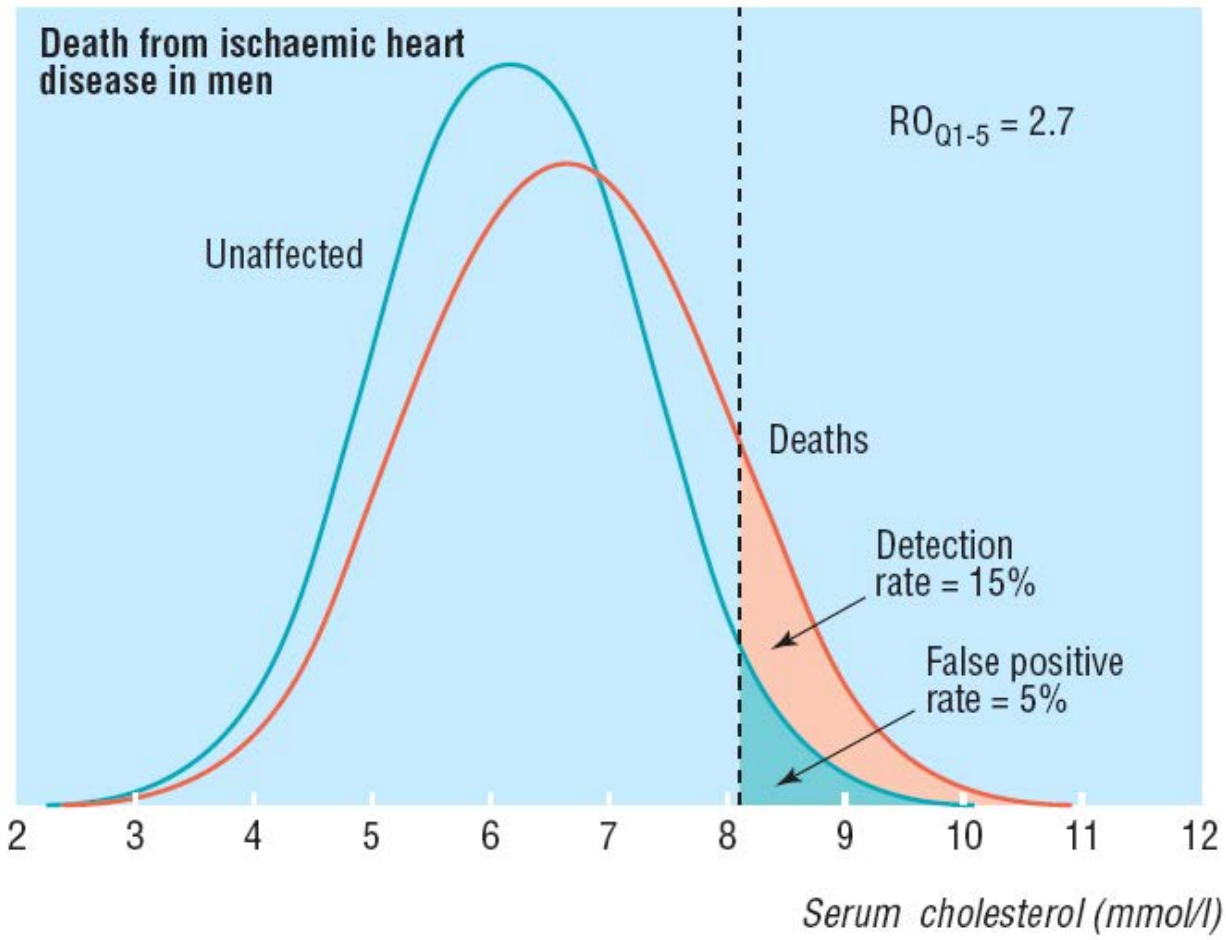


Fig 1 Femoral neck bone mineral density versus age at time of fall in people who did and did not sustain a hip fracture. Dashed lines show 2 SD less than peak bone mass for women (lower line) and men (upper line). Adapted from Greenspan et al[10]

General practice guidelines for assessment of risk of falling

- Detailed history of current and past falls:
  - Fall in past 12 months
  - Indoor fall
  - Inability to get up after fall
- Review of medical risk factors, especially:
  - Prescribed drugs (especially psychotropic)
  - Visual impairment
  - Cognitive function
- Watch patient walk and move to assess muscle strength, balance, and gait
- Assess time taken to stand from sitting

Las caidas, son el factor de riesgo más importante de fracturas en la gente mayor.
La densidad ósea es un pobre predictor del riesgo individual de fracturas.
La profilaxis con medicamentos es cara y no previene la mayoría de las fracturas de la gente mayor.
Puede evitarse más de un 50% de las caídas de la gente mayor.
La prevención debe valorar el riesgo de caídas e intervenir para reducirlo.
Jarvinen T, et al
BMJ 2008; 336:124-5.



Wald NJ, et al. When can a risk factor be used as a worthwhile screening test? BMJ 1999; 319:1562-5.

Serum cholesterol and ischaemic heart disease

Because serum cholesterol is an established risk factor for ischaemic heart disease, it was believed that it would be a useful screening test. According to this view, individuals with high cholesterol concentrations—that is, those regarded as being "screen positive"—would be offered cholesterol lowering drugs to reduce the risk of a myocardial infarction. This belief was unfounded, as illustrated by figure 4. The lower diagram in figure 4 shows the distribution of serum cholesterol concentrations in men aged 35-65 in the United Kingdom who did or did not subsequently die from ischaemic heart disease over a period of about 10 years. The $RO_{Q1\text{-}5}$ value is 2.7, indicating that people with a high serum cholesterol concentration (in the highest fifth) are nearly three times more likely to die from ischaemic heart disease than those with a low serum cholesterol concentration (in the lowest fifth). This is a moderately strong association, but when it is assessed as a screening test the performance is poor. For a false positive rate of 5%, only 15% of those who would later die of ischaemic heart disease would be identified.[1] Again, this screening performance is slightly better than predicted by the table because of the somewhat higher SD of serum cholesterol concentrations in affected individuals.

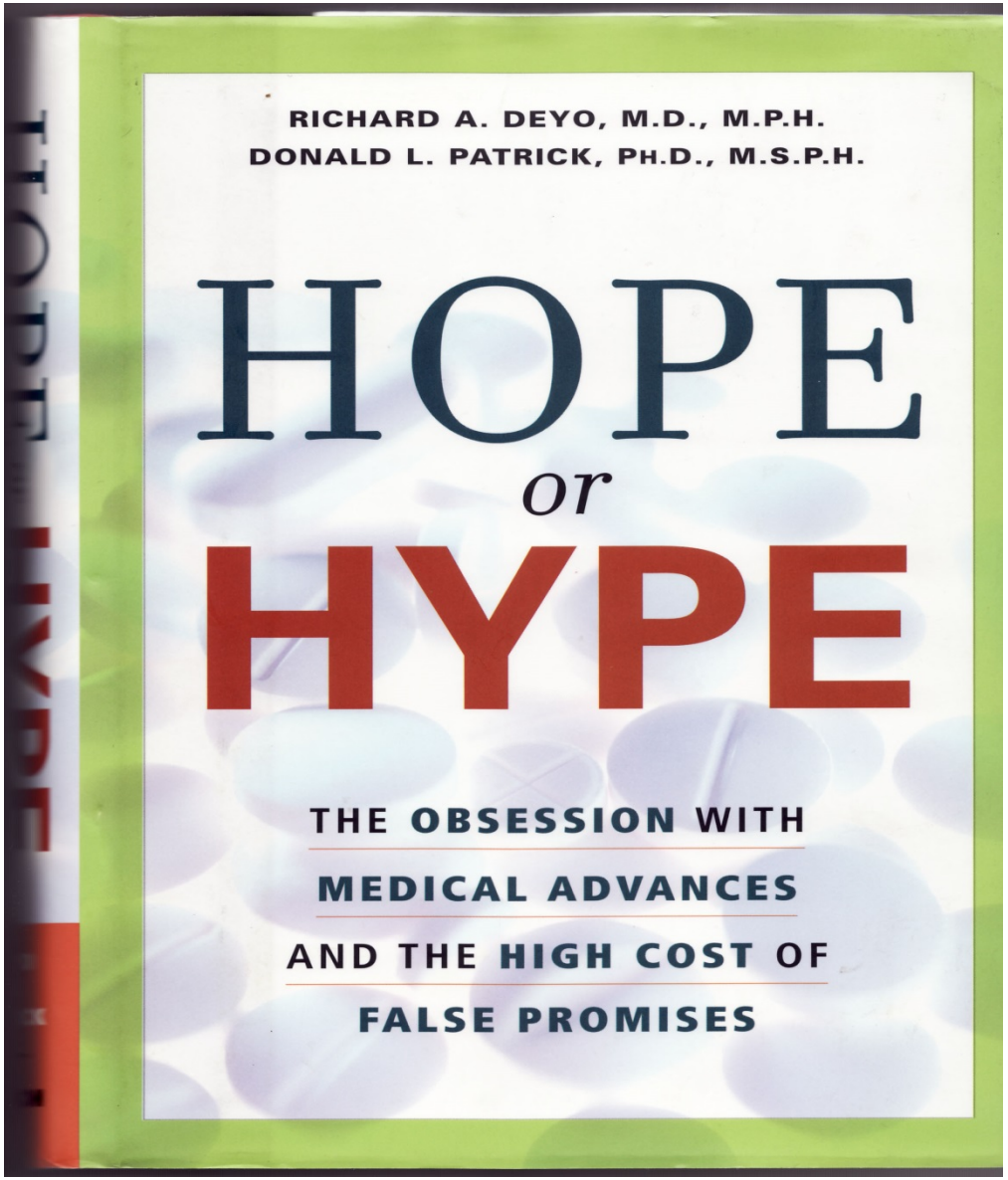
FROM THE FRONTLINE

Bad medicine: digital rectal examination

Rectal examination is unpleasant, invasive, and as an investigation has unknown sensitivity and specificity. In a young population digital rectal examination has almost no value, and in older patients may have very occasional and limited indication. It is time to question the once standard practice of routine digital rectal examination because it represents flimsy thinking and bad medicine.

Des Spence *general practitioner, Glasgow*

Cite this as: *BMJ* 2011;342:d3421


RICHARD A. DEYO, M.D., M.P.H.
DONALD L. PATRICK, PH.D., M.S.P.H.
HOPE
or
HYPE
THE OBSESSION WITH
MEDICAL ADVANCES
AND THE HIGH COST OF
FALSE PROMISES
HOPE or HYPE

Mites sobre la innovació mèdica

L'experimentació i l'atenció estàndard estàn ben definides

Els metges adopten les innovacions sobre la base de la bona ciència

Nou és sempre millor

Més proves diagnostiques sempre són millor. La informació només pot ser bona

L'acció és sempre millor que l'espera

La majoria de les malalties tenen tractament curatiu

Deyo RA, Patrick DL. Hope or Hype.2005

Utilització inapropiada o inadequada

Sense indicació positiva suficient

Sense valorar prou la relació avantatges/ inconvenients potencials (risc terapèutic)

Com a fetitxe

Com alternativa més còmoda a una decisió més pertinent

De vegades per intentar solucionar un problema provocat per un medicament

El cas de les endoscòpies fútils en ancians greument malalts

Estudi de 136.000 endoscòpies al Regne Unit (2002-3)

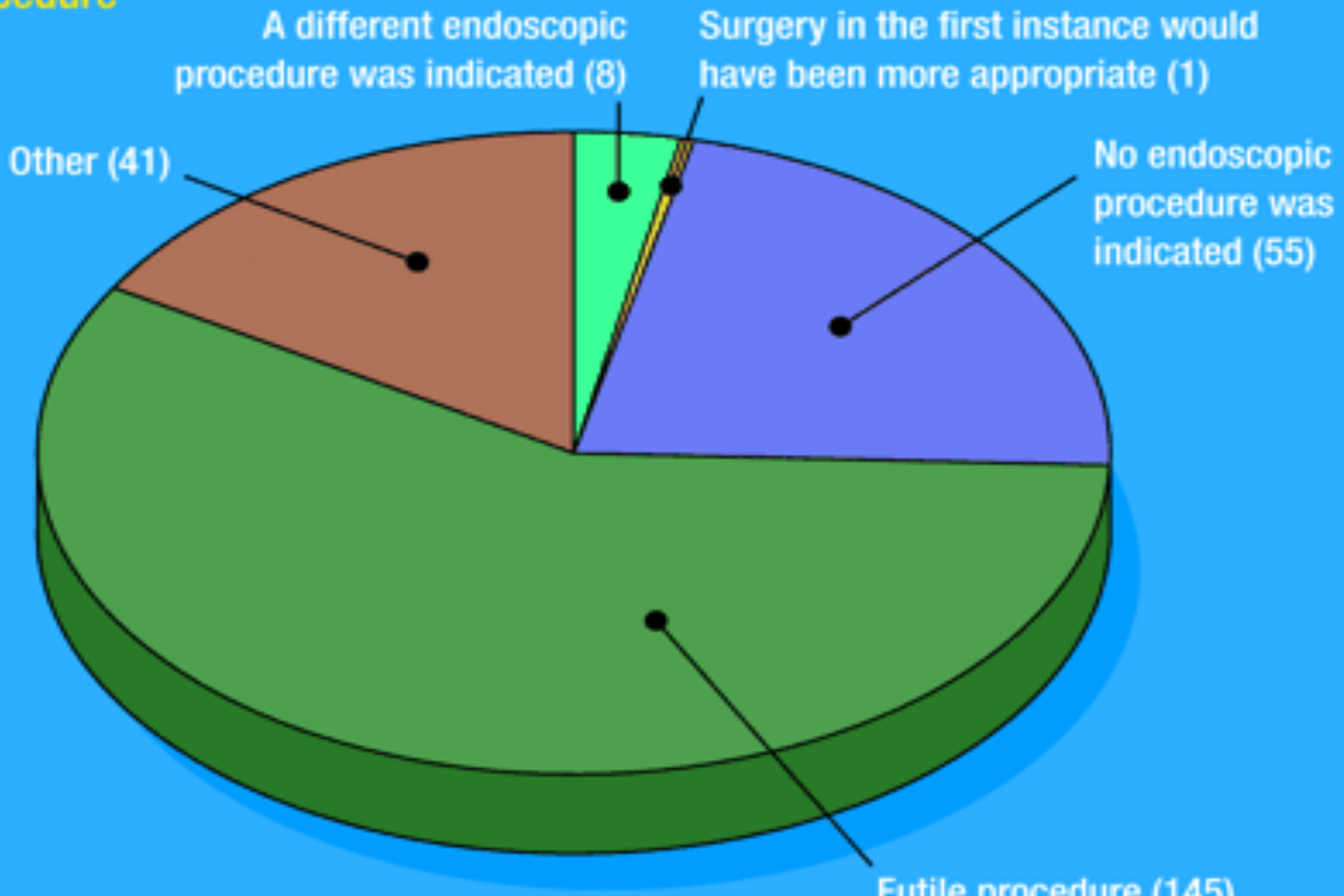
En el 3% (4.000) mort del pacient durant el mes següent

El 14% es consideren improcedents

El 7% es consideren fútils

BMJ 2004; 329: 873

Reasons for inappropriateness of endoscopy in the 230 cases in Britain in 2002-3 where the patient died in the 30 days after an inappropriate procedure*



*Cases can occur in more than one category

Table 8.3

Relation between Number of Tests Ordered and Percentage of Normal People with at Least one Abnormal Test Result[a]

NUMBER OF TESTS	PEOPLE WITH AT LEAST ONE ABNORMALITY
	%
1	5
5	23
20	64
100	99.4

[a] From Sackett DL: Clinical diagnosis and the clinical laboratory. *Clin Invest Med* 1:37–43, 1978.

"I'll want to run a few tests on you, just to cover my ass."

Unnecessary Tests and Procedures In the Health Care System

What Physicians Say About The Problem, the Causes, and the Solutions

Results from a National Survey of Physicians

May 1, 2014

Conducted for
The ABIM Foundation

Nearly 3 in 4 physicians say unnecessary tests and procedures represent a serious problem in the health care system.

A majority of physicians feels a strong responsibility to help their patients avoid unnecessary care.

Sponsored by the Robert Wood Johnson Foundation

May 1, 2014. Funded by the Robert Wood Johnson Foundation, the ABIM Foundation commissioned PerryUndem Research/Communication to conduct a national survey of physicians. The purpose of the survey was to gauge physicians' attitudes toward the problem of unnecessary tests and procedures in the health care system, views on the causes of the problem, and their perspectives on various solutions. The survey also measured exposure to the Choosing Wisely® campaign and compared self-reported behaviors between those with and without exposure to the campaign.

The survey was conducted by telephone from February 12 through March 21, 2014 among n = 600 physicians (primary care and specialists) nationwide. The margin of sampling error is ± 4.0 percentage points. The margin of error is larger for smaller subsamples. More information about the methodology can be found at the end of this report.

PERRYUNDEM
RESEARCH/COMMUNICATION

ABIM FOUNDATION

Unnecessary Tests and Procedures In the Health Care System

Figure 1: Do you think the frequency of unnecessary tests and procedures in the health care system is a…

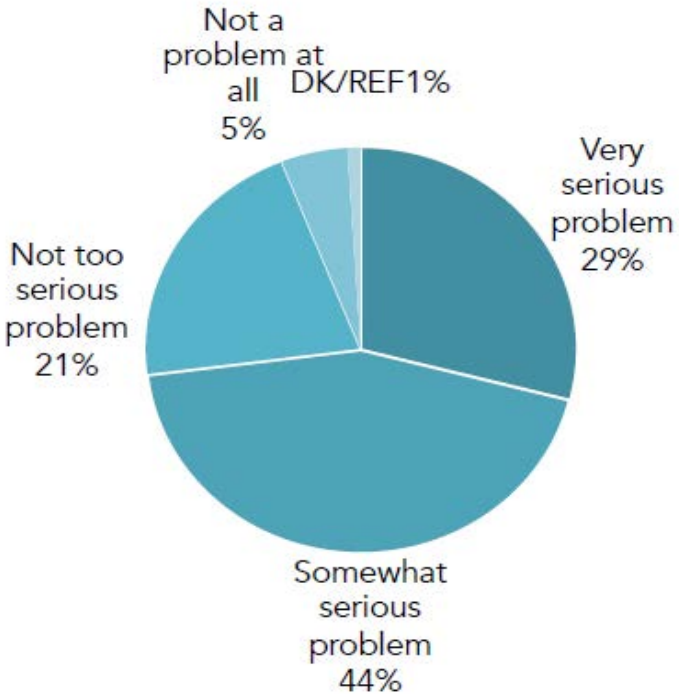


Figure 2: In your own practice, how often do patients ask for a test or procedure that you think is unnecessary?

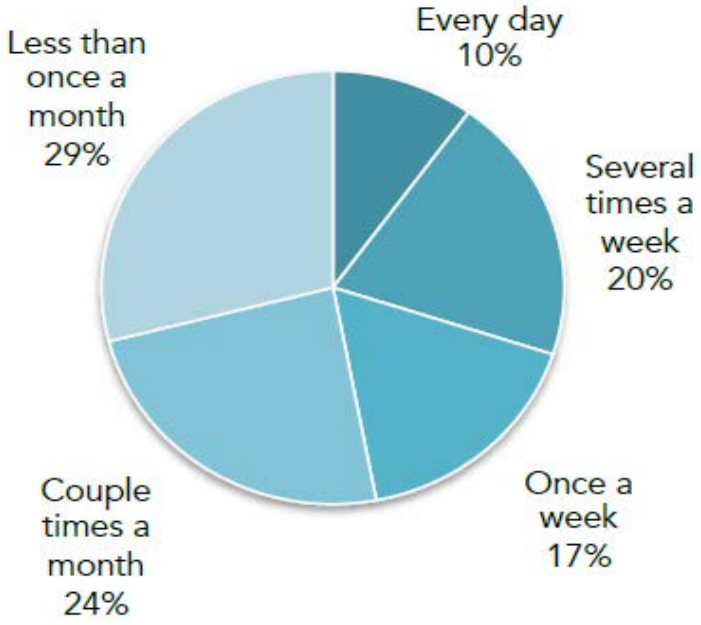


Figure 3: How often do patients follow your advice and avoid the test or procedure?

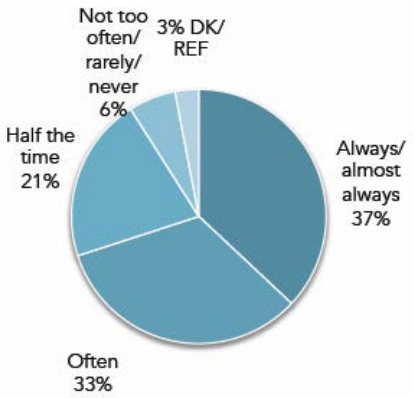


Figure 4: Let's say a patient came to you convinced he or she needed a specific test. You knew the test was unnecessary, but the patient was quite insistent. Would you:

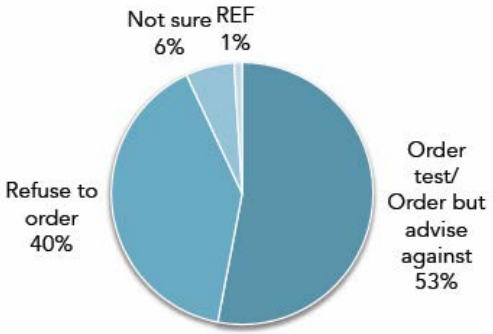


Table 1: Response to Insistent Patient by Demographics

	Order test/ Order but advise against	Refuse to order test
All MDs	***53%***	***40%***
Sees < 100 patients per week	48%	44%
Sees 100+ patients per week	61%	32%
Has seen Choosing Wisely® materials	47%	44%
Has not seen Choosing Wisely® materials	56%	37%

Figure 5: In your own practice, is this a reason you sometimes end up ordering an unnecessary test or procedure? IF YES: Is this a major reason or minor reason?
Total n = 600

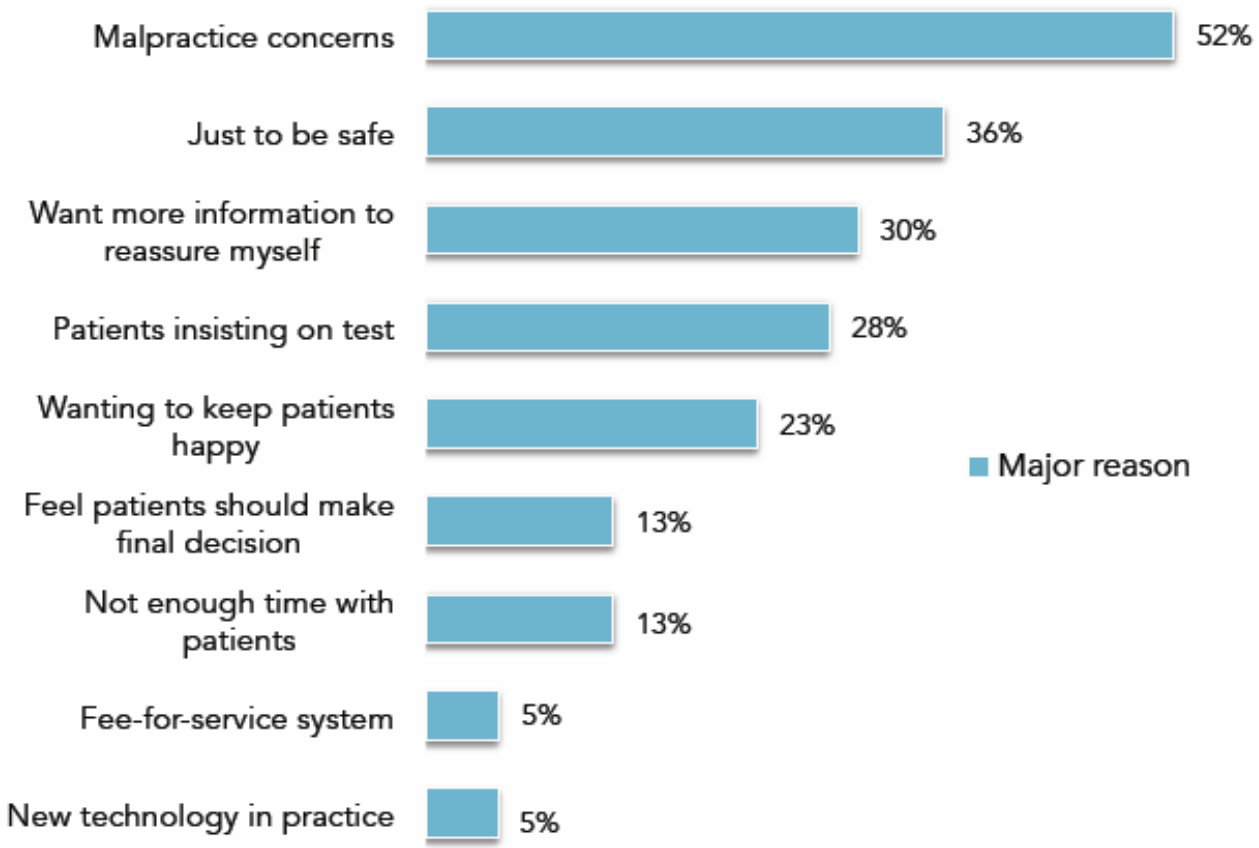


Figure 6: Do you feel comfortable or uncomfortable talking to patients about why they should avoid an unnecessary test or procedure? Do you feel very or somewhat comfortable/uncomfortable?

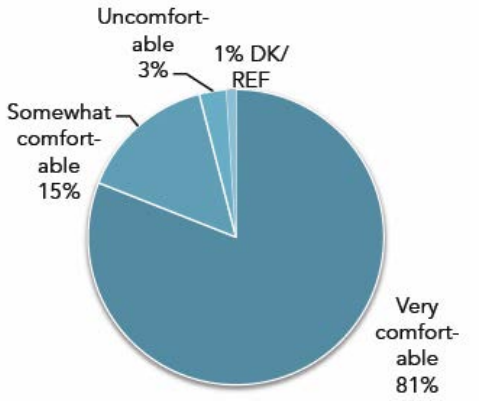


Figure 7: When patients ask for a test or procedure you feel is unnecessary, how often do you talk to them about why they should not have the test or procedure?

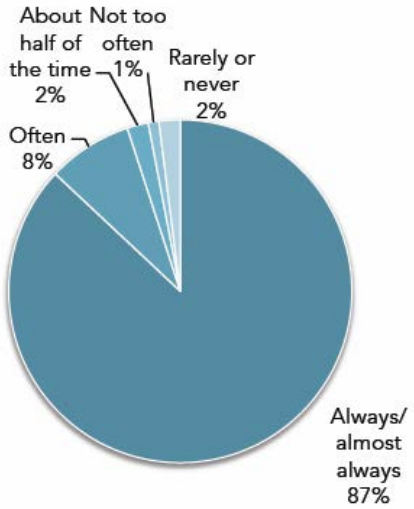


Figure 8: How often do you talk with your patients about the costs of tests and procedures?

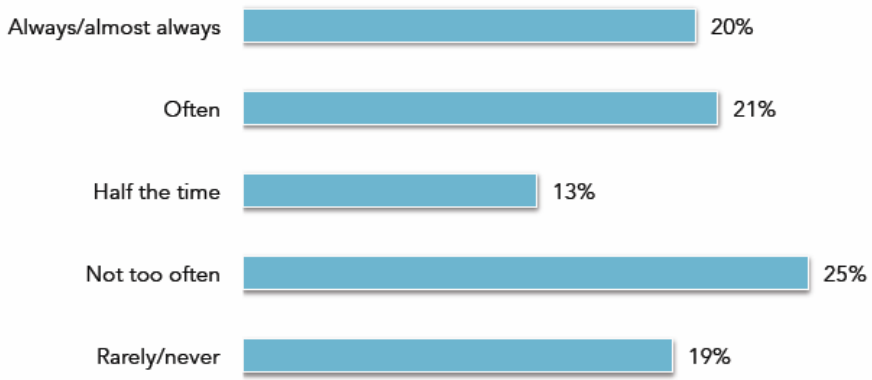


Figure 9: How much responsibility do you feel you have for making sure your patients avoid unnecessary tests and procedures?

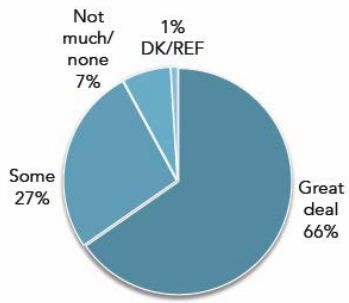
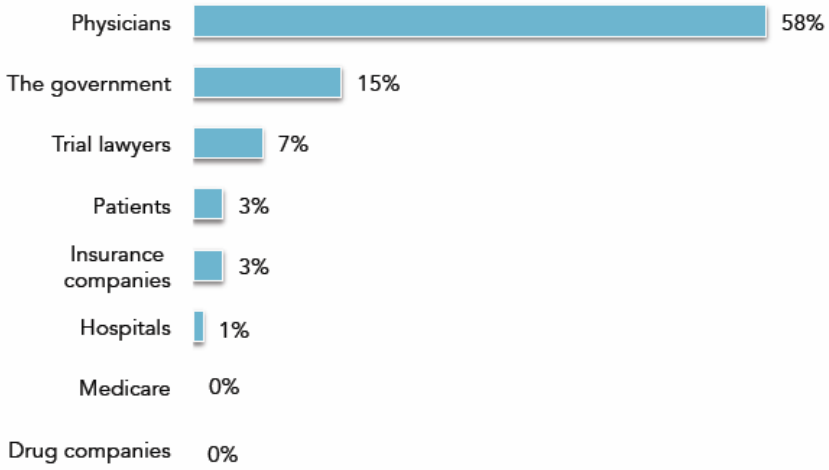
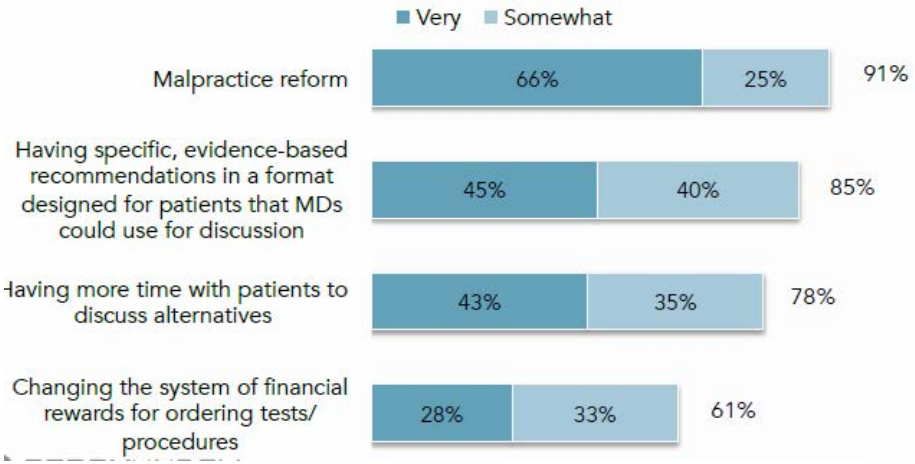


Figure 10: Who do you think is in the best position to help address the problem of unnecessary tests and procedures?*



** This question was an open-ended question. If a respondent replied "don't know," the list was read to him or her.*

Figure 11: How effective would _____ be in reducing unnecessary tests and procedures? (Very effective, somewhat effective, not too effective, or not at all effective?)

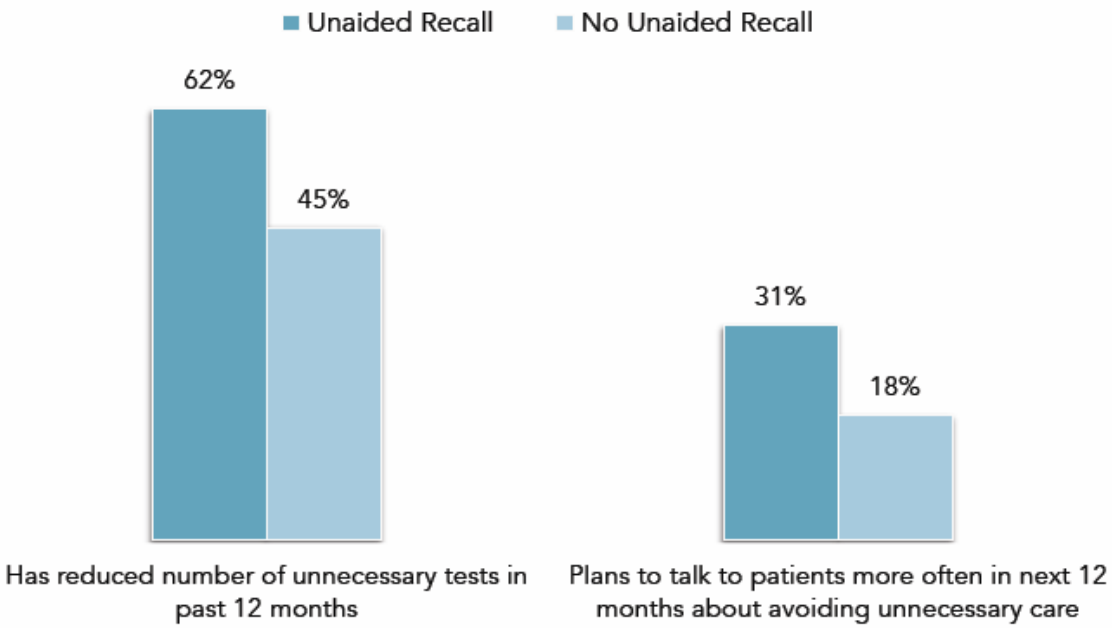


Prior to a description, respondents were asked: "Have you heard of the Choosing Wisely® campaign or not?" (unaided recall). One in five physicians (21 percent) reports hearing about the campaign; 78 percent reports not hearing about it.

Physicians who report (unaided) exposure to the campaign are more likely to have reduced the number of times they recommended a test or procedure in the last year because they learned it was unnecessary (62 percent vs. 45 percent). (See Figure 12.)

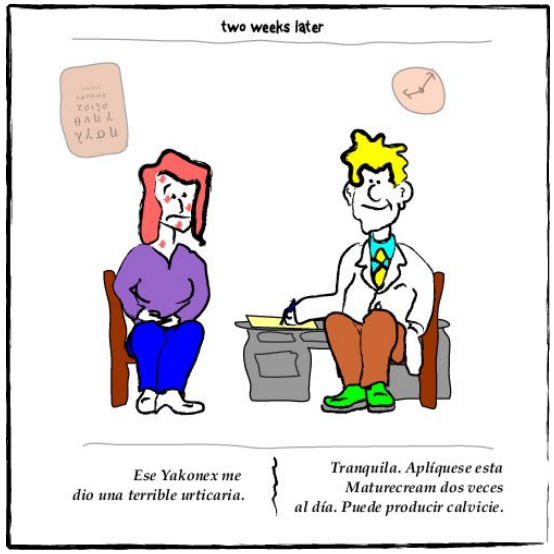
Additionally, those with exposure are more likely to say they will be talking to patients more often in the next 12 months about avoiding unnecessary tests or procedures.

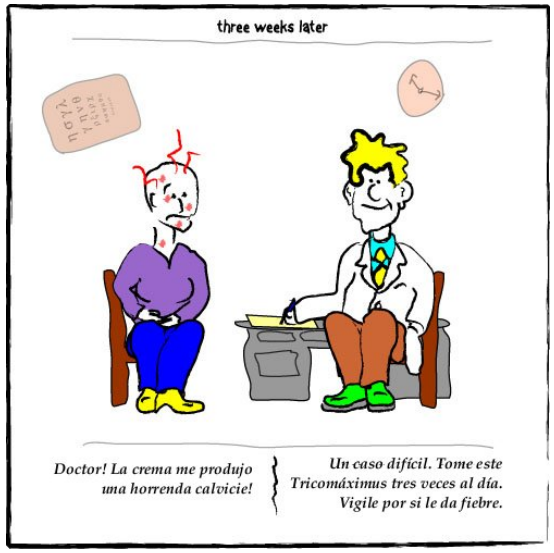
Figure 12: Unaided Recall to Choosing Wisely and Behaviors

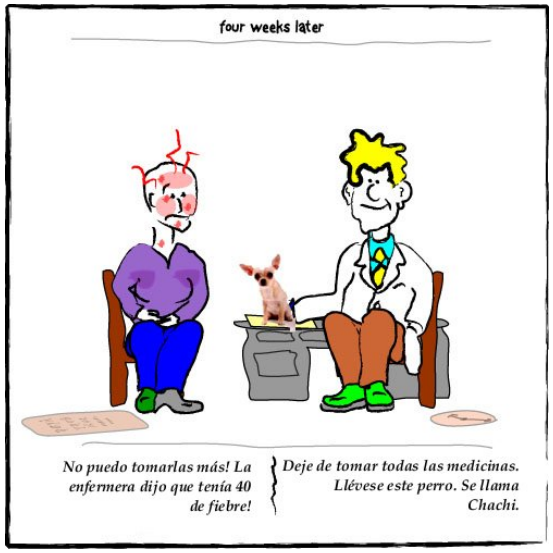



Verá Doctor...
Me siento sola.
Hay una medicina que se llama Desolax. Vigile las naúseas.


one week later
Ese Desolax me produce muchas naúseas.
No hay problema. Aquí tiene Yakonex para las naúseas. Podría provocarle urticaria.


two weeks later
Ese Yakonex me dio una terrible urticaria.
Tranquila. Aplíquese esta Maturecream dos veces al día. Puede producir calvicie.


three weeks later
Doctor! La crema me produjo una horrenda calvicie!
Un caso difícil. Tome este Tricomáximus tres veces al día. Vigile por si le da fiebre.

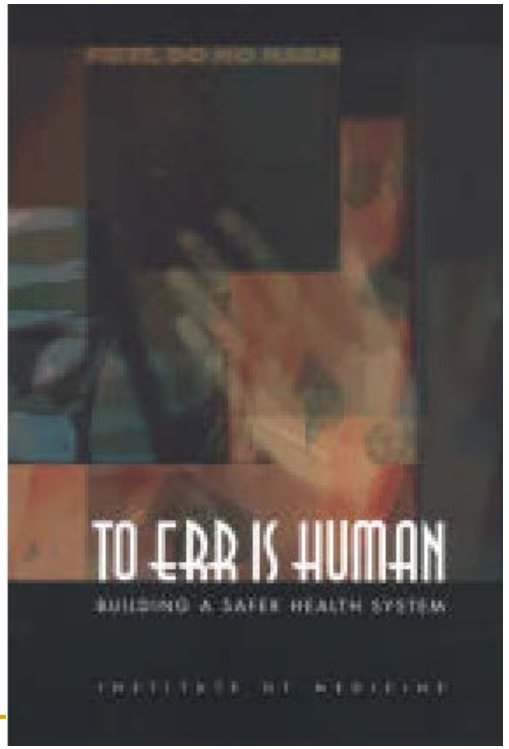

four weeks later
No puedo tomarlas más! La enfermera dijo que tenía 40 de fiebre!
Deje de tomar todas las medicinas. Llévese este perro. Se llama Chachi.


five weeks later
Me siento mucho mejor.
Fantástico. Me olvidé comentarle que Chachi podría tener lombrices. Lo siento.

TO ERR IS HUMAN:
BUILDING A SAFER HEALTH SYSTEM

Health care in the United States is not as safe as it should be--and can be. At least 44,000 people, and perhaps as many as 98,000 people, die in hospitals each year as a result of medical errors that could have been prevented, according to estimates from two major studies. Even using the lower estimate, preventable medical errors in hospitals exceed attributable deaths to such feared threats as motor-vehicle wrecks, breast cancer, and AIDS.

- Efectos adversos 2-4% de las hospitalizaciones
- 6-13% responsables del fallecimiento del paciente
- 40.000-90.000 muertes al año en USA
  - 43.000 por accidentes de tráfico
  - 42.000 por cáncer de mama
  - 16.000 por SIDA
- Coste estimado: 17-29x10^9 $



Is US Health Really the Best in the World?

Barbara Starfield, MD, MPH

INFORMATION CONCERNING THE DEFICIENCIES OF US MEDIcal care has been accumulating. The fact that more than 40 million people have no health insurance is well known. The high cost of the health care system is considered to be a deficit, but seems to be tolerated under the assumption that better health results from more expensive care, despite evidence from a few studies indicating that as many as 20% to 30% of patients receive contraindicated care.[1] In addition, with the release of the Institute of Medicine (IOM) report "To Err Is Human,"[2] millions of Americans learned, for the first time, that an estimated 44 000 to 98 000 among them die each year as a result of medical errors.

and adverse effects that occur because of iatrogenic damage not associated with recognizable error include:

- 12 000 deaths/year from unnecessary surgery
- 7000 deaths/year from medication errors in hospitals
- 20 000 deaths/year from other errors in hospitals
- 80 000 deaths/year from nosocomial infections in hospitals
- 106 000 deaths/year from nonerror, adverse effects of medications

These total to 225 000 deaths per year from iatrogenic causes. Three caveats should be noted. First, most of the data are derived from studies in hospitalized patients. Second, these estimates are for deaths only and do not include adverse effects that are associated with disability or discomfort. Third, the estimates of death due to error are lower than those in the IOM report.[1] If the higher estimates are used, the deaths due to iatrogenic causes would range from 230 000 to 284 000. In any case, 225 000 deaths per year constitutes the third leading cause of death in the United States, after deaths from heart disease and cancer. Even if these figures are overestimated, there is a wide margin between these numbers of deaths and the next leading cause of death (cerebrovascular disease).

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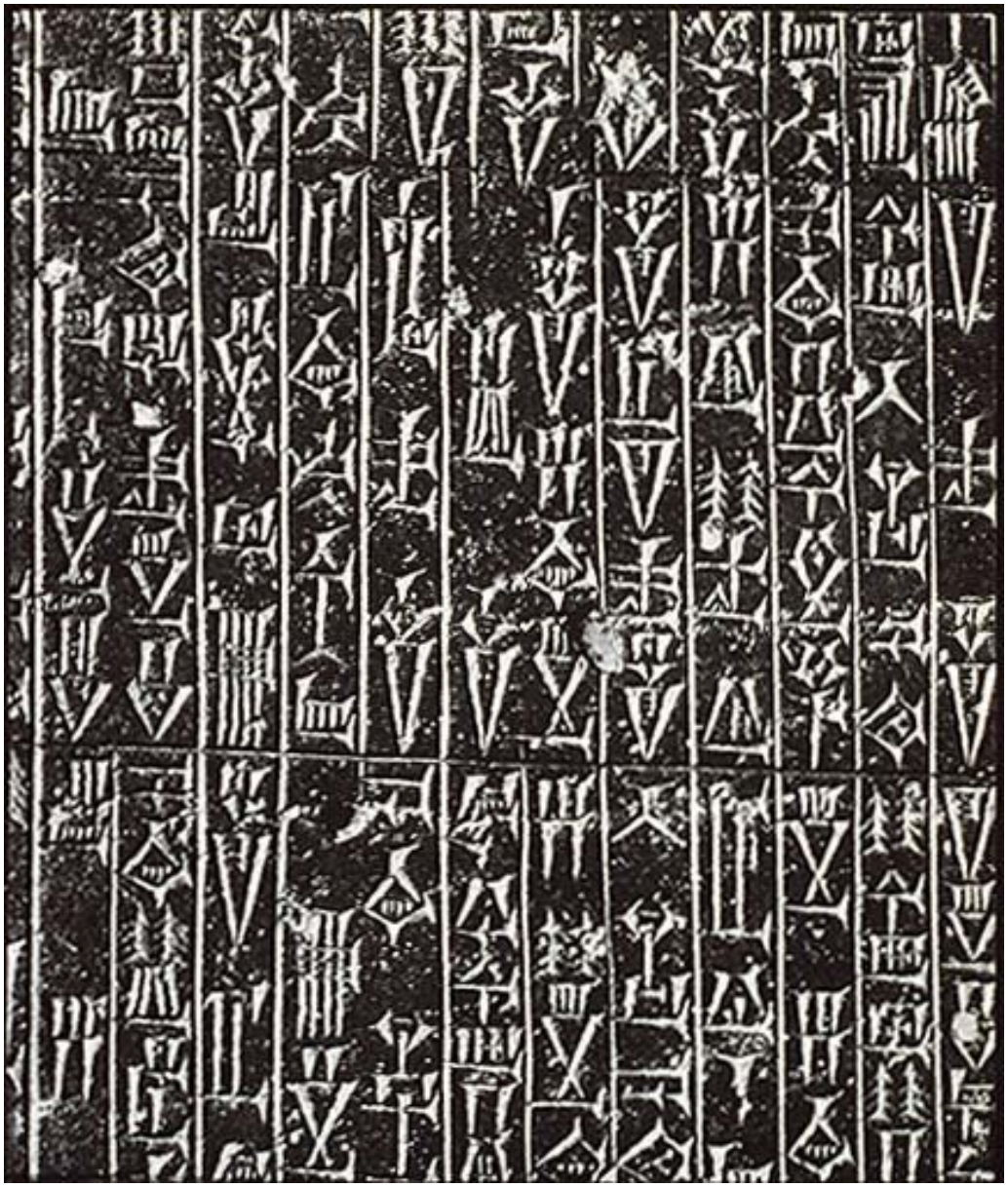


218.- Si un médico hizo una operación grave con el bisturí de bronce y lo ha hecho morir, o bien si lo operó de una catarata en el ojo y destruyó el ojo de este hombre, se cortarán sus manos.

219.- Si un médico hizo una operación grave con el bisturí de bronce e hizo morir al esclavo de un muskenun, dará otro esclavo equivalente.

220.- Si operó una catarata con el bisturí de bronce y ha destruido su ojo, pagará en plata la mitad de su precio.

221.- Si un médico curó un miembro quebrado de un hombre libre, y ha hecho revivir una víscera enferma, el paciente dará al médico cinco siclos de plata.

Annals of Internal Medicine | IDEAS AND OPINIONS

Appropriate Use of Screening and Diagnostic Tests to Foster High-Value, Cost-Conscious Care

Amir Qaseem, MD, PhD, MHA; Patrick Alguire, MD; Paul Dallas, MD; Lawrence E. Feinberg, MD; Faith T. Fitzgerald, MD; Carrie Horwitch, MD, MPH; Linda Humphrey, MD, MPH; Richard LeBlond, MD; Darilyn Moyer, MD; Jeffrey G. Wiese, MD; and Steven Weinberger, MD

Unsustainable rising health care costs in the United States have made reducing costs while maintaining high-quality health care a national priority. The overuse of some screening and diagnostic tests is an important component of unnecessary health care costs. More judicious use of such tests will improve quality and reflect responsible awareness of costs. Efforts to control expenditures should focus not only on benefits, harms, and costs but on the value of diagnostic tests—meaning an assessment of whether a test provides health benefits that are worth its costs or harms. To begin to identify ways that practicing clinicians can contribute to the delivery of high-value, cost-conscious health care, the American College of Physicians convened a workgroup of physicians to identify, using a consensus-based process, common clinical situations in which screening and diagnostic tests are used in ways that do not reflect high-value care. The intent of this exercise is to promote thoughtful discussions about these tests and other health care interventions to promote high-value, cost-conscious care.

Ann Intern Med. 2012;156:147-149. www.annals.org
For author affiliations, see end of text.

1. Repeating screening ultrasonography for abdominal aortic aneurysm following a negative study
2. Performing coronary angiography in patients with chronic stable angina with well-controlled symptoms on medical therapy or who lack specific high-risk criteri on exercise testing
3. Performing echocardiography in asymptomatic patients with innocent-sounding heart murmurs, most typically grade I–II/VI short systolic, midpeaking murmurs that are audible along the left sternal border
4. Performing routine periodic echocardiography in asymptomatic patients with mild aortic stenosis more frequently than every 3–5 y
5. Routinely repeating echocardiography in asymptomatic patients with mild mitral regurgitation and normal left ventricular size and function
6. Obtaining electrocardiograms to screen for cardiac disease in patients at low to average risk for coronary artery disease
7. Obtaining exercise electrocardiogram for screening in low-risk asymptomatic adults
8. Performing an imaging stress test (echocardiographic or nuclear) as the initial diagnostic test in patients with known or suspected coronary artery disease who are able to exercise and have no resting electrocardiographic abnormalities that may interfere with interpretation of test results
9. Measuring brain natriuretic peptide in the initial evaluation of patients with typical findings of heart failure
10. Annual lipid screening for patients not receiving lipid-lowering drug or diet therapy in the absence of reasons for changing lipid profiles
11. Using MRI rather than mammography as the breast cancer screening test of choice for average-risk women
12. In asymptomatic women with previously treated breast cancer, performing follow-up complete blood counts, blood chemistry studies, tumor marker studies, chest radiography, or imaging studies other than appropriate breast imaging
13. Performing dual-energy x-ray absorptiometry screening for osteoporosis in women younger than 65 y in the absence of risk factors
14. Screening low-risk individuals for hepatitis B virus infection
15. Screening for cervical cancer in low-risk women aged 65 y or older and in women who have had a total hysterectomy (uterus and cervix) for benign disease
16. Screening for colorectal cancer in adults older than 75 y or in adults with a life expectancy of less than 10 y
17. Repeating colonoscopy within 5 y of an index colonoscopy in asymptomatic patients found to have low-risk adenomas
18. Screening for prostate cancer in men older than 75 y or with a life expectancy of less than 10 y
19. Using CA-125 antigen levels to screen women for ovarian cancer in the absence of increased risk
20. Performing imaging studies in patients with nonspecific low back pain

22. Ordering routine preoperative laboratory tests, including complete blood count, liver chemistry tests, and metabolic profiles, in otherwise healthy patients undergoing elective surgery
23. Performing preoperative coagulation studies in patients without risk factors or predisposing conditions for bleeding and with a negative history of abnormal bleeding
24. Performing serologic testing for suspected early Lyme disease
25. Performing serologic testing for Lyme disease in patients with chronic nonspecific symptoms and no clinical evidence of disseminated Lyme disease
26. Performing sinus imaging studies for patients with acute rhinosinusitis in the absence of predisposing factors for atypical microbial causes
27. Performing imaging studies in patients with recurrent, classic migraine headache and normal findings on neurologic examination
28. Performing brain imaging studies (CT or MRI) to evaluate simple syncope in patients with normal findings on neurologic examination
29. Routinely performing echocardiography in the evaluation of syncope, unless the history, physical examination, and electrocardiogram do not provide a diagnosis or underlying heart disease is suspected
30. Performing predischarge chest radiography for hospitalized patients with community-acquired pneumonia who are making a satisfactory clinical recovery
31. Obtaining CT scans in a patient with pneumonia that is confirmed by chest radiography in the absence of complicating clinical or radiographic features
32. Performing imaging studies, rather than a high-sensitivity D-dimer measurement, as the initial diagnostic test in patients with low pretest probability of venous thromboembolism
33. Measuring D-dimer rather than performing appropriate diagnostic imaging (extremity ultrasonography, CT angiography, or ventilation–perfusion scintigraphy), in patients with intermediate or high probability of venous thromboembolism
34. Performing follow-up imaging studies for incidentally discovered pulmonary nodules ≤4 mm in low-risk individuals
35. Monitoring patients with asthma or chronic obstructive pulmonary disease by using full pulmonary function testing that includes lung volumes and diffusing capacity, rather than spirometry alone (or peak expiratory flow rate monitoring in asthma)
36. Performing an antinuclear antibody test in patients with nonspecific symptoms, such as fatigue and myalgia, or in patients with fibromyalgia
37. Screening for chronic obstructive pulmonary disease with spirometry in individuals without respiratory symptoms

SPECIAL ARTICLE

LESS IS MORE

Overuse of Health Care Services in the United States

An Understudied Problem

Deborah Korenstein, MD; Raphael Falk, MD, MPH; Elizabeth A. Howell, MD, MPP; Tara Bishop, MD, MPH; Salomeh Keyhani, MD, MPH

Background: Overuse, the provision of health care services for which harms outweigh benefits, represents poor quality and contributes to high costs. A better understanding of overuse in US health care could inform efforts to reduce inappropriate care. We performed an extensive search for studies of overuse of therapeutic procedures, diagnostic tests, and medications in the United States and describe the state of the literature.

Methods: We searched MEDLINE (1978-2009) for studies measuring US rates of overuse of procedures, tests, and medications, augmented by author tracking, reference tracking, and expert consultation. Four reviewers screened titles; 2 reviewers screened abstracts and full articles and extracted data including overuse rate, type of service, clinical area, and publication year.

Results: We identified 172 articles measuring overuse: 53 concerned therapeutic procedures; 38, diagnostic tests; and 81, medications. Eighteen unique therapeutic procedures and 24 diagnostic services were evaluated, including 10 preventive diagnostic services. The most commonly studied services were antibiotics for upper respiratory tract infections (59 studies), coronary angiography (17 studies), carotid endarterectomy (13 studies), and coronary artery bypass grafting (10 studies). Overuse of carotid endarterectomy and antibiotics for upper respiratory tract infections declined over time.

Conclusions: The robust evidence about overuse in the United States is limited to a few services. Reducing inappropriate care in the US health care system likely requires a more substantial investment in overuse research.

Arch Intern Med. 2012;172(2):171-178

Table 3. Overuse of Diagnostic Preventive Services

Service	No. of Patients Studied	Year	Scope	Standard for Determining Appropriateness (Guideline Issuing Organization)	Rate of Overuse, %
Preoperative pulmonary function testing	135	1995	Local	American College of Physicians	39.0
Cervical cancer screening (Papanicolaou test)[a]	197	1998	Local	US Preventive Services Task Force	58.0
Prostate cancer screening (PSA)	429	2000	Local	Panel consensus process	20.1
Colon cancer screening (fecal occult blood testing)	500	2005	Local	VA	8.0
Prostate cancer screening (PSA)	597 642	2006	National	VA and US Preventive Services Task Force	36.0
Periodic health examination	2704	2006	National	US Preventive Services Task Force	
Chest radiography					7.6
Electrocardiogram					9.2
Urinalysis					36.8
Prostate cancer screening (PSA)	105 765	2007	Regional	US Preventive Services Task Force, American Urological Association, American Cancer Society, and National Comprehensive Cancer Network	16.1
Colon cancer screening (colonoscopy—follow-up after initial screen)	1006	2007	Regional	US Multi-Society Task Force on Colorectal Cancer and the American Cancer Society	60.8

Abbreviations: PSA, prostate-specific antigen; VA, Department of Veterans Affairs.
[a] Patients had history of hysterectomy for benign causes.

Table 2. Most Commonly Evaluated Health Care Services: Overuse Rates Over Time[a]

Service	Condition(s)	No. of Studies	Range of Overuse Rates, % (1978-1999)	Range of Overuse Rates, % (2000-2009)
Therapeutic procedures				
Coronary angiography[b]	Myocardial infarction, coronary artery disease	17	4.0-17.4	8.0-21.8
Coronary revascularization[c]	Coronary artery disease	16	2.0-15.0	1.4-14.0
Carotid endarterectomy	Carotid stenosis	13	1.0-33.0	8.6-10.6
Diagnostic tests				
Upper endoscopy[d]	Bleeding (upper), peptic ulcer disease	7	5.2-19.6	19.0-23.0
Radiographs in acute respiratory illnesses	Bronchiolitis or croup, asthma	5	70.0[e]	32.0-72.0
Colonoscopy[d]	Colon cancer screening and follow-up	4	18.4-22.9	23.0-60.8
Imaging in low back pain	Low back pain	5	28.0[e]	4.5-28.0
Prostate-specific antigen	Prostate cancer screening and follow-up	4	None	16.1-80.0
Medications				
Antibiotics	Upper respiratory tract infection, acute bronchitis	59	17.0-85.0	2.0-89.0
Bronchodilators	Bronchiolitis obstructive diseases	6	12.0-69.0	30.0-81.0

[a] When original studies presented ranges of overuse rates, values presented are the lower end of the range. Includes services evaluated in 4 or more separate studies. See the eTable and eReferences for details of all studies.
[b] Includes studies with or without percutaneous intervention.
[c] Includes studies evaluating coronary artery bypass grafting and additional forms of revascularization
[d] A 2003 study reporting a single rate of overuse of endoscopy or colonoscopy is included in both categories.
[e] Evaluated in a single study during the period.

Preventing overdiagnosis: how to stop harming the healthy

BMJ

Evidence is mounting that medicine is harming healthy people through ever earlier detection and ever wider definition of disease. With the announcement of an international conference to improve understanding of the problem of overdiagnosis, **Ray Moynihan**, **Jenny Doust**, and **David Henry** examine its causes and explore solutions

Box 1: Problems of overdiagnosis

Asthma—Canadian study suggests 30% of people with diagnosis may not have asthma, and 66% of those may not require medications[37]

Attention deficit hyperactivity disorder—Widened definitions have led to concerns about overdiagnosis; boys born at the end of the school year have 30% higher chance of diagnosis and 40% higher chance of medication than those born at the beginning of the year[46]

Breast cancer—Systematic review suggests up to a third of screening detected cancers may be overdiagnosed[4]

Chronic kidney disease—Controversial definition classifies 1 in 10 as having disease; concerns about overdiagnosis of many elderly people [23]

Gestational diabetes—Expanded definition classifies almost 1 in 5 pregnant women [31]

High blood pressure—Systematic review suggests possibility of substantial overdiagnosis[22]

High cholesterol—Estimates that up to 80% of people with near normal cholesterol treated for life may be overdiagnosed[3]

Lung cancer—25% or more of screening detected lung cancers may be overdiagnosed[56]

Osteoporosis—Expanded definitions may mean many treated low risk women experience net harm[18]

Prostate cancer—Risk that a cancer detected by prostate specific antigen testing is overdiagnosed may be over 60%[12]

Pulmonary embolism—Increased diagnostic sensitivity leads to detection of small emboli. Many may not require anticoagulant treatment [39]

Thyroid cancer—Much of the observed increase in incidence may be overdiagnosis[28]

BMJ 2012;344:e3502 doi: 10.1136/bmj.e3502 (Published 29 May 2012)

Drivers of overdiagnosis

- Technological changes detecting ever smaller “abnormalities”
- Commercial and professional vested interests
- Conflicted panels producing expanded disease definitions and writing guidelines
- Legal incentives that punish underdiagnosis but not overdiagnosis
- Health system incentives favouring more tests and treatments
- Cultural beliefs that more is better; faith in early detection unmodified by its risks

Concern about overdiagnosis does not preclude awareness that many people miss out on much needed healthcare. On the contrary, resources wasted on unnecessary care can be much better spent treating and preventing genuine illness. The challenge is to work out which is which, and to produce and disseminate evidence to help us all make more informed decisions about when a diagnosis might do us more good than harm.

2. DESINVERTIR EN LO QUE NO AÑADE SALUD.

Cuando el presupuesto disminuye o no aumenta, no sólo hay que prestar atención a que lo nuevo sea útil y asequible, sino a lo que se va a eliminar para financiar las innovaciones. Se requiere reorientar las prioridades de financiación, lo que comúnmente se etiqueta como "desinversión". Entendemos por **desinversión** el proceso explícito mediante el cual se dejan de financiar parcial o completamente medicamentos, dispositivos, aparatos, procedimientos o servicios con **escaso valor clínico**. Distinguimos dos áreas de actuación: las intervenciones de valor dudoso y la mala calidad de los servicios prestados. En el primer grupo se incluyen intervenciones **inefectivas** (como la prescripción de estatinas en prevención primaria de muerte por cardiopatía isquémica); aquéllas en las que el **balance beneficio-riesgo** se desplaza netamente hacia el segundo (cualquier cirugía electiva en paciente no elegible); las **prescindibles por innecesarias** (entre otras, un tercio de los tratamientos antibióticos en Atención Primaria); las **potencialmente "cosméticas"** (como la operación estética de varices); las **eficaces con alternativas más coste-efectivas** que deberían ser consideradas en primer lugar (por ejemplo, la mitad de los tratamientos de osteoporosis); y las **intervenciones efectivas pero con relación beneficio-riesgo incierta para el caso de los pacientes "medios"** (como las cirugías de cadera, rodilla o cataratas). En el segundo grupo (mala calidad de los servicios prestados) se incluyen los efectos adversos evitables derivados de la prestación de servicios médicos (infecciones hospitalarias, errores de medicación, etc.).

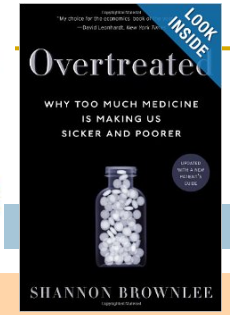
Què és l'Essencial?

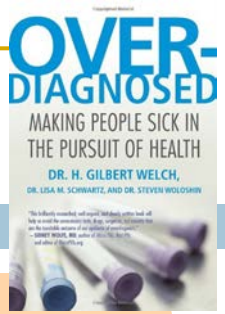
Iniciativa que identifica pràctiques clíniques de poc valor per a la salut i promou recomanacions per tal d'evitar-ne la seva realització

Context

BMJ PREVENTING OVERDIAGNOSIS
Winding back the harms of too much medicine

JAMA Internal Medicine
Formerly Archives of Internal Medicine



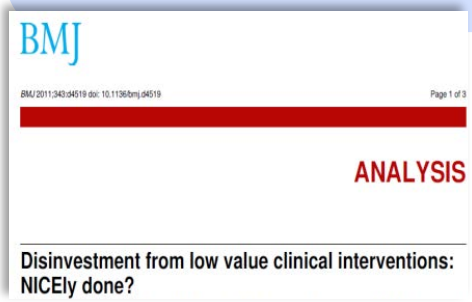


Comunitat científica

(alertes de sobrediagnòstic/sobretractament)

Sistemas sanitaris

(sostenibilitat qüestionada)


BMJ

ANALYSIS

Disinvestment from low value clinical interventions: NICEly done?


Revista de Calidad Asistencial

ELSEVIER DOYMA

ARTÍCULO ESPECIAL

Taxonomía práctica de la «desinversión sanitaria» en lo que no añade valor, para hacer sostenible el Sistema Nacional de Salud

J.R. Repullo

NECESITAT DE:

1) Revisió de la practica clínica rutinària

2) Revisió de la cobertura sanitària publica

3) Presa de decisions compartida

Pacients /Ciutadania

(proactius i informats)

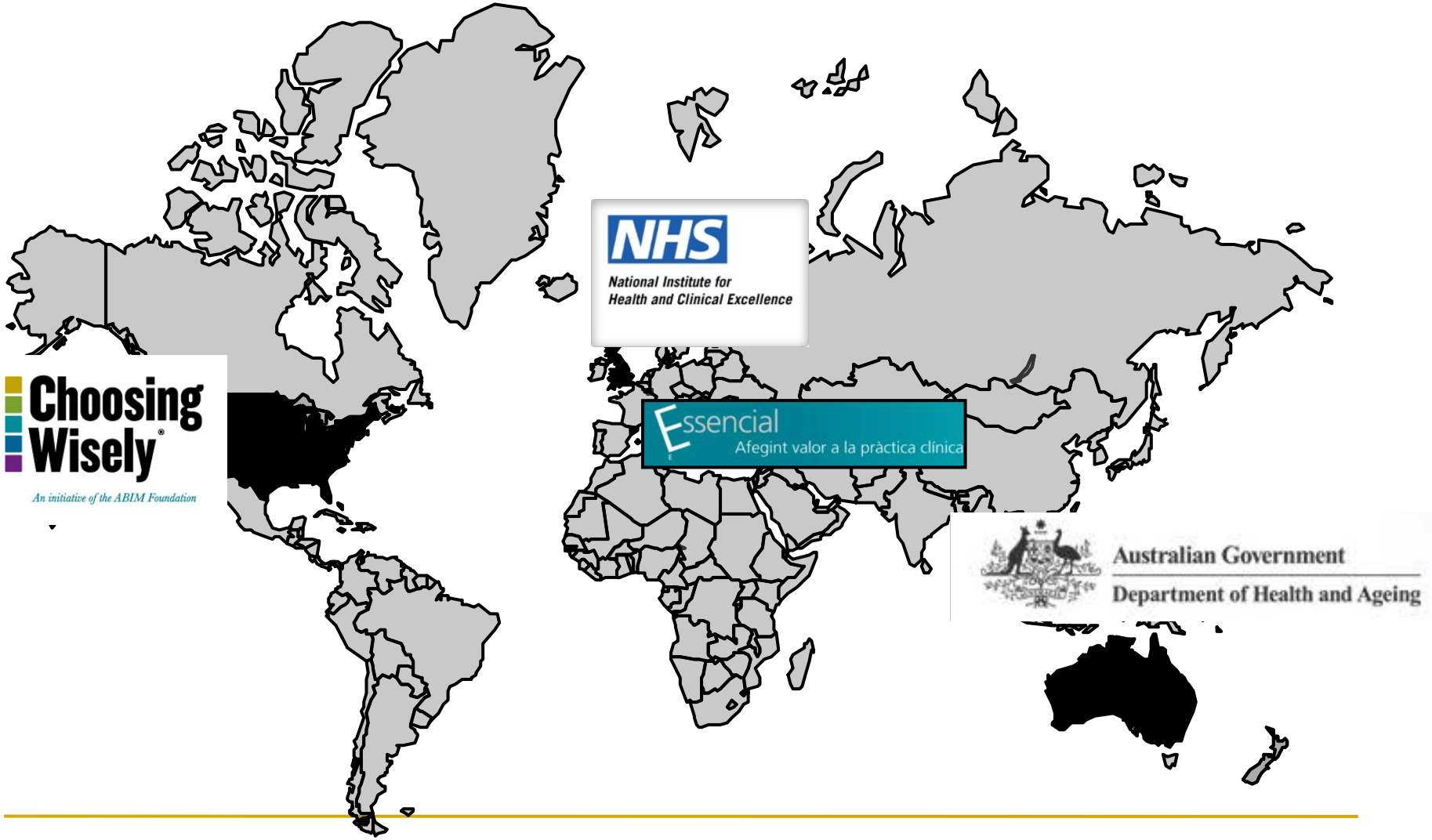
patientslikeme®

1. **Imperatiu ètic** actuar sobre pràctiques de poc valor

2. Millora de la **qualitat assistencial**

3. **Màxim valor** als recursos destinats als serveis sanitaris

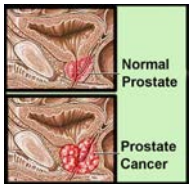
Iniciatives similars



Quines son les pràctiques clíniques de poc valor?

- ✓ Manca **d'evidència sobre l'efectivitat**
- ✓ **Són inefectives**
- ✓ **Els riscos són superiors als beneficis**
- ✓ **Hi ha alternatives d'efectivitat semblant i menor cost**

Actualment...



21 recomanacions

Proves d'imatge en lumbàlgia, Radiografia de tòrax preoperatòria en persones asimptomàtiques, Rehabilitació de l'ictus més enllà dels dotze mesos, Proves d'imatge en l'avaluació de cefalees, Bisfosfonats en dones postmenopàusiques amb risc baix de fractures, Inhibidors de la bomba de protons en malalts polimedicats o majors de 65 anys, Mamografia en dones menors de 50 anys i sense risc addicional, PSA en el cribratge del càncer de pròstata, Tractament simptomàtic del refredat comú i la tos en infants, Episiotomia rutinària en el part normal, Sondatge vesical en pacients amb ictus, Antibiòtics en otitis mitjana aguda en infants, Hospitalització de pacients amb pneumònia d'origen comunitari, IECA i ARA-II en pacients amb insuficiència cardíaca, Estatines en població amb risc coronari baix o moderat, Antibiòtics en faringitis pediàtrica, Oxigenoteràpia domiciliària en pacients sense insuficiència respiratòria

Quin interès te (pot o ha de tenir) la persona responsable de la gestió d'un dentre sanitari?

Quant al finançador

Quant als professionals

Quant als pacients

Quant als ciutadans