ECOCARDIOCHIRURGIA 2014

Milano 5-7 maggio 2014

La medicalizzazione eccessiva può portare un danno al paziente o ad un utilizzo improprio delle risorse.
Less is more?

Introduzione ad un argomento inconsueto

G Corrado, FANMCO, FESC
Unità Operativa di Cardiologia
Ospedale Valduce – Como (IT)

H. Valduce 1879

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Less is more?

Conflitti di interesse? Proprio nessuno.

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LESS IS MORE

EDITORIAL

LESS IS MORE

Less Is More

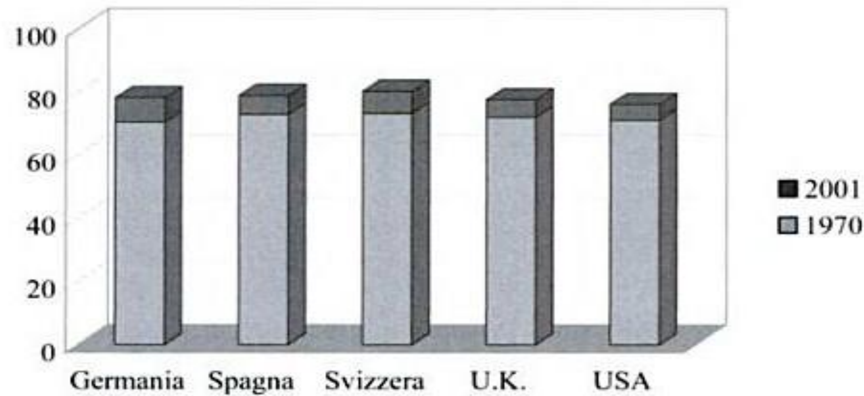
How Less Health Care Can Result in Better Health

If some medical care is good, more care is better. Right? Unfortunately, this is often not the case.

Est modus in rebus: sunt certi denique fines, quos ultra citraque nequit consistere rectum (Orazio. Satire I, 1, vv. 106-107)

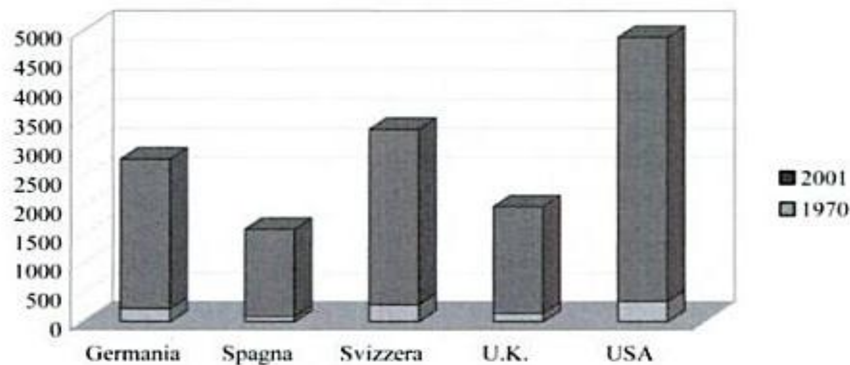
HOUSTON, WE HAVE A PROBLEM

Fig. 2 - Variazione dell'aspettativa di vita alla nascita, in anni, tra il 1970 e il 2001



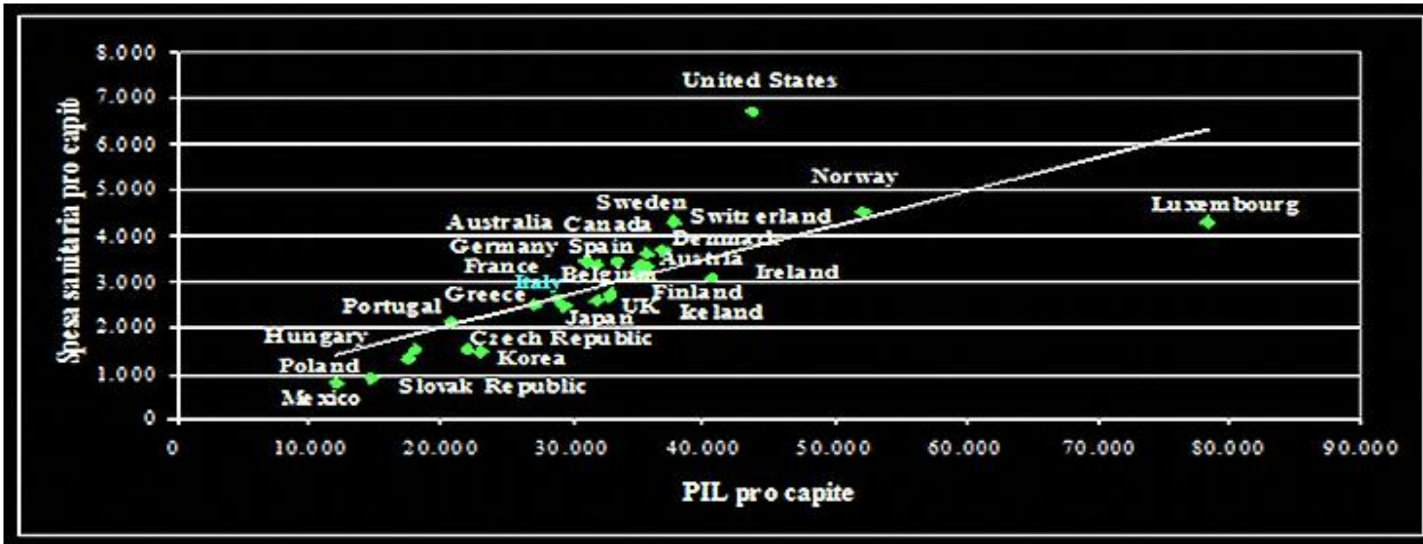
Fonte: Elaborazione su dati WHO *World Report* 2002

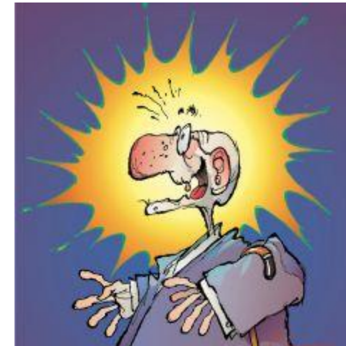
Fig. 3 - Variazione della spesa pro capite, in dollari a parità di potere di acquisto, tra il 1970 e il 2001



Fonte: Elaborazione su dati OECD *Health Data* 2003

IL PARDOSSO SPESA/LONGEVITA'



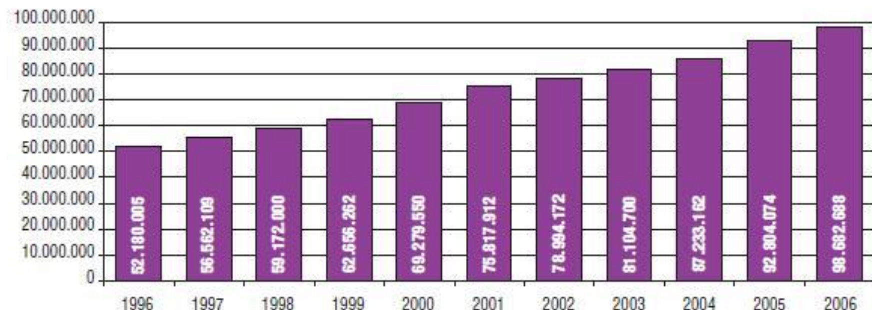


SANITA’ E SALUTE

“…la sanità ha effetti relativi sulla salute, essendo maggiori gli effetti dell’igiene, delle condizioni di vita, dell’alimentazione e in genere dello stile di vita; anche se non è agevole separare i diversi effetti, alcuni ricercatori hanno stimato che il raggiungimento della longevità dipende per il 20-30% dal patrimonio genetico, per il 20% dall’eco-sistema, per il 40-50% da fattori socio-economici e solo per il 10-15% da fattori strettamente sanitari...”

(M. Crivellini, “Sanità e Salute: un Conflitto di Interesse”)

EVOLUZIONE SPESA SANITARIA DAL 1996 AL 2006 (MIGLIAIA DI EURO)



Fonte: Elaborazione Federanziani su dati Ministero della Salute

SPESA/OUTCOME

Annals of Internal Medicine | ARTICLE

The Implications of Regional Variations in Medicare Spending. Part 1: The Content, Quality, and Accessibility of Care

Elliott S. Fisher, MD, MPH; David E. Wennberg, MD, MPH; Thérèse A. Stukel, PhD; Daniel J. Gottlieb, MS; F.L. Lucas, PhD; and Étoile L. Pinder, MS

Background: The health implications of regional differences in Medicare spending are unknown.

Objective: To determine whether regions with higher Medicare spending provide better care.

Design: Cohort study.

Setting: National study of Medicare beneficiaries.

Patients: Patients hospitalized between 1993 and 1995 for hip fracture (n = 614 503), colorectal cancer (n = 195 429), or acute myocardial infarction (n = 159 393) and a representative sample (n = 18 190) drawn from the Medicare Current Beneficiary Survey (1992–1995).

Exposure Measurement: End-of-life spending reflects the component of regional variation in Medicare spending that is unrelated to regional differences in illness. Each cohort member's exposure to different levels of spending was therefore defined by the level of end-of-life spending in his or her hospital referral region of residence (n = 306).

Outcome Measurements: Content of care (for example, frequency and type of services received), quality of care (for example, use of aspirin after acute myocardial infarction, influenza immunization), and access to care (for example, having a usual source of care).

Results: Average baseline health status of cohort members was similar across regions of differing spending levels, but patients in higher-spending regions received approximately 60% more care. The increased utilization was explained by more frequent physician visits, especially in the inpatient setting (rate ratios in the highest vs. the lowest quintile of hospital referral regions were 2.13 [95% CI, 2.12 to 2.14] for inpatient visits and 2.36 [CI, 2.33 to 2.39] for new inpatient consultations), more frequent tests and minor (but not major) procedures, and increased use of specialists and hospitals (rate ratio in the highest vs. the lowest quintile was 1.52 [CI, 1.50 to 1.54] for inpatient days and 1.55 [CI, 1.50 to 1.60] for intensive care unit days). Quality of care in higher-spending regions was no better on most measures and was worse for several preventive care measures. Access to care in higher-spending regions was also no better or worse.

Conclusions: Regional differences in Medicare spending are largely explained by the more inpatient-based and specialist-oriented pattern of practice observed in high-spending regions. Neither quality of care nor access to care appear to be better for Medicare enrollees in higher-spending regions.

Ann Intern Med. 2003;138:273-287. www.annals.org

For author affiliations, see end of text.

See related article on pp 288-298 and editorial comments on pp 347-348, 348-349, and 350-351.

HOW CAN MORE HEALTH CARE LEAD TO WORSE HEALTH OUTCOMES?

- Almost all tests, imaging procedures, drugs, surgery, and preventive interventions have some risk of adverse effects. In some cases, these harms have been proven to outweigh benefits—for example, treating asymptomatic women with postmenopausal hormone therapy.
- In other cases, services become widely used with inadequate proof of benefit. For example, arthroscopic debridement of the knee for treatment of osteoarthritis was performed about 650000 times per year in the United States in the late 1990s, despite the fact that the procedure had not been shown to be beneficial. Randomized trials subsequently demonstrated no benefit of this procedure, but all patients were exposed to the pain and risk associated with surgery
- Even if a medical service has been shown to provide a clear benefit in selected groups, using this service in different groups, especially those with less severe disease or lower risk for disease, can result in harm. For example, antidepressants have been shown in multiple randomized trials to be an effective treatment for severe depression but have little benefit in persons with less severe depression.
- Even if the relative benefit of a medical service is the same, overuse in a low-risk population can result in harm screening mammography is probably just as effective in reducing the risk of dying of breast cancer in younger women as in older women. But because the absolute risk of dying of breast cancer is lower in younger women than in older women, the absolute benefit is lower. But the adverse effects of mammography—falsepositive findings, biopsies, anxiety, and overdiagnosis and treatment of latent cancers—is the same and may overwhelm the benefit.

HOW CAN MORE HEALTH CARE LEAD TO WORSE HEALTH OUTCOMES?

Finally, harm can occur when tests and procedures are repeated unnecessarily

For example, repeated CT scanning to "follow" documented renal stones has no clear clinical purpose but is associated with a significant risk of radiation induced cancers

Terranova G et al, JACC Cardiovasc Imaging. 2012

Picano E, BMJ 9 October 2004, updated with **BEIR VII**, 2006

Projected risk of cancer (fatal and non-fatal) for exposure to one 64-slice coro-CT
Elderly: 1 in 1,500
Adult man: 1 in 750
Male child (<1 year): 1 in 200
Female child (<1 year): 1 in 100

Additional risk of cancer/exam
1 in 500
1 in 1,000
1 in 10,000
Female child <1 year
Male child <1 year
Adult wo man
Adult man
Elderly
50
250
500
750
1000
Equivalent number of chest x-rays

EDITORIAL

LESS IS MORE

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How Less Health Care Can Result in Better Health

MA IN PARTE QUESTE COSE GIA' LE SAPPIAMO

Fig. 8 - La diversa incidenza degli interventi chirurgici fra i medici e i loro familiari rispetto a quella di tutta la popolazione

200
150
100
50
0

146
92
119
158
153
183
184

Tonsillectomia
Appendicectomia
Raschiamento uterino
Isterectomia
Ernia inguinale
Cura emmorroidi
Colecistectomia

medici e loro familiari
totale della popolazione

VENDERE MALATTIE

CALL TO ACTION ON SELLING SICKNESS

Washington, DC

We come together as researchers, health care professionals, activists, advocates, patients, caregivers and citizens deeply troubled about the growing corruption of medical science and health care.

We demand an end to industry-promoted *disease-mongering* that manipulates health concerns and causes harm through practices that medicalise normal life and deceive professionals and the public.

Hazardous practices and distorted science harm patients, waste public resources, create illness and health anxiety, hoodwink the public, corrupt knowledge, corrode professionalism, and expose everyone to unnecessary, costly and dangerous tests and treatments.

TROPPA MEDICINA

BMJ 2013;346:f1271 doi: 10.1136/bmj.f1271 (Published 26 February 2013)

EDITORIALS

Winding back the harms of too much medicine

Registration is opening and abstracts closing soon for our "Preventing Overdiagnosis" conference

Ray Moynihan *senior research fellow*[1], Paul Glasziou *professor*[1], Steven Woloshin *professor of community and family medicine*[2], Lisa Schwartz *professor of community and family medicine*[2], John Santa *director of health ratings centre*[3], Fiona Godlee *editor, BMJ*[4]

[1]Centre for Research in Evidence-Based Practice, Faculty of Health Sciences and Medicine, Bond University, Gold Coast, QSD 4229, Australia; [2]Dartmouth Institute for Health Policy and Clinical Practice, Hanover, NH, USA; [3]Consumer Reports, New York, USA; [4]BMJ, London WC1H 9JR, UK

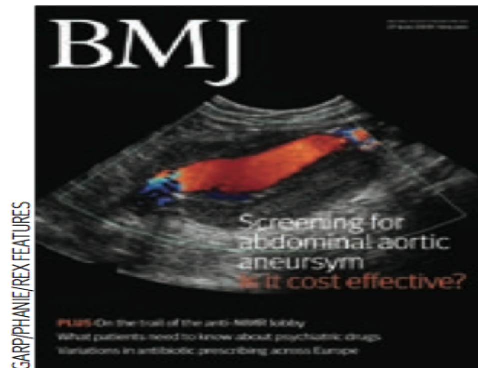
Distinguishing the sick from the healthy has always been a fundamental challenge for medicine. A chief concern has been to guard against missing disease, with the focus on problems of underdiagnosis and undertreatment. Yet with the modern technological expansion of healthcare in rich developed nations, sceptical voices have long warned of the flipside—too much medicine.[1 2] Mounting evidence about the threat to human health from overdiagnosis,[3] and the harms and waste from unnecessary tests and treatments,[4 5] now demand that we meet one of this century's key challenges: how to wind back medical excess, safely and fairly.

BMJ Helping doctors make better decisions

MENO POTREBBE ESSERE MEGLIO

EDITOR'S CHOICE

Less medicine is more



GARP/PHANIE/REX FEATURES

Editorial, p 1509
Research, pp 1538, 1542

It would be fair to say that the *BMJ* tends towards less rather than more medicine. We've published a lot over the years on the risks of overtreatment and the problems of medicalisation and disease mongering. It's not a bad default to have in times of economic hardship, although I hope we also do our bit to highlight evidence of undertreatment where it exists. In a recent letter David Oliver warned that, although ageing should not be routinely medicalised, there is a risk of "socialising" treatable problems in older people such as incontinence and falls (*BMJ* 2009;338:b1200).

With that proviso, I'm drawn to several articles this week that champion the view that less is more, and in particular that if you give patients complete and unbiased information about the likely effects of an intervention they may well say no to it. Iona Heath sets us off on this tack, writing about her decision to turn down mammography screening (p 1534). She thinks the evidence is pretty clear that the potential harms of overdiagnosis outweigh the potential benefits of an accurate early diagnosis. But she's worried that her decision is based on information that her patients can't easily find because the invitation leaflet doesn't mention harms.

BMJ

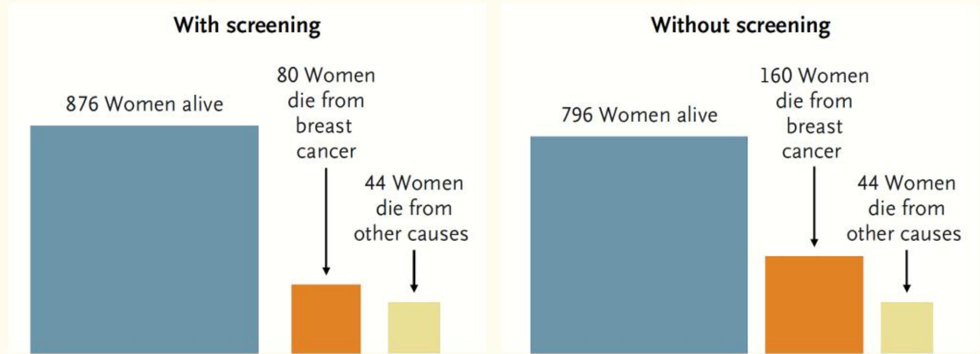
Editor's Choice

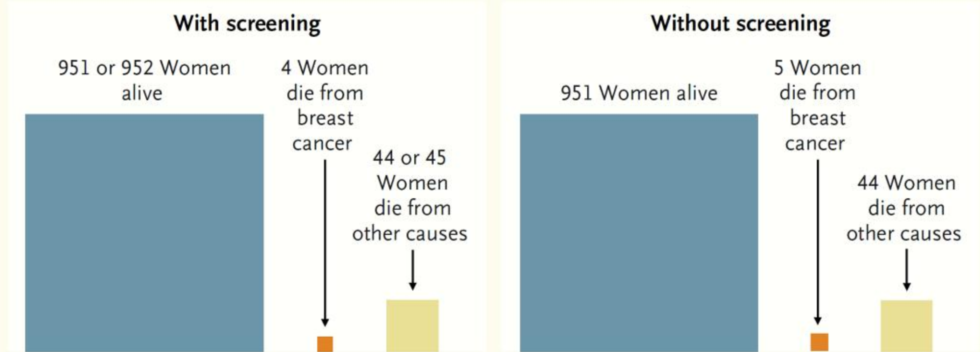
How to avoid unnecessary interventions

BMJ 2009; 339 doi: http://dx.doi.org/10.1136/bmj.b3304 (Published 13 August 2009)
Cite this as: BMJ 2009;339:b3304

Fiona Godlee, editor

"Avoiding unnecessary intervention makes sense for patients because almost all treatments and tests have the potential to do harm. It also makes sense for health care, especially in times of financial constraint"





U.S. Women's Perceptions of the Effects of Mammography Screening on Breast-Cancer Mortality as Compared with the Actual Effects.

Panel A shows the views of 50-year-old women in the United States regarding the effect of mammography every 2 years on the 10-year risk of death from breast cancer (at left), as compared with no screening (at right). The areas of the squares are proportional to the numbers of women per 1000 who would be alive (blue), die from breast cancer (orange), or die from other causes (yellow). The numbers were calculated from women's perceived relative and absolute risk reductions for breast-cancer deaths (Domenighetti et al.[4]) and U.S. mortality statistics for 2008 from the Centers for Disease Control and Prevention. Panel B shows the actual effect of mammography screening on breast-cancer deaths, with numbers calculated from breast-cancer mortality data for 2008 from the National Cancer Institute and U.S. mortality statistics for 2008, assuming a relative risk reduction of 20% for breast-cancer mortality in women invited to undergo screening (Independent U.K. Panel[2]).

N Engl J Med April 16, 2014 DOI: 10.1056/NEJMp1401875

SCREENING MAMMOGRAFICO

It is easy to promote mammography screening if the majority of women believe that it prevents or reduces the risk of getting breast cancer and saves many lives through early detection of aggressive tumors. We would be in favor of mammography screening if these beliefs were valid.

Unfortunately, they are not, and we believe that women need to be told so.

Abolishing Mammography Screening Programs? A View from the Swiss Medical Board

Nikola Biller-Andorno, M.D., Ph.D., and Peter Jüni, M.D.

The NEW ENGLAND JOURNAL of MEDICINE

TROPPA SPESA:
I TAGLI ORIZZONTALI

Here is a better idea: cut waste. That is a basic strategy for survival in most industries today, ie, to keep processes, products, and services that actually help customers and systematically remove the elements of work that do not.

ONLINE FIRST

Eliminating Waste in US Health Care

Donald M. Berwick, MD, MPP
Andrew D. Hackbarth, MPhil

TROPPA SPESA IMPRODUTTIVA

ONLINE FIRST

Eliminating Waste in US Health Care

Donald M. Berwick, MD, MPP
Andrew D. Hackbarth, MPhil

The need is urgent to bring US health care costs into a sustainable range for both public and private payers. Commonly, programs to contain costs use cuts, such as reductions in payment levels, benefit structures, and eligibility. A less harmful strategy would reduce waste, not value-added care. The opportunity is immense. In just 6 categories of waste—overtreatment, failures of care coordination, failures in execution of care processes, administrative complexity, pricing failures, and fraud and abuse—the sum of the lowest available estimates exceeds 20% of total health care expenditures. The actual total may be far greater. The savings potentially achievable from systematic, comprehensive, and cooperative pursuit of even a fractional reduction in waste are far higher than from more direct and blunter cuts in care and coverage. The potential economic dislocations, however, are severe and require mitigation through careful transition strategies.

JAMA. 2012;307(14):1513-1516
Published online March 14, 2012. doi:10.1001/jama.2012.362

JAMA®
The Journal of the American Medical Association

www.jama.com

LA RIDUZIONE SENSATA DELLA SPESA

1. **Failures of Care Delivery:** the waste that comes with poor execution or lack of widespread adoption of known best care processes
2. **Failures of Care Coordination:** the waste that comes when patients fall through the slats in fragmented care
3. **Overtreatment:** the waste that comes from subjecting patients to care that, according to sound science and the patients'own preferences, cannot possibly help them
4. **Administrative Complexity:** the waste that comes when government, accreditation agencies, payers, and others create inefficient or misguided rules.
5. **Pricing Failures:** the waste that comes as prices migrate far from those expected in well-functioning markets, that is, the actual costs of production plus a fair profit.
6. **Fraud and Abuse**

ONLINE FIRST

Eliminating Waste in US Health Care

Donald M. Berwick, MD, MPP
Andrew D. Hackbarth, MPhil

Choosing Wisely®

An initiative of the ABIM Foundation

American College of Cardiology

AMERICAN COLLEGE *of* CARDIOLOGY

Five Things Physicians and Patients Should Question

EBM

About

Choosing Wisely® aims to promote conversations between physicians and patients by helping patients choose care that is:

- Supported by evidence
- Not duplicative of other tests or procedures already received
- Free from harm
- Truly necessary

1 **Don't perform stress cardiac imaging or advanced non-invasive imaging in the initial evaluation of patients without cardiac symptoms unless high-risk markers are present.**

Asymptomatic, low-risk patients account for up to 45 percent of unnecessary "screening." Testing should be performed only when the following findings are present: diabetes in patients older than 40-years-old; peripheral arterial disease; or greater than 2 percent yearly risk for coronary heart disease events.

2 **Don't perform annual stress cardiac imaging or advanced non-invasive imaging as part of routine follow-up in asymptomatic patients.**

Performing stress cardiac imaging or advanced non-invasive imaging in patients without symptoms on a serial or scheduled pattern (e.g., every one to two years or at a heart procedure anniversary) rarely results in any meaningful change in patient management. This practice may, in fact, lead to unnecessary invasive procedures and excess radiation exposure without any proven impact on patients' outcomes. An exception to this rule would be for patients more than five years after a bypass operation.

3 **Don't perform stress cardiac imaging or advanced non-invasive imaging as a pre-operative assessment in patients scheduled to undergo low-risk non-cardiac surgery.**

Non-invasive testing is not useful for patients undergoing low-risk non-cardiac surgery (e.g., cataract removal). These types of tests do not change the patient's clinical management or outcomes and will result in increased costs.

4 **Don't perform echocardiography as routine follow-up for mild, asymptomatic native valve disease in adult patients with no change in signs or symptoms.**

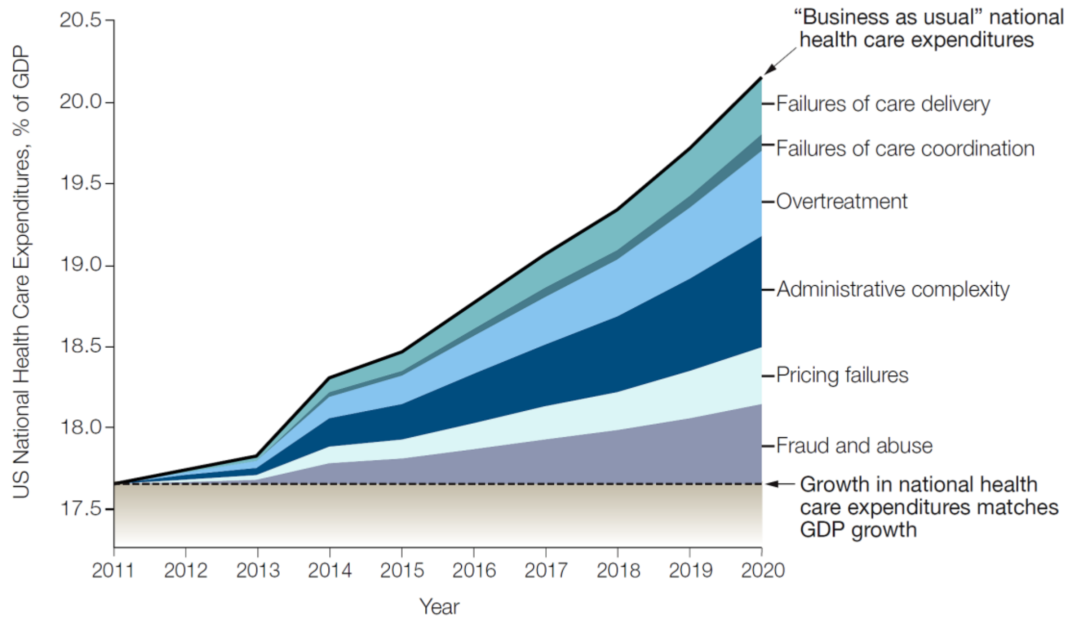
Patients with native valve disease usually have years without symptoms before the onset of deterioration. An echocardiogram is not recommended yearly unless there is a change in clinical status.

5 **Don't perform stenting of non-culprit lesions during percutaneous coronary intervention (PCI) for uncomplicated hemodynamically stable ST-segment elevation myocardial infarction (STEMI).**

Stent placement in a noninfarct artery during primary PCI for STEMI in a hemodynamically stable patient may lead to increased mortality and complications. While potentially beneficial in patients with hemodynamic compromise, intervention beyond the culprit lesion during primary PCI has not demonstrated benefit in clinical trials to date.

LA RIDUZIONE SENSATA DELLA SPESA

Figure. Proposed "Wedges" Model for US Health Care, With Theoretical Spending Reduction Targets for 6 Categories of Waste



The "wedges" model for US health care follows the approach based on the model by Pacala and Socolow.[9] The solid black "business as usual" line depicts a current projection of health care spending, which is estimated to grow faster than the gross domestic product (GDP), increasing the percentage of GDP spent on health care; the dashed line depicts a more sustainable level of health care spending growth that matches GDP growth, fixing the percentage of GDP spent on health care at 2011 levels. Between these lines lies the "stabilization triangle"—the reduction in national health care expenditures needed to close the gap. The 6 colored regions filling the triangle show one possible set of spending reduction targets; each region represents health care expenditures as a percentage of GDP that could be eliminated by reduction of spending in that waste category over time.

ONLINE FIRST

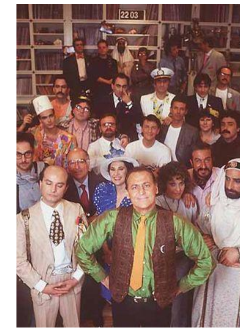
Eliminating Waste in US Health Care

Donald M. Berwick, MD, MPP
Andrew D. Hackbarth, MPhil

COME NON ESSERE D'ACCORDO?

- **È molto meglio essere giovani, belli, ricchi e in buona salute, piuttosto che essere vecchi, brutti, poveri e malati**

  M. Catalano. "Quelli della notte" di Renzo Arbore. Ed RAI



- **Commonly, programs to contain costs use cuts, such as reductions in payment levels, benefit structures, and eligibility. A less harmful strategy would reduce waste, not value-added care**

  Berwick DM, Hackbarth AD JAMA. 2012;307(14):1513-1516

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TAGLI ALLA SANITA': COMUNQUE IMPOPOLARI

- **Cost cutting as a justification for reducing the use of medical services is met with suspicion by many people who equate reducing the volume of care to rationing. Rationing implies that the care being withheld is beneficial and is being withheld simply to save money.**

EDITORIAL

LESS IS MORE

Less Is More

How Less Health Care Can Result in Better Health

BASTA TAGLI ALLA SALUTE

TAGLI ALLA SANITA’: COMUNQUE IMPOPOLARI

- **There are many reasons why clinicians in the United States may provide more care than is needed. These include payment systems that reward procedures disproportionately compared with talking to patients, expectations of patients who equate testing and interventions with better care, the glamour of technology, the fact that it may be quicker to order a test or write a prescription than explain to a patient why they are not being treated, and of course, defensive medicine. Another reason is “technology creep.” After a device is approved for use with a high-risk population in which there is a proven benefit, its use often expands to lower-risk groups**

EDITORIAL

Less Is More

Less Is More

How Less Health Care Can Result in Better Health

CAMBIARE E' DIFFICILE

THIS WEEK

EDITOR'S CHOICE

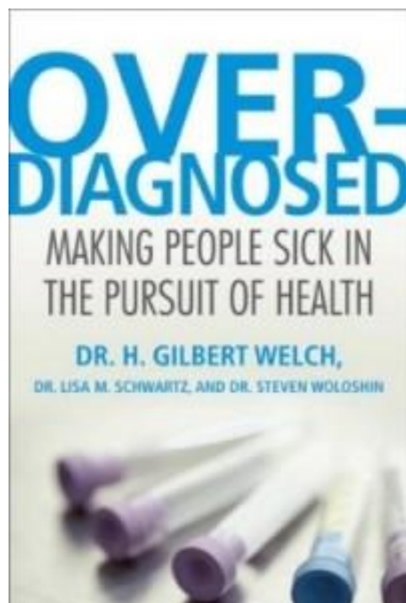
How to avoid unnecessary interventions

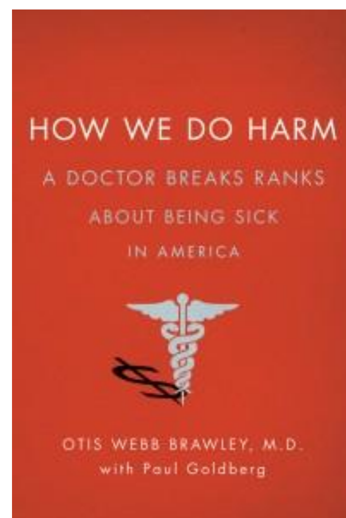
Taryn Bessen and colleagues sought to increase use of the Ottawa ankle rules in two hospitals in Adelaide. They put in place several quality improvement measures, including interviewing staff, identifying champions and opinion leaders, and introducing a new x ray request form (p 396). Their before and after study showed a substantial increase in the use of the rules but only a modest fall in rates of radiography. It turns out that eliminating an established behaviour is far harder than adding a new one.

IT'S A LONG WAY

PER CHI HA VOGLIA DI LEGGERE....

KEEP
CALM
BECAUSE
LESS IS MORE





ECOCARDIOCHIRURGIA 2014

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GRAZIE PER L'ATTENZIONE

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