## "APPROPRIATEZZA O ADEGUATEZZA?







# Sovradiagnosi e Sovratrattamento

Raffaele Landolfi

Fondazione Policlinico Universitario Agostino Gemelli IRCCS Università Cattolica del Sacro Cuore



#### Relazioni con soggetti portatori di interessi commerciali in campo sanitario

- Ai sensi dell' art. 3.3 sul Conflitto di Interessi, pag. 17 del Regolamento Applicativo dell' Accordo Stato-Regione del 5 novembre 2009, dichiaro che negli ultimi due anni ho avuto i seguenti rapporti anche di finanziamento con soggetti portatori di interessi commerciali in campo sanitario:
  - BMS
  - BOEHRINGER INGELHEIM
  - PFIZER
  - SANOFI

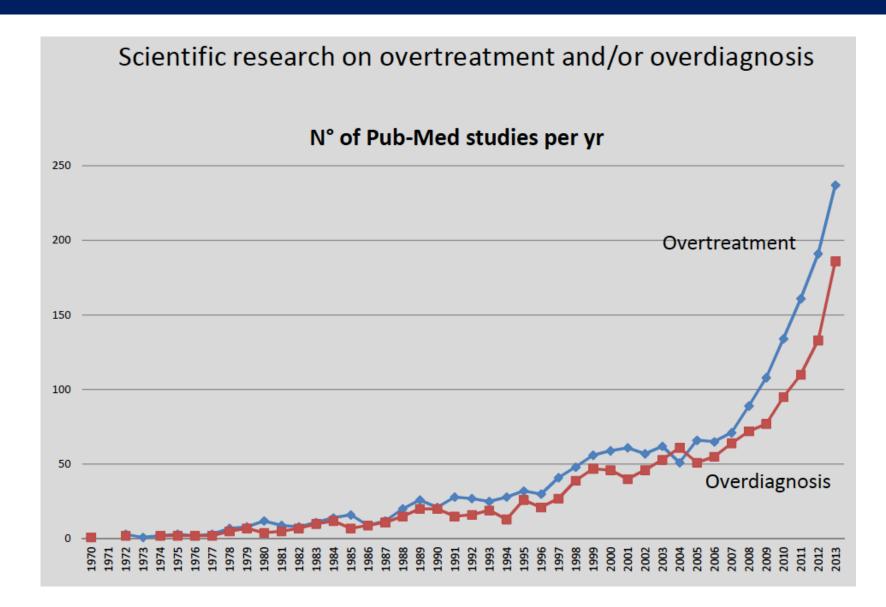


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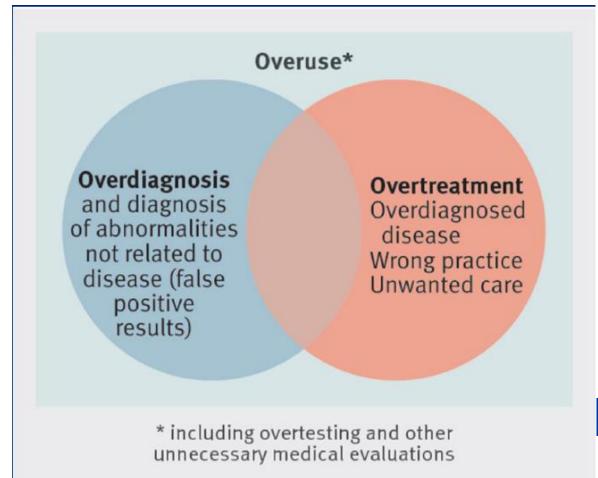






#### Setting a research agenda for medical overuse

Although overuse in medicine is gaining increased attention, many questions remain unanswered. **Dan Morgan and colleagues** propose an agenda for coordinated research to improve our understanding of the problem



BMJ. 2015;351:h4534

#### **ONLINE FIRST**

#### Eliminating Waste in US Health Care

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

JAMA. 2012;307(14):doi:10.1001/jama.2012.362

Categoria sprechi	%	Mld*	(± 20%)
1. Sovra-utilizzo	30	7,69	(6,15 – 9.23)
2. Frodi e abusi	20	5,13	(4,10-6.15)
3. Acquisti a costi eccessivi	16	4,10	(3,28-4.92)
4. Sotto-utilizzo	12	3,08	(2,46-3,69)
5. Complessità amministrative	12	3,08	(2,46-3,69)
6. Inadeguato coordinamento assistenza	10	2,56	(2,05-3.08)



#### Why does Overdiagnosis matter



BMJ 2013;347:f4247 doi: 10.1136/bmj.f4247 (Published 2 July 2013)

Page 1 of 2

#### Too much medicine; too little care

Time to wind back the harms of overdiagnosis and overtreatment

Paul Glasziou *professor* <sup>1</sup>, Ray Moynihan *senior research fellow* <sup>1</sup>, Tessa Richards *analysis editor* <sup>2</sup>, Fiona Godlee *editor in chief* <sup>2</sup>

<sup>1</sup>Bond University, Robina, QLD 4226, Australia; <sup>2</sup>BMJ, London WC1H 9JR, UK

Too much testing of well people and not enough care for the sick worsens health inequalities and drains professionalism, <u>harming both</u> those who need treatment and those who don't."

Margaret McCartney, GP Glasgow, Author of "The Patient Paradox".



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#### The Problem with The Problem

- Overuse
- Overdiagnosis
- Overtesting
- Overtreatment
- Medicalization
- Disease-mongering
- Iatrogenesis
- Making sick from well
   Pseudodisease
- Too much medicine
- Inappropriateness

- Iatrogenesis
- Overutilization
- False positives
- Misdiagnosis
- Overdetection
- Futility
- Waste
- Incidentalomas
- etc.

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#### Transformation of Philosophy



- The old days: "You are healthy until proven otherwise."
- The modern era: "You are sick until proven otherwise."

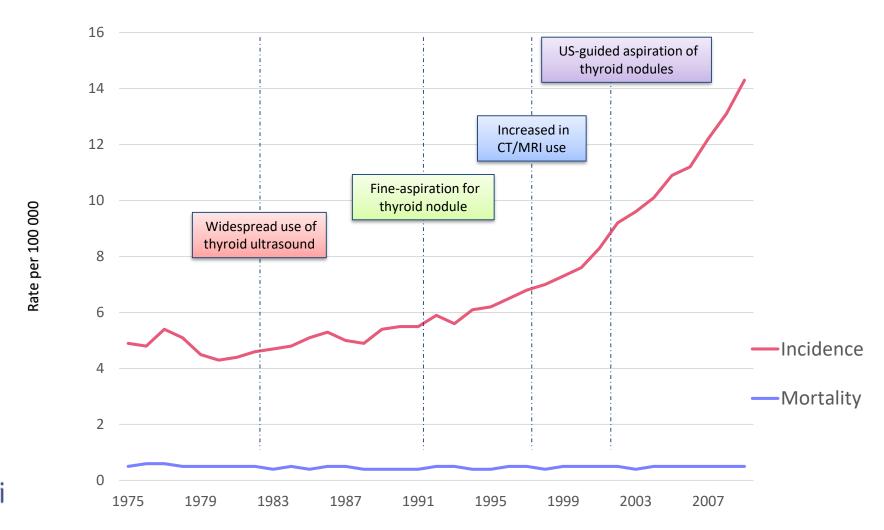
Adapted from E. Diamondis & M. Li, Clin Chem Lab Med 2016;54(3):389-396



Aug 27, 2013

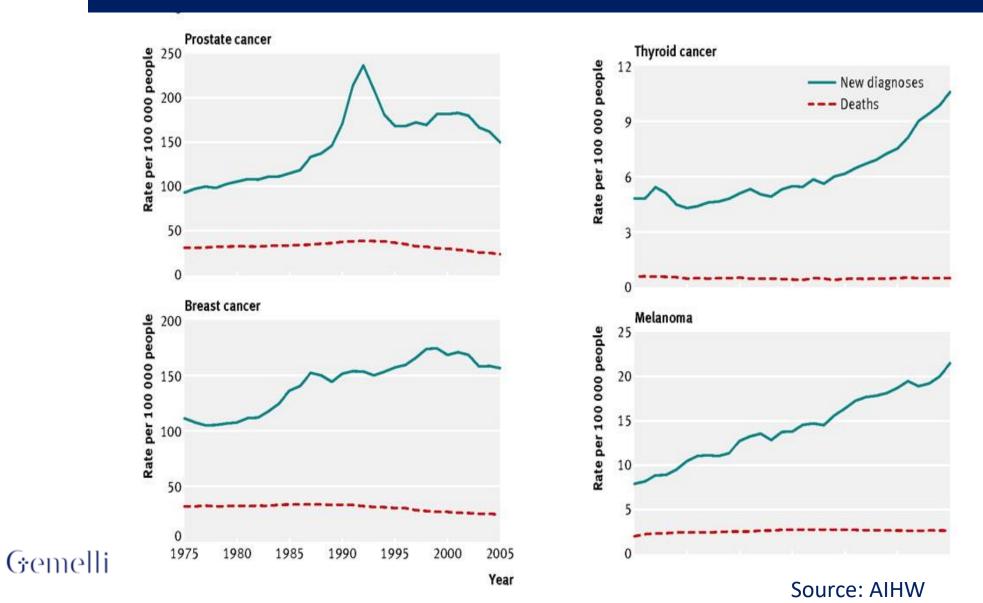
## Thyroid cancer: zealous imaging has increased detection and treatment of low risk tumours

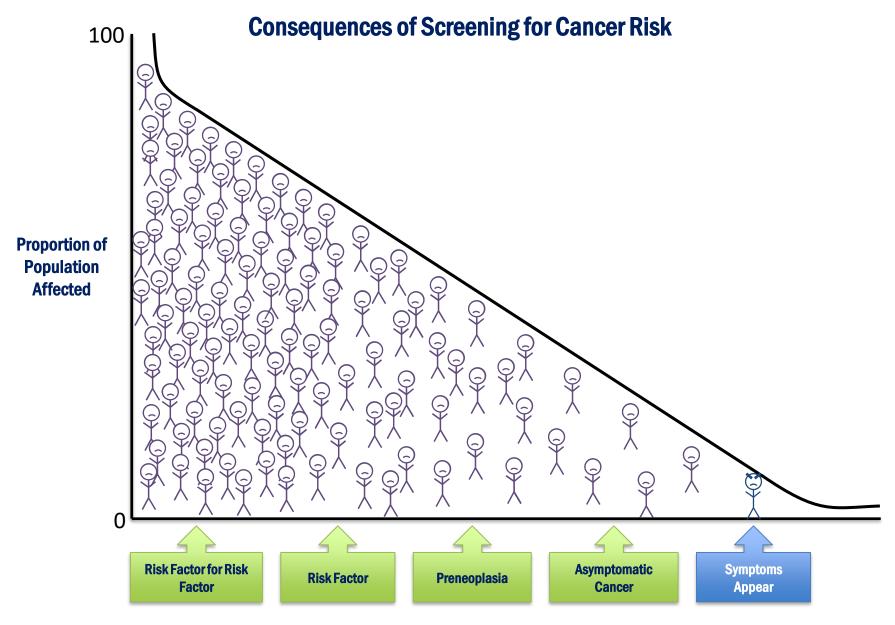
Incidence and mortality of thyroid cancer in the US, 1975-2009 and advent of new technology





#### An epidemic of diagnosis, not an epidemic of cancer!

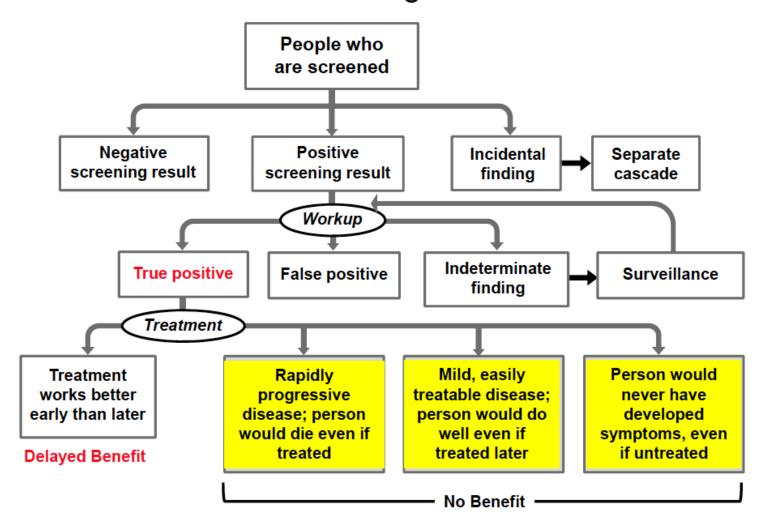






**Risk of Having/Getting Cancer** 

#### The Screening Cascade



Gemelli

#### PROSTATE SCREENING IN MEN

IF THERE WAS A PSA PROSTATE CANCER SCREENING PROGRAMME

Of 1,000 men aged 45-80, without any symptoms...

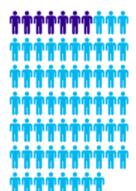




#### WITHOUT SCREENING

will be diagnosed with prostate cancer

- 7 will die of prostate cancer
- 61 will be treated and survive their cancer



88

will be diagnosed with prostate cancer

- 7 will die of prostate cancer
- 81 will be treated and survive their cancer
- 20 of the 81 will be overdiagnosed. These are cancers that
- wouldn't have caused any harm.\* -
- () lives will be saved due to screening



**DUE TO SCREENING** 

No lives will be saved and around 20 men will be diagnosed with cancers that would not have caused them any harm.

Reference: Screening for Prostate Cancer (Review), The Cochrane Library 2013

cruk.org

Gemelli

NATIONAL CANCER INSTITUTE

\*It is not possible to tell who these men are. They may go through unnecessary treatment, worry and potential complications such as infections, sexual dysfunction and bladder and bowel control problems.





Table 2   Estimated proportions of cancers that represent overdiagnosis*			
Disease	Context	Range of estimates	
Breast cancer	Population based screening with mammography	1-10% (Europe) <sup>22</sup> 12.4% (Canada, age 40-49) <sup>58</sup> 9.7% (Canada, age 50-70)	
Prostate cancer	Screening with PSA	2.9-88.1% based on age and characteristics <sup>59</sup>	
Lung cancer	Screening high risk patients with LDCT	11.9% (US) <sup>60</sup>	
Thyroid cancer	Spread of imaging	49% (men across developed countries) 83% (women across developed countries) <sup>36</sup>	
*LDCT=low dose computed tomography; PSA=prostate specific antigen.			



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#### Too much testing



"A normal person is someone who has not had enough tests" Dean at John Hopkins Medical School

#### Too much technology

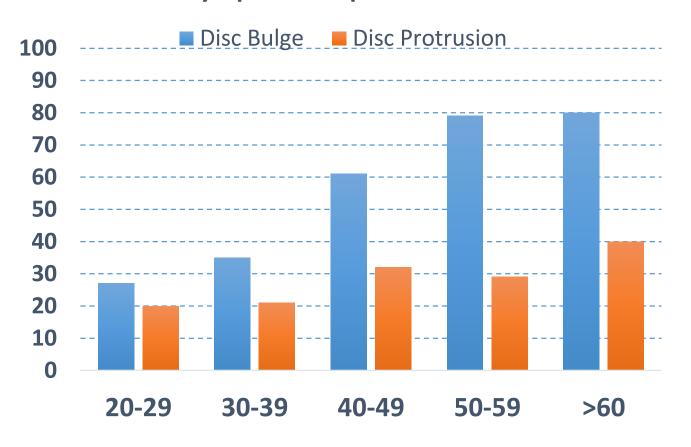
Our abilities to produce and use technologies appear to outrun our abilities to reflect on their application. To avoid becoming technological titans and ethical Lilliputians, **Bjørn Morten Hofmann** argues we need a more reflective and responsible implementation of health technology

- "nuovo è meglio di vecchio"
- "complesso è meglio di semplice"
- "molto è meglio di poco"
- "sapere è meglio di non sapere"
- "una diagnosi precoce è meglio di una tardiva"



#### Incidentalomas in MRI of spine

#### % of asymptomatic patients with MRI



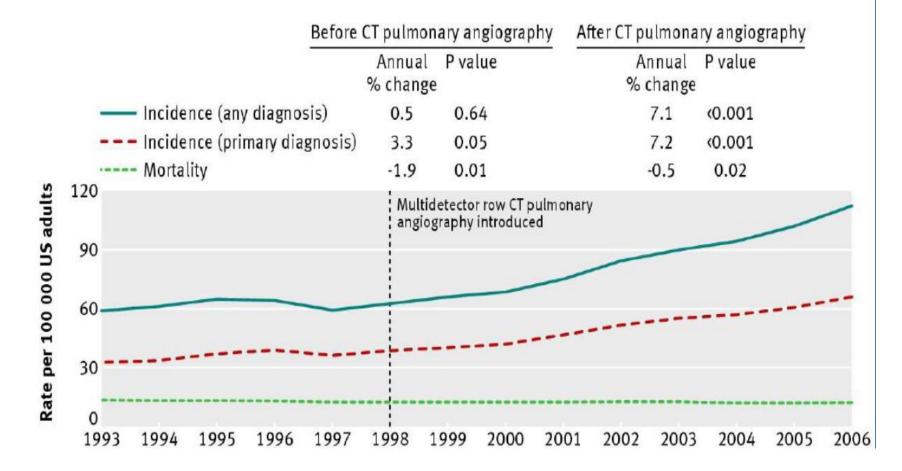


Disc protrusion in 24 year old with no back pain



# When a test is too good: how CT pulmonary angiograms find pulmonary emboli that do not need to be found

Incidence, mortality, and case fatality of pulmonary embolism in United States, 1993-2006





#### ONLINE FIRST | LESS IS MORE

## The Diagnosis and Treatment of Pulmonary Embolism

A Metaphor for Medicine in the Evidence-Based Medicine Era

• The fact that death rates remain stable whereas incidence has nearly doubled suggests that nearly half of the pts. diagnosed as having PE experience only the risks of therapy without the benefit



American College of Chest Physicians & American Thoracic Society, 2013

Five Things Physicians and Patients Should Question

Don't perform chest computed tomography (CT angiography) to evaluate for possible pulmonary embolism in patients with a low clinical probability and negative results of a highly sensitive D-dimer assay.

Clinical practice guidelines for pulmonary embolism indicate that the cost and potential harms of CT angiography (including radiation exposure and the possibility of detecting and treating clinically insignificant pulmonary emboli with anticoagulation) outweigh the benefits for patients with a low pre-test probability of pulmonary embolism. In patients with a low clinical prediction score (e.g., Wells or Geneva score) followed by a negative D-dimer measured with a high sensitivity test (e.g., ELISA), pulmonary embolism is effectively excluded and no further imaging is indicated for pulmonary embolism evaluation.



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# Expanding Disease Definitions in Guidelines and Expert Panel Ties to Industry: A Cross-sectional Study of Common Conditions in the United States

#### **CONCLUSION:**

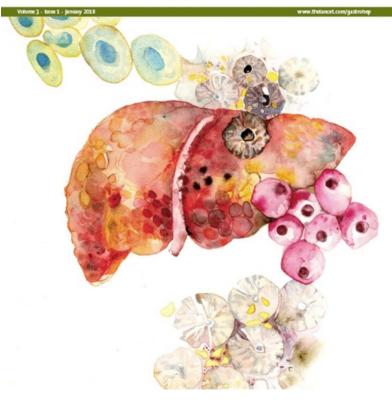
"research and policy attention might be directed at designing new processes for reviewing disease definitions, free of financial conflicts of interest and informed by rigorous analysis of benefits and harms."

thresholds; (iii) earlier or new diagnostic methods.

- None had rigorous assessment of potential harms of proposed changes.
- The average proportion of members with industry ties was 75%; 12/16 chairs had ties.



### THE LANCET Gastroenterology & Hepatology



January, 2018



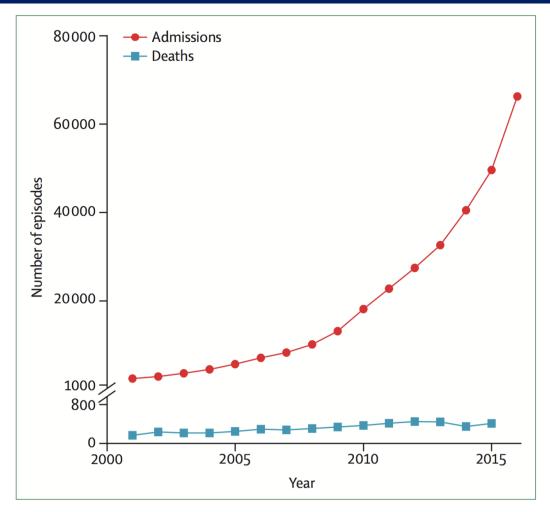


Figure 2: Numbers of hospital admissions and deaths attributed to non-alcoholic fatty liver disease in England

Hospital admission episodes were extracted from NHS Digital reports<sup>50</sup> and deaths were extracted from the Office for National Statistics reports.<sup>51</sup>



## COMMENT

# The devotion to surrogate outcomes in drug development for liver disease

Ian A. Rowe

Surrogate end points are often used in clinical trials where the time to clinical outcomes is long. In patients with liver disease, these surrogate outcomes are rarely validated. Without validation, treatment effects reported in trials might not directly translate to patient benefit after licensing.





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#### Medicalization



Then you might have "Body Dysmorphic Disorder by Proxy"



#### Le emozioni diventano malattie – Disturbo di ansia generalizzato

- Primavera 2001, TV locali USA: 10 milioni soffrono di una malattia nuova e sconosciuta. Attenzione ai sintomi: irrequietezza, stanchezza, irritabilità, tensione muscolare, nausea, diarrea, sudorazione. Secondo i rapporti, lascia chi ne soffre paralizzato da paure irrazionali
- Testimonial: paziente guarita dopo 2 anni di clausura e noto psichiatra della Columbia University
- GAD: contenitore psichiatrico multiuso
- 16/4/2001 FDA approva paroxetina per GAD



#### Epidemiologia creativa

Disordine da stress post-traumatico

Disordine da shopping compulsivo

Sindrome premestruale

Mild cognitive impairment

Iperattività e deficit di attenzione

Sindrome delle gambe senza riposo

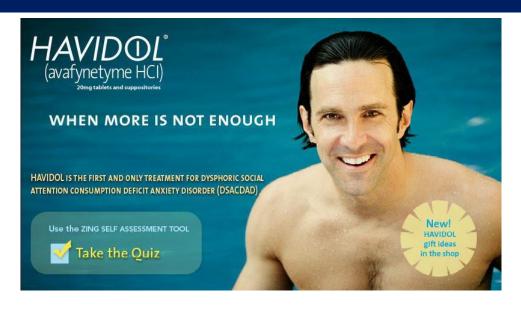
Disturbo bipolare

Vescica iperattiva

Disfunzione sessuale femminile

Non è difficile associare a queste entità cliniche i farmaci proposti per il trattamento. Si tratta di patologie costruite attorno a farmaci già disponibili ed in cerca di un mercato.





- Preoccupazioni, stanchezza, stato di tensione, mancanza di riposo, stress sul posto di lavoro e a casa, scarso interesse per attività una volta apprezzate.
- "Non è la vita è la DSACDAD"
- Sindrome disforica con disordini ansiosi da deficit di attenzione



#### **LASTAMPA**it

26/3/2007 (10:35)

#### Viagra per le donne

A partire da questa settimana sugli scaffali delle farmacie inglesi apparirà la prima versione per donne del Viagra. Al contrario della famosa pillola blu per uomini, il medicinale, un cerotto chiamato «Intrinsa», non ha effetti meccanici sul fisico femminile ma contiene un ormone che stimola le fantasie erotiche. Secondo gli esperti questo nuovo afrodisiaco aumenta del 74% la «probabilità di avere un'attività soddisfacente». sessuale

#### Pillola anti sonno

Quarantott'ore di non-sonno filate. E senza neanche sentirsi un po' stanchi. Si può. Artificialmente certo. Ma è possibile. Un sogno per chi considera il dormire uno spreco di tempo, la soluzione ideale per chi vorrebbe una giornata lunghissima, senza fine. Basta una pillola. Si chiama modafinil ed è capace di dimezzare il bisogno di sonno.





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"The economics book of the year."

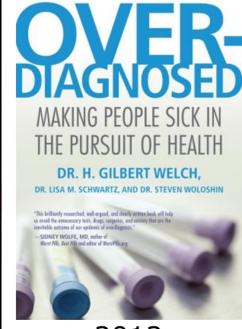
—David Leonhardt, *The New York Times* 

## Overtreated

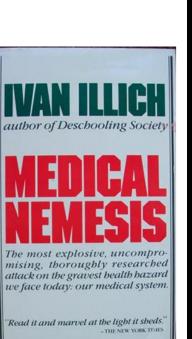
WHY TOO MUCH MEDICINE
IS MAKING US
SICKER AND POORER



WITH
A NEW
AFTERWORD
BY THE
AUTHOR



2012



1976

Gemelli

SHANNON BROWNLEE



#### **Too Young to Die, Too Old to Worry**

SEPT. 20, 2014

Physicians are warned by pharmaceutical companies that even after they have prescribed drugs to reduce their patients' risk of heart disease, a "residual risk" remains — more drugs are often prescribed.

"Why doesn't Medicare pay us all to have dinner and two glasses of wine once a week with friends?" What he was getting at is that we desire not simply to pursue life, but happiness, and that medicine is important, but it's not the only means to this happiness.

Jason Karlawish is a <u>professor of medicine</u>, <u>medical ethics and health policy at the University of Pennsylvania</u>.



Circulation. 2017;135:1617–1628.

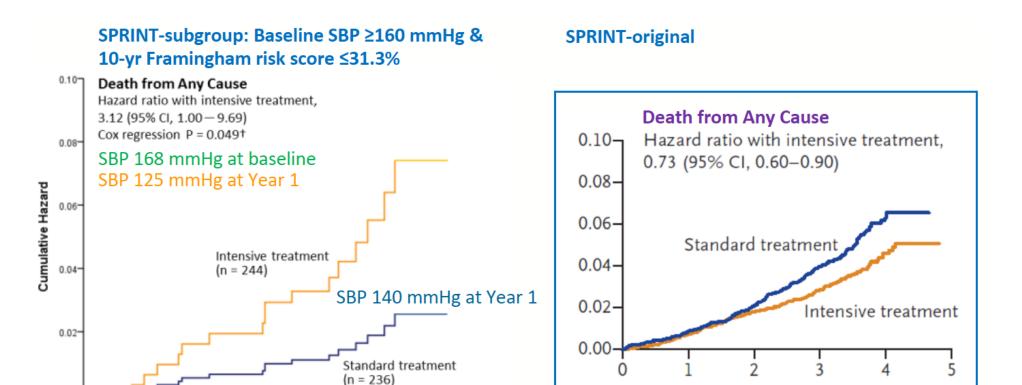
## Potential Deaths Averted and Serious Adverse Events Incurred From Adoption of the SPRINT (Systolic Blood Pressure Intervention Trial) Intensive Blood Pressure Regimen in the United States

**Projections From NHANES (National Health and Nutrition Examination Survey)** 

#### What Is New?

 In this population-based study, if fully implemented in eligible US adults, intensive blood pressure treatment was projected to prevent ≈107500 deaths per year and give rise to ≈56100 episodes of hypotension, 34400 episodes of syncope, 43400 serious electrolyte disorders, and 88700 cases of acute kidney injury per year compared with standard blood pressure treatment.





Years

- Among the SPRINT participants with a baseline systolic BP of ≥160 mmHg and a lower 10-year Framingham risk score (≤31.3%, median), targeting a systolic BP of <120 mmHg
  compared with <140 mmHg resulted in an approximate 3-fold risk of death from any
  cause</li>

  Seeing the devil in the details!
- Despite of the hypothesis-generating nature, it seems prudent to recommend targeting an SBP of <140 mmHg rather than <120 mmHg in patients with stage 2 hypertension and a 10-year Framingham risk score of ≤30% (close to 31.3%)

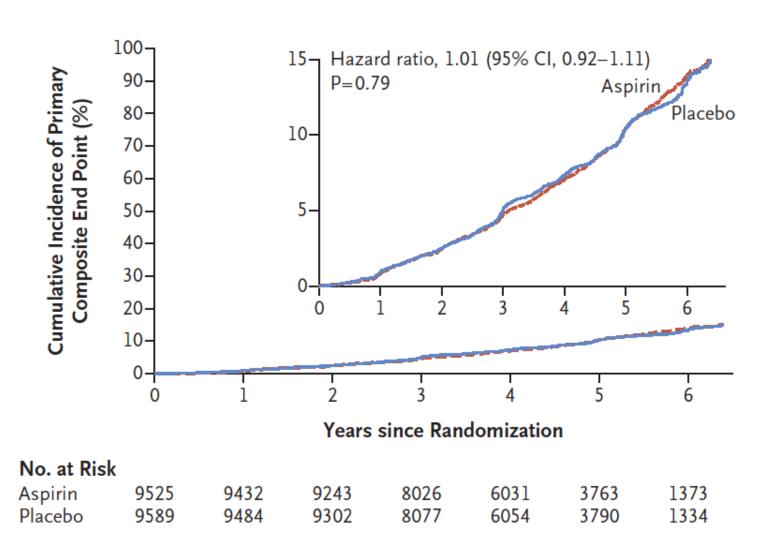


#### The NEW ENGLAND JOURNAL of MEDICINE

Effect of Aspirin on Disability-free Survival in the Healthy Elderly

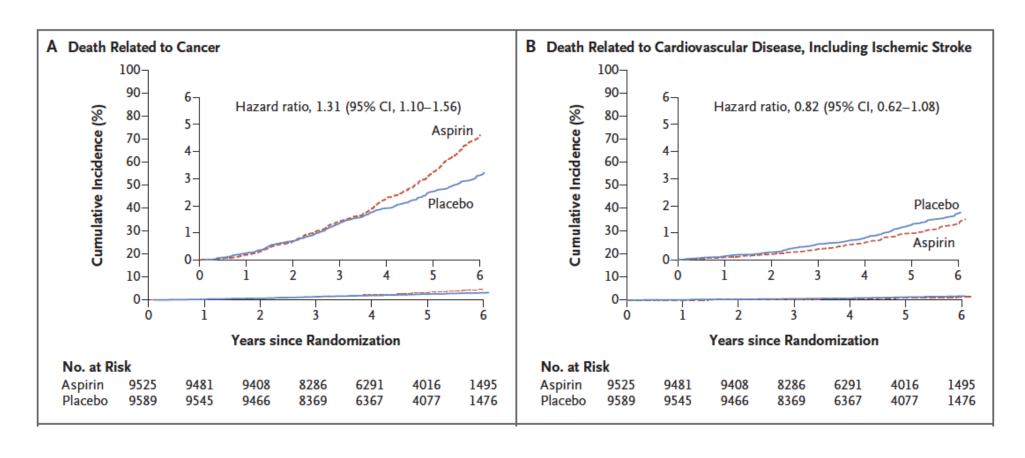
September 18, 2018

Gemelli



#### The NEW ENGLAND JOURNAL of MEDICINE

Effect of Aspirin on All-Cause Mortality September 18, 2018 in the Healthy Elderly



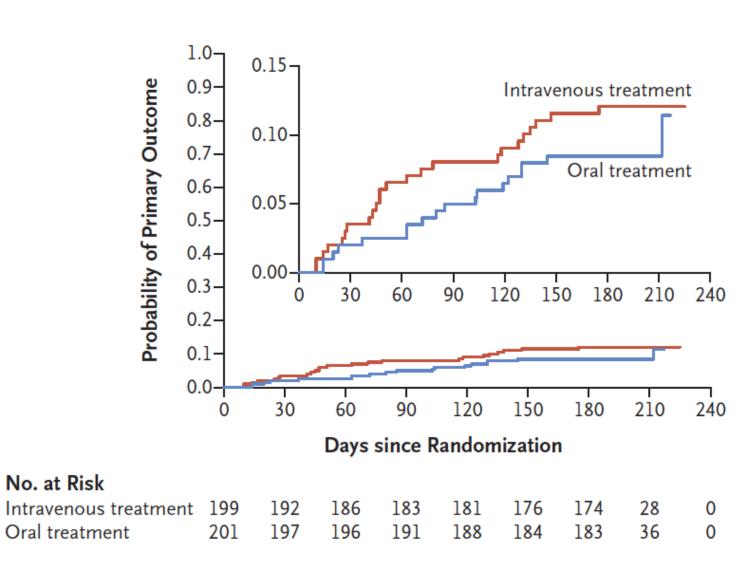


### The NEW ENGLAND JOURNAL of MEDICINE

# August 28, 2018

# Partial Oral versus Intravenous Antibiotic Treatment of Endocarditis

17 days after the start of treatment. The inset shows the same data on an months after antibiotic treatment shifted from intravenously ad ministered antibiotics to orally administered antibiotics at a median of from randomization until pathogen,





## Antibiotics for Sepsis–Finding the Equilibrium

JAMA September 14, 2018

possible sepsis. Until then, studies that have documented high rates of sepsis overdiagnosis and the possibility that overtreatment may increase mortality rates compel caution. <sup>2-5</sup> Titrating the timing and

The time has come to balance the recommendation for early and aggressive antibiotics for all patients with possible sepsis with the diagnostic uncertainty regarding sepsis and the possible harm associated with unnecessary antibiotics.



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"The problem is that you're overmedicated. Luckily there are drugs that can help with that."

#### Asma grave

Si definisce **ASMA GRAVE**, l'asma che nell'anno precedente ha richiesto, secondo le linee guida GINA, alti livelli di trattamento (LABA/ICS ad alti dosaggi o leucotrieni/teofillina) o, per la metà o più del tempo nell'anno precedente, è stata effettuata terapia con corticosteroidi orali per evitare che l'asma diventi o rimanga "non controllata" nonostante la terapia

Chung KF, Wenzel SE, Brozek JL, Bush A, Castro M, Sterk PJ, Adcock IM, Bateman ED, Bel EH, Bleecker ER, Boulet LP, Brightling C, Chanez P, Dahlen SE, Djukanovic R, Frey U, Gaga M, Gibson P, Hamid Q, Jajour NN, Mauad T, Sorkness RL, Teague WG.

International ERS/ATS Guidelines on Definition, Evaluation and Treatment of Severe Asthma. Eur Respir J 2014;43:343-73

FitzGerald JM, Lemiere C, Lougheed MD, Ducharme FM, Dell SD, Ramsey C, Yang MCL, Côté A, Watson W, Olivenstein R, Van Dam A, Villa-Roel C, Grad R.

Recognition and management of severe asthma: A Canadian Thoracic Society position statement, Canadian Journal of Respiratory, Critical Care, and Sleep Medicine 2017;1(4):199-221



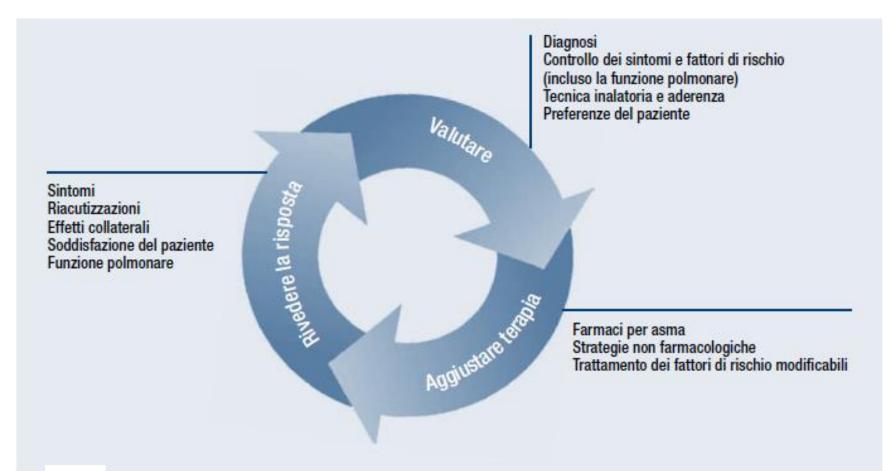








### Terapia





Box 3-2. II ciclo della gestione dell'asma basata sul controllo



#### Asma grave

- 50% della spesa sanitaria legata all'assistenza dei pazienti affetti da asma, in termini sia di costi diretti che indiretti, è dovuta ai pazienti con AG (World Allergy Organisation, 2005)
- Improprio uso risorse diagnostiche e mancato controllo malattia
- Mancanza di uniformità (identificazione paziente, trattamento..)
- Mancanza di coordinamento tra i professionisti coinvolti







al<sup>3</sup> identified 4 main groups of variables that interact to substantial potential to improve care and reduce costs<sup>4</sup> influence the adoption of innovations (Figure): the exter-

A Framework Drawn From Implementation Science complex because they engage diverse individuals from The emerging field of implementation science focuses on different organizational levels and sometimes beyond. understanding how change takes place. Damschroder et Existing evidence suggests that such innovations have



## The patient is the **most undervalued resource** as well as the most crucial one for gaining effective and sustainable healthcare outcomes!

The NEW ENGLAND JOURNAL of MEDICINE

#### **Building the Path to Accountable Care**

Elliott S. Fisher, M.D., M.P.H., Mark B. McClellan, M.D., Ph.D., and Dana G. Safran, Sc.D.

ARCHIVE | TOPICS BLOGS **Patient Engagement: Four Case Studies That Highlight The Potential For Improved Health Outcomes And Reduced** Jeremy Laurance<sup>1,\*</sup>, Sarah Henderson<sup>2</sup>, Peter J. Howitt<sup>3</sup>, Mariam Matar<sup>4</sup>, Hanan Al Kuwari<sup>5</sup>, Susan Edgman-Levitan<sup>6</sup> and Ara Darzi<sup>7</sup> + Author Affiliations →\*Corresponding author



PATIENT ENGAGEMENT: A potential answer to improve healthcare



BMJ 2017;356:j816 doi: 10.1136/bmj.j816 (Published 2017 February 20)

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#### **EDITORIALS**

VALUE BASED
HEALTHCARE:
but what is
value for
patients?



#### Measuring what matters to patients

OECD Health ministers commit to patient reported measures of performance

#### Angela Coulter

Nuffield department of population health, University of Oxford, Oxford OX3 7LF

We need to invest in measures that will help us assess whether our health systems deliver what matters most to people. So said the health ministers from various Organisation for Economic Co-operation and Development (OECD) countries at a recent meeting in Paris. Reliance on mortality rates and clinical indicators gives only a partial view of the value of health care, they concluded. What people really care about is its impact on their wellbeing and their ability to play an active role in society, so that's what we should be measuring. And, of course, the only way to do this is to ask patients themselves.

appropriate instruments; identifying suitable sampling frames; controlling the quality of data collection; avoiding response bias; and minimising survey fatigue.

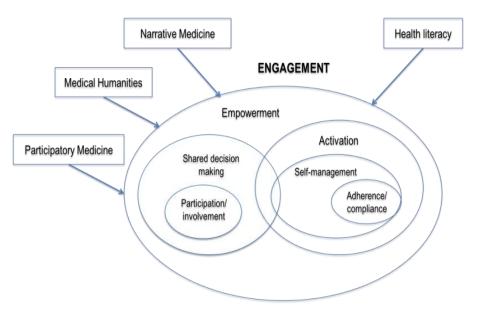
If we are to focus on what matters to patients then patients must be involved in determining which health outcomes to measure, yet this is surprisingly rare. A recent review of studies describing the development of 193 different PROMs found that only 21 (10.9%) of these had actually asked patients which outcomes were worth measuring.<sup>5</sup>

A particular challenge is to measure outcomes of care for people

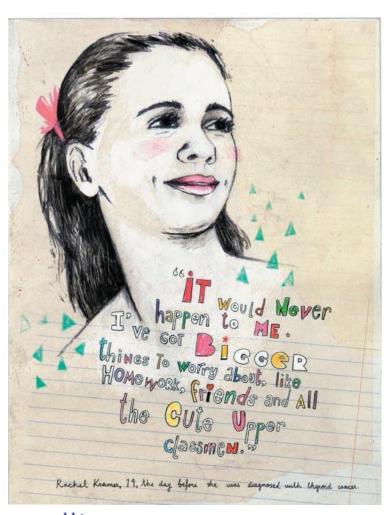


workforce capability incident menogen good governance experience Smatske Diffe Kallod PEOPLE outcomes noitevonni bns dotases,

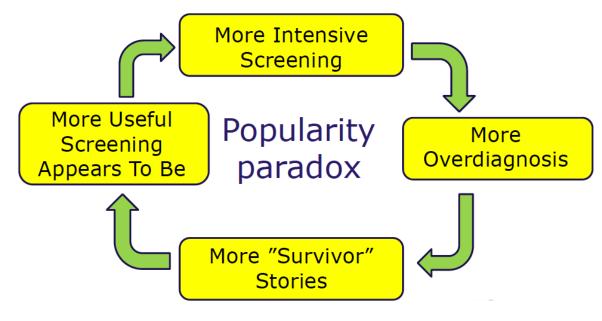
«Engagement is a complex process that results from the combination of different dimensions and individual, relational, organizational, social, economic and political factors which qualify the life context of the person»



- «Engagement may be defined as an umbrella term that qualifies the systemic relation that occurs between the demand and the supply of healthcare, at different levels and in different situation»
- If considered according to this meaning, engagement overarches the other terms more traditionally used to denote the active role of patients in their care such as patient adherence, patient compliance, patient involvement, patient participation, and patient activation



# Survivors stories drive screening towards more overdiagnosis



#### **JAMA Internal Medicine**

Review | Less Is More

ONLINE FIRST

January 09, 2017

Clinicians' Expectations of the Benefits and Harms of Treatments, Screening, and Tests

A Systematic Review

- Clinicians...
  - Rarely accurately estimate harms & benefits
  - Tend to overestimate benefits and
  - Underestimate harms
  - Face challenging wealth of evidence for interventions from hundreds of journals
  - Might fall victim to "therapeutic illusion"





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#### Family Medicine Forum (FMF), 2016, Vancouver



misuse of evidence



imbalance of power



entitlement & patient satisfaction



medicalization (+)



fear of uncertainty



fear of death and illness



fear of litigation



industry pressure, corruption



new technology



magical thinking



herd mentality

# Care Health ₽. Factors

evidence-based medicine



patient-centred care



if fully-informed consent



population health



comfort with uncertainty



strong relationships



taking time



cost awareness



professionalism & accountability



measuring quality



efficiency



safety & common sense

#### INAPPROPRIATENESS

choosing unwisely, overdiagnosis, wrong care, overtreatment, undertreatment, too much medicine



Less is More, 'Goldilocks' healthcare, choosing wisely, high-value care, #rightcare, minimally-disruptive medicine



# The Science of Choosing Wisely — Overcoming the Therapeutic Illusion

David Casarett, M.D.

N ENGL J MED 374;13 NEJM.ORG MARCH 31, 2016

Tess, physicians also overestimate the benefits of everything from interventions for back pain to cancer chemotherapy.<sup>4,5</sup> And their therapeutic illusion facilitates continued use of inappropriate tests and treatments.



# Choos Wisely





An initiative of the ABIM



MEDICINE



## Choosing wisely





a campaign to help clinicians and patients engage in conversations about unnecessary tests, treatments and procedures



#### Table 1. The Ten Points of the Federation of Associations of Hospital Doctors on Internal Medicine for a Slow Medicine.

- In the Internal Medicine complex patient with multi-morbidities you have to exercise a proactive selection of priorities, putting the various problems in order of importance with respect to their actual clinical significance
- You must not request unnecessary specialist consultations: consultations should be limited to those that are really needed according to the
  expected results of the individual case
- 3. Before requesting new tests and examinations you should check: i) if they have already been carried out previously and, if so, when; ii) what additional useful information can they give you concerning patient management; iii) what are the risks involved
- 4. You have to inform and involve the patient and his caregivers about the choices concerning care; you have to tailor the management and treatment of the patient according to his real needs, values, and preferences, as well as considering potential risks; according to the best available knowledge, you have to explain what clinical goals can be realistically pursued and which potential improper requests could be made by the patient and his family
- In the terminal patient at the end of life, please refrain from sophisticated and/or invasive procedures. Treatment choice should ensure adequate quality of life and effective pain control
- 6. At hospital admission, at discharge and at each check up/outpatient visit you have to exercise the concept of medication reconciliation. Reconciliation is the process that starts with comparing the list of drugs taken by the patient (recognition) with those that should be administered to the patient in the particular circumstances at that time. This allows you to decide the correct medication to be prescribed
- For any new treatment and for treatment-naïve patients you have to use equivalent drugs according to patients' characteristics, the disease
  and the active ingredients of the drug concerned
- On discharge from the hospital, reduce the number of prescribed drugs as much as possible, preferably to less than those already being taken before admission
- Plan the patient's discharge. On admission to the hospital, a comprehensive patient assessment (clinical, functional, psychological-cognitive, economic, social and familial) can help identify difficult to discharge cases, taking into consideration the community health resources available for the continuity of care
- 10. On hospital discharge, when possible, provide your patients, their families and caregivers with all the information they need for the self-management of the disease: medicines and the equipment or facilities needed, the symptoms and signs to be monitored to maintain patient well-being, the people to contact if help is needed, a list of the procedures and appointments for the post-discharge period, and any home care services that have been activated or that need to be activated.





# Choosing Wisely Campaigns A Work in Progress Jama May 15, 2018

#### Conclusions

The Choosing Wisely campaign has grown and spread beyond what was anticipated at its outset, but there are significant challenges ahead to achieve widespread effect on the quality and safety of care—

Evidence-based medicine informs the clinician worldview that success is determined by rigorous data showing an effect on outcomes. The spread of Choosing Wisely internationally demonstrates that the campaign has been well received, but now it needs to demonstrate effectiveness in improving outcomes and making a difference on measures of quality and safety that matter to clinicians and patients.



#### Outline

- Introduction
- Definition
- Overdetection [cancer screening]
- Too much testing
- Expanding definitions
- (Over)Medicalization
- Too much medicine Overtreatment
- Overuse and its drivers
- The present current initiatives
- The future





# The role of journals in preventing overdiagnosis

Diane Kelsall

Navjoyt Ladher

Rita Redberg





JAMA Internal Medicine



## Overdiagnosis: what it is and what it isn't

Why then, can one desire too much of a good thing?

#### **Conclusion**

William Shakespeare, As You Like It (1600)

Overdiagnosis is one of the most harmful and costly problems in modern healthcare. It often triggers a cascade of overtreatment, although the two are not synonymous. To prevent and minimise overdiagnosis, we need more studies on the natural history of diseases, watchful waiting trials of very early/small or ambiguous abnormalities, studies of the effects of diagnostic language, intervention studies on known drivers of overdiagnosis, and studies of how to involve patients in decisions about diagnostic strategies. And we need to ensure that new disease definitions are based on evidence, <sup>13</sup> not financial interests. <sup>14</sup>

Describing what overdiagnosis is and what it isn't is essential, so that more attention and resources are directed towards preventing it.



### **EDITORIALS**

# Focusing on overdiagnosis as a driver of too much medicine

Why overdiagnosis is hard to spot and to explain to individuals

We need tools to help recognise overdiagnosis in individuals. <sup>10</sup> <sup>11</sup> This is an active area of research in cancer diagnosis and early detection, where new molecular tools and informatics may help to distinguish progressive from non-progressive lesions detected on screening. <sup>12</sup> This science is still in its infancy, so it can be misunderstood or misapplied. This could make things worse by promoting undue optimism about the usefulness of new biomarkers and by introducing confusion if tests with uncertain clinical utility are widely used. Cardiovascular risk estimation provides a cautionary example, where risk factors meant to predict the chance of future events (such as high cholesterol) are sometimes elevated in public messaging as representing actual "disease" states themselves.

None of this will be easy, but it starts with recognising the unique aspects of overdiagnosis as a major contributor to too much medicine and working to identify it, communicate its effects, and explore new research directions.



anticipated.



### as a quality problem: insights from healthcare improvement research Achieving improvements in healthcare quality is rarely straightforward; the challenges of tackling issues in practice and achieving meaningful and sustained change can be formidable. Overdiagnosis and overtreatment are problems that are often tricky to define, with suggestions that there may be much politics at play in deciding which problems are targeted<sup>34</sup> and differing approaches to the significance attached to any possible harms that might be incurred or benefits that might be achieved. This is not to suggest that overdiagnosis and overtreatment are not worthy issues to seek to tackle, but rather to highlight that doing

so in practice may be harder and more complex than

Overdiagnosis and overtreatment

#### MEDICINE AND SOCIETY

Debra Malina, Ph.D., Editor

# The Less-Is-More Crusade — Are We Overmedicalizing or Oversimplifying?

Lisa Rosenbaum, M.D.

Like many physicians, I was captivated by a body of research, much of it from Dartmouth, suggesting that there was little correlation between higher spending and higher quality of care.1 These observations helped popularize the perception that less care is better care, or even that more care is harmful.<sup>2</sup> A movement arose, premised on the notion that "less is more"; its influence can be seen in books,3-5 educational initiatives promoting resource-savvy care,6 conferences about overdiagnosis or overmedicalization, and efforts like the Choosing Wisely campaign. Though reducing unnecessary care is important, the missionary zeal of waste hunting began to obscure a complex evidence base, perpetuating an oversimplified narrative about waste's magnitude, causes, and solutions.

Mitigating waste is imperative. But doing so effectively means grappling with a greed that may more often reflect a hunger for information than a desire for financial gain. Until we learn how to better manage the uncomfortable uncertainties inherent in clinical care, "less is more" may be an aphorism better suited to telling coherent stories than to the complex decisions faced by doctors and patients.



#### **ESSAY**

## Overcoming overuse: the way forward is not standing

Less can be more, but it can also be less. Developing and implementing evidence based strategies to recognise and safely reduce wasteful, ineffective, and harmful practices can lead to good for our patients and society. And it can free up resources to tackle the similarly prevalent problem of underuse of effective care. Rather than making assertions, asking, "Is less more?" has resulted in a profound shift in the ethos of medicine: a recognition that healthcare truly is a double edged sword that can harm as well as benefit patients. The nuances in, and possible unintended consequences of, the less-is-more movement cannot justify maintaining the status quo: it is unethical for doctors to knowingly cause harm. We will not get to better healthcare by standing still.





#### Take home

- Diagnosi e trattamenti non necessari assorbono enormi risorse e sono spesso dannosi per il paziente
- Choosing wisely è solo una delle molte iniziative volte a ridurre i costi e soprattutto a proteggere i pazienti dalla eccessiva medicalizzazione
- L'educazione e l'engagement dei medici e degli utenti in questa opera di sensibilizzazione è ineludibile per la sicurezza e la sostenibilità del nostro sistema sanitario

