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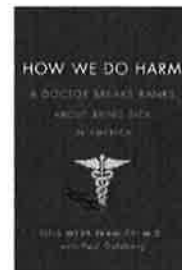
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Healthcare in the 21st Century Ethical Issues

Disclosures

- Employment:
 - American Cancer Society
 - Emory University
 - Turner Broadcasting (CNN)
- Consulting
 - National Institutes of Health
 - Centers for Disease Control
 - Department of Defense

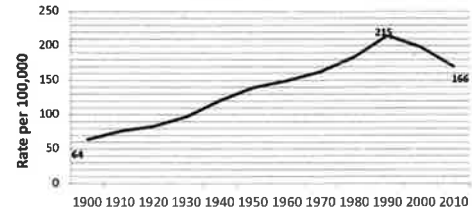
Declarations:



"It is difficult to get a man to understand something, when his salary depends on his not understanding it."
Upton Sinclair

A professional is someone who puts the interests of his patients above his own.
Hal Sox

US Cancer Age-Adjusted Death Rate 1900 to 2012



1900-1970, US Public Health Service, Vital Statistics of the US, Vol. 1 and Vol 2;
1971-2012, US National Center for Health Statistics, Vital Statistics of the US

Cancer Statistics, 2016

A 23% decline in age-adjusted mortality rate over 23 years means 1.7 million Americans did not die a cancer death!

The US was the 31st country to achieve a greater than 20% decline

US Cancer Statistics, 2016

It is estimated that this year will see:

-1.69 million cancers diagnosed

-596,000 cancer deaths

-148,000 Cancer deaths preventable*

*If all known prevention and treatment disseminated

Healthcare in America

The Good and the Bad and
Where We Go From Here

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The greatest threat to American
healthcare and the health of the nation
is out of control increasing costs!!!

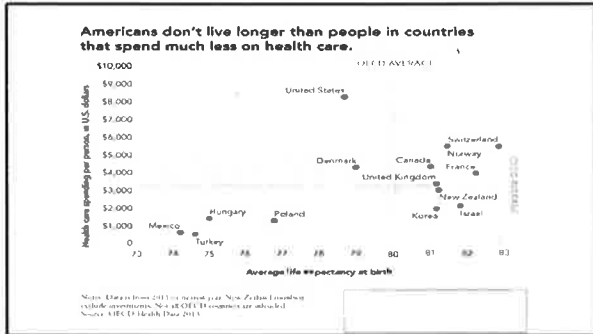
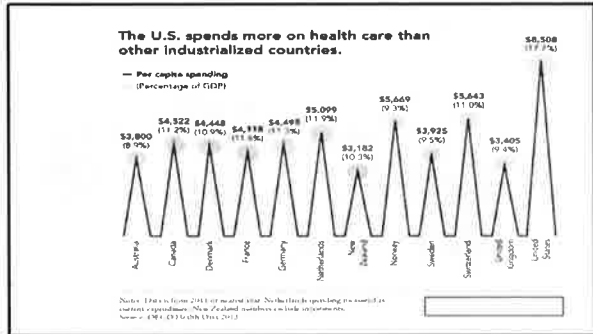
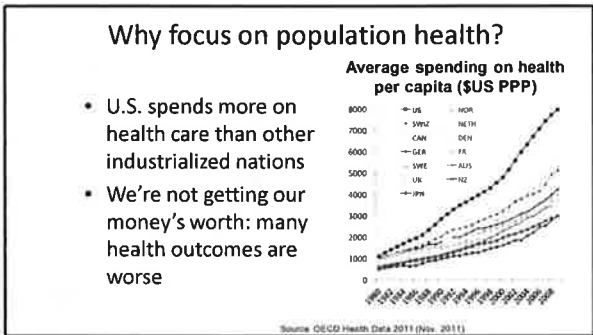
U.S. Health Care Spending

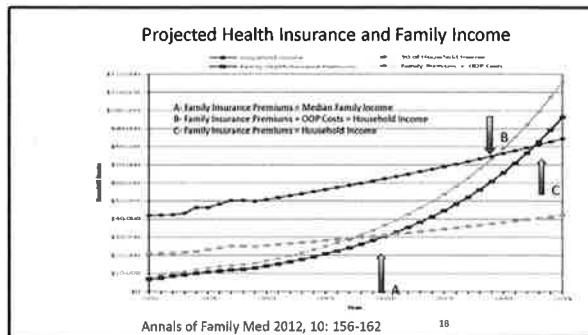
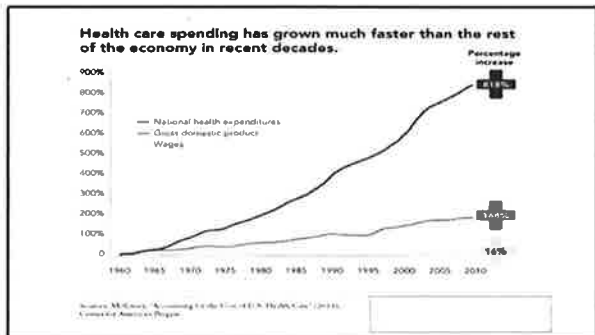
\$2.7 TRILLION
In 2011

Spending in Context



* Excludes alcoholic beverages (\$150 billion) and tobacco products (\$92 billion)
Source: Bureau of Economic Analysis; National Bureau of Statistics of China; MGI analysis





The American Healthcare System

Inefficient!!!

We often do not follow the science

- We often use treatments and interventions that are lucrative to the providers but not proven effective.
- We often ignore and fail to use simple, inexpensive, and effective interventions.

Disparities in Health
The Concept of Medical Gluttony

- Some consume too much
 - (Unnecessary care is given and increased risk of medical error)
- Some consume too little
 - (Necessary care not given and harm results)
- We could decrease the waste and improve overall health!!!!

**Rational Use of Medicine
vs.
Rationing of Medicine**

True Healthcare Reform

Requires:

An appreciation of science and the scientific method

That is:

- A rejection of "faith-based medicine"
- Acceptance of science and reality

Clinical Lessons Learned Late
Overused Interventions

- Hysterectomy
- Caesarian section
- Carotid endarterectomy
- Coronary Artery Bypass Grafting
- Tonsillectomy

Clinical Lessons Learned Late
Drugs re-assessed after-marketing

- Postmenopausal Hormone replacement therapy
- Lidocaine after MI
- Hyper-vitaminosis (vit E, Beta Carotene, Selenium)
- Vioxx for arthritic pain

Clinical Lessons Learned Late

Screening done before proven net harmful

- Chest Xray screening for lung cancer
- Urine screening for neuroblastoma

Our History of Not Respecting the Science

- The Halsted Mastectomy
- Bone Marrow Transplant in Breast Cancer
- Erythropoetin to stimulate blood production in cancer patients
- Mass Prostate Cancer Screening

Prostate Cancer

Recommending for Informed Decision Making

- American Cancer Society
- National Comprehensive Cancer Network
- American Society for Clinical Oncology
- European Urology Association
- American Urology Association
- American College of Physicians

Recommending Against Routine Prostate Cancer Screening

- U.S. Preventive Services Taskforce
- Canadian Taskforce on the Periodic Health Examination
- American College of Preventive Medicine
- American Academy of Family Physicians

The American Cancer Society 2010 Prostate Cancer Screening Guideline

“Men should have an opportunity to make an informed decision with their health care provider about whether to be screened for prostate cancer, after receiving information about the uncertainties, risks, and potential benefits associated with prostate cancer screening.”

American Urological Association*

Given the uncertainty that PSA testing results in more benefit than harm, a thoughtful and broad approach to PSA is critical.

Patients need to be informed of the risks and benefits of testing before it is undertaken. The risks of over-detection and over-treatment should be included in this discussion.

*Taken from the AUA PSA Best Practice Statement 2009 and markedly different from statements made in press conferences

Possible Reasons for Decline in Prostate Cancer Mortality

- Screening with PSA and local treatment saves lives
- Changes in WHO algorithm for cause of death in 1988 (a shift that favored more deaths attributed to infection)
- Treatment of metastatic disease prolongs life such that competing causes of death overcomes prostate cancer.
- Hormonal therapy increases cardiovascular death and prevents prostate cancer death.
 - Boyle P, BJU, 2003
 - Haines I, JNCI, 2013

ISSUE 20 NUMBER 24 DECEMBER 10, 2012

JOURNAL OF CLINICAL ONCOLOGY COMMENTS AND CONTROVERSIES

Gleason Score 6 Adenocarcinoma: Should It Be Labeled As Cancer?

14. Sebastian Carlin, Ashraf Paroh, Patrick C. Walsh, Bruce J. Trock, Robert W. Mills, William C. Nelson, and Donald S. Cobley, The Johns Hopkins University and Johns Hopkins Kimmel Cancer Center, Baltimore, MD
15. J. S. Trujillo, National Cancer Institute, National Institutes of Health, Bethesda, MD
Jonathan T. Lyman, The Johns Hopkins University and Johns Hopkins Hospital, Baltimore, MD

JCO Vol 30, Dec 10, 2012, p 4294-6




The Drive Against Prostate Cancer

Their literature:

- Only talks about Prostate Cancer Screening being good as it extends survival!!!
- There is no mention of caution and no mention of harm.

Lung Cancer Screening

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The National Lung Screening Trial

- **Nearly 54,000 at high risk enrolled in the trial**
 - age 55 and above
 - 30 pack year or greater history of smoking; if quit, did so less than 15 years prior to trial entry
 - Reasonable health
- **Subjects prospectively randomized to chest X-ray (sham) or low dose spiral CT (LDCT) yearly for three years**
 - Done at 30 sites with lung cancer expertise
 - Analysis 10 years from start of screening showed LDCT associated with a 20% reduction in relative risk of death

CT:computed tomography
N Engl J Med 2011 Aug 4;364(22):2116-54.

The National Lung Screening Trial: A Closer Look

- **In this high risk group, the benefit/risk ratio of 5.4 lives saved for:**
 - Every 2 people with a complication due to an invasive procedure
 - Every 1 life lost prematurely due to diagnostic procedures
- **This study was done in 30 of the best hospitals in the country**
 - Results may differ as LDCT screening is adopted at other facilities.
 - The benefit-risk ratio may decrease

LDCT:low dose spiral CT
N Engl J Med 2011 Aug 4;364(22):2116-54

Lung Cancer Screening Recommendations

Six Respected Groups Recommend the Doctor
"Consider" spiral CT for those:

- Healthy aged 55 years and above,
- H/O 30 pack years of smoking or more,
- If quit smoking did so less than 15 years ago,
- Who understand that there are risks of unnecessary diagnostic procedures and even death associated with screening.



SAINT JOSEPH'S

Offers Low Dose Spiral CT of the Lung to those at risk for lung cancer. (\$325 cash).

"At risk for lung cancer," according to St Joe's, includes 40 year old non-smoking women who have lived in an urban area for more than ten years.

The business plan relies on insurance to pay for the follow-up testing of the 25% or more abnormal screens.

Medical Gluttony

- Screening tests of no proven value
- Treatments of no proven value
- Laboratory and radiologic imaging done for convenience.
 - Cannot find original.
 - Legal defense (real or imagined).
 - Tradition.

The Drug Makers

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Rational vs. Irrational Medicine

Generic Omeprazole (Prilosec)

vs.

Esomeprazole (Nexium)

25 cents per day vs. six dollar per day
Eight dollars per month vs. 180 dollars per month

True Healthcare Reform

Requires:

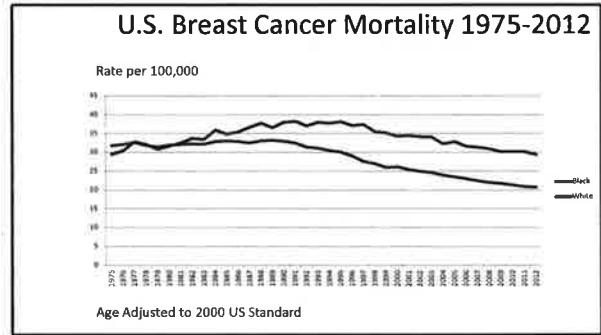
The use of "Evidence Based Care and Prevention"

That is:

- The rational use of medicine
- Not the rationing of medicine

Comparative Effectiveness Research

Breast Cancer



Breast Cancer Mortality

Decline due to:

- 1) Improvements in treatment
 - Hormonal therapy
 - Chemotherapy
 - Radiation
 - Surgery
- 2) Awareness and early presentation
- 3) Screening with mammography and clinical breast examination

Berry et al, *N Engl J Med.* 2005;353(17):1784-92
 Mandelblatt et al, *Cancer.* 2013;119(14):2541-8

Breast Cancer Quality of Care

- Receipt of “minimum expected care” in SEER-Medicare data 1992-1999
- Blacks less likely 0.67 95% CI (.59-.76)
- Hispanics less likely 0.77 95% CI (.66-.90)

• Haggstrom, *Cancer* 2005

Breast Cancer Quality of Care

- In 2000, 7.5% of Black Women in Atlanta diagnosed with localized highly curable breast cancer did not receive a surgical removal of the tumor in the first year after diagnosis.
- A substantial number of women of all races and incomes get less than optimal breast cancer care!!!!
- Provision of adequate care is a logistical issue and not new medical science.

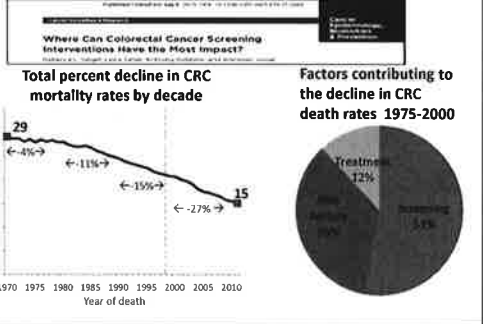
Lund et al, Breast Cancer Res Treat, 2008

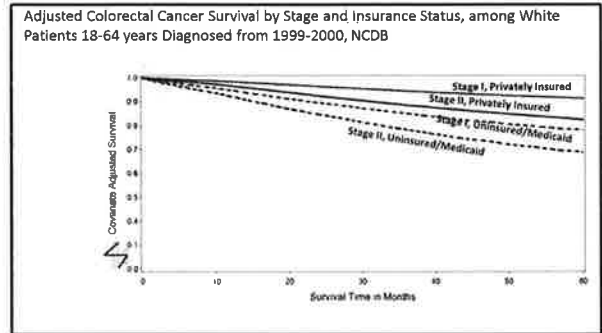
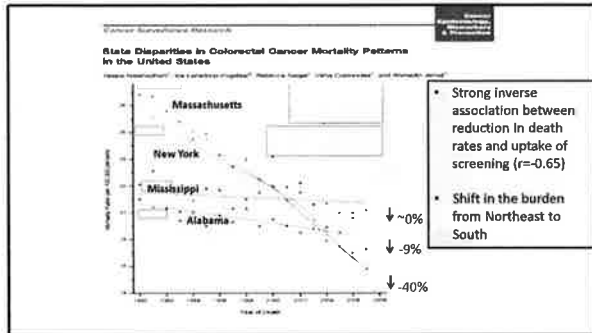
Lack of progress in reducing breast cancer death rates in select Southern and Midwestern states (shaded in red)



DeSantis et al, CA Cancer J Clin: 2011

Colon Cancer





Colorectal Cancer Screening

A substantial number of lives (perhaps 15 to 20,000 per year) could eventually be saved in the US, if there was efficient colorectal cancer screening and treatment:

- 45-50% of the US population aged 50 to 75 are not screened on time given current recommendations
- A substantial proportion of those with health insurance are not up to date on screening

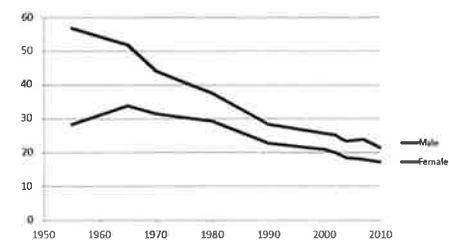
healthmeasures.ppt hhs.gov/measures/25
Fellord et al. CMAJ 2010; Sept 7; 182(11):2130P-13

The Prevention Opportunity

Research has told us that the leading causes of cancer are:

- Tobacco use
- Nutrition and Physical Activity (NUPA)
 - bad nutrition/too many calories
 - Obesity
 - Lack of physical activity
- Certain Infectious Diseases

U.S. Smoking Prevalence by Gender 1955-2010



National Health Interview Survey, CDC

Smoking Prevalence 2010

- Males - 21.6%
- Females - 16.5%

- Native Americans - 31.5%
- Below Poverty Level - 29.1%

CDC, MMWR 2012

Current tobacco use, 18 years and older, 2013
Smoked 100 cigarettes in entire lifetime and currently smoke



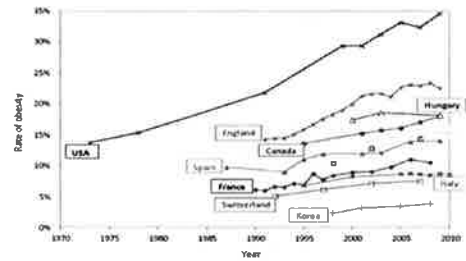
A Tsunami of Chronic Disease

Obesity, lack of physical activity and poor diet will surpass tobacco as leading cause of cancer within the next two decades.

The triad is also a leading cause of:

- Diabetes
- Cardiovascular Disease
- Orthopedic Injury

US Continues to Lead the World in Adult Obesity



OECD Obesity Update 2012

Healthcare Reform
Versus

Healthcare Transformation

Transformation meaning we change our approach to healthcare and the consumption of healthcare.

A Cancer Control Agenda for the 21st Century

- Respect science and educate
- Intensify tobacco control efforts
- Encourage good nutrition and physical activity
- Realize adequate healthcare as a human right

Conclusion

- The American healthcare economy is in extremis! We must:
 - Be orthodox in our practice of medicine
 - Be more efficient, eliminate waste
 - Appreciate evidence-based medicine
 - Renounce faith-based medicine
 - Understand the data and its proper assessment

- Research is providing extraordinary opportunities.
 - It can guide us! If we let it!
 - It must be respected and supported!!!

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