

THE SECOND REVOLUTION IN HEALTH CARE

SUTTER HEALTH
RESEARCH, DEVELOPMENT & DISSEMINATION

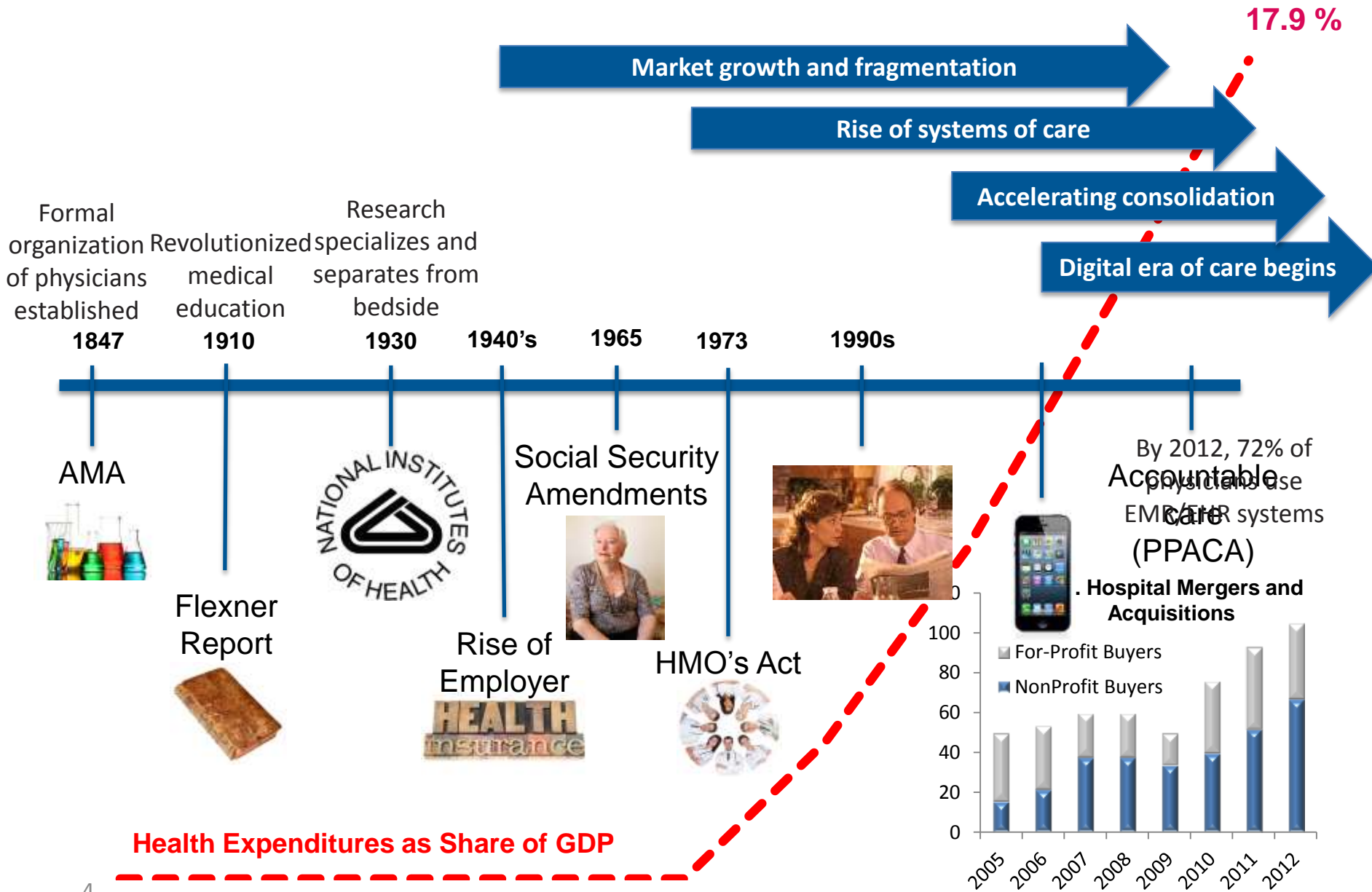
Buzz Stewart

**DID YOU MISS THE
FIRST
REVOLUTION?**



**NO ONE WOULD HAVE PREDICTED THE
RESULT OF THE FIRST REVOLUTION**

HISTORY OF MODERN HEALTHCARE

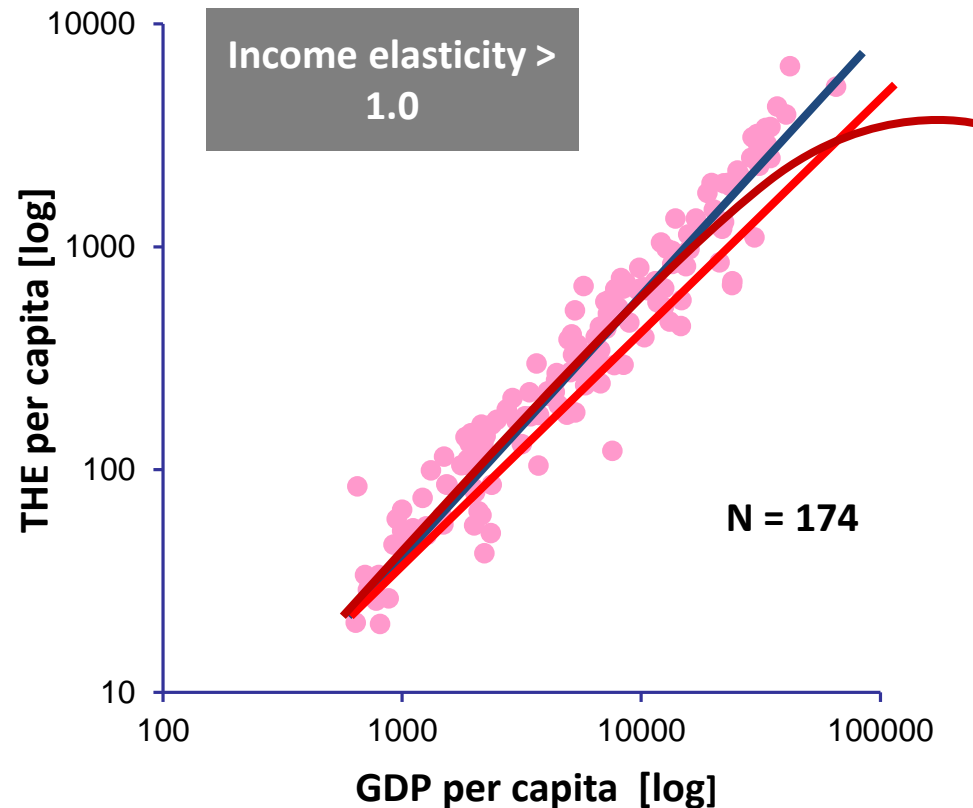
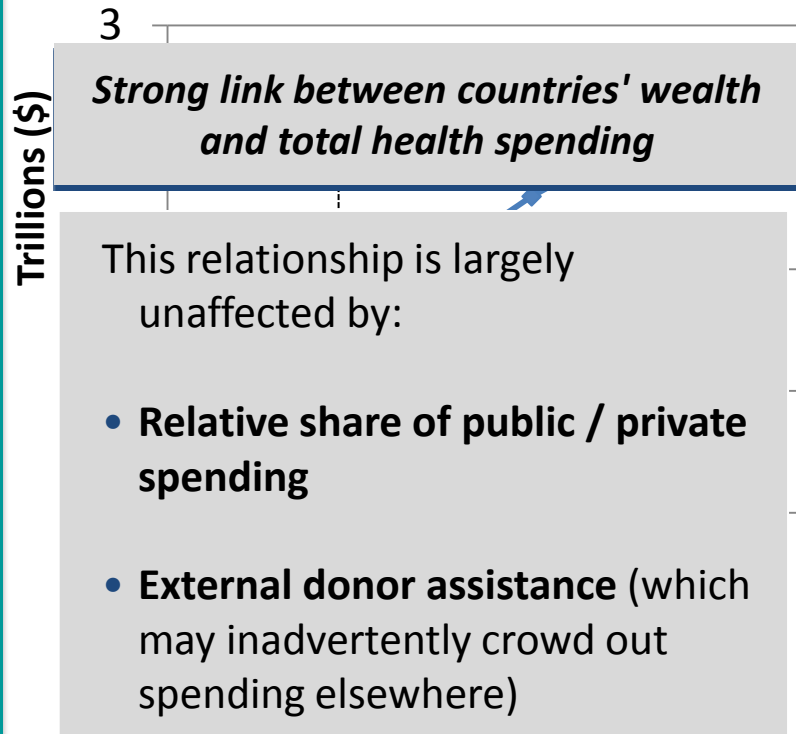


OVERVIEW

- A revolution has consequences
- The benefits and challenges
- Things we should and should not be doing in the second revolution

U.S. NATIONAL DEBT PROBLEM

US TOTAL HEALTH CARE SPEND PER YEAR



EXTRAORDINARY HEALTH CARE SPENDING

2007

\$1,020 billion



U.S. food*

\$1,390 billion



China: personal consumption

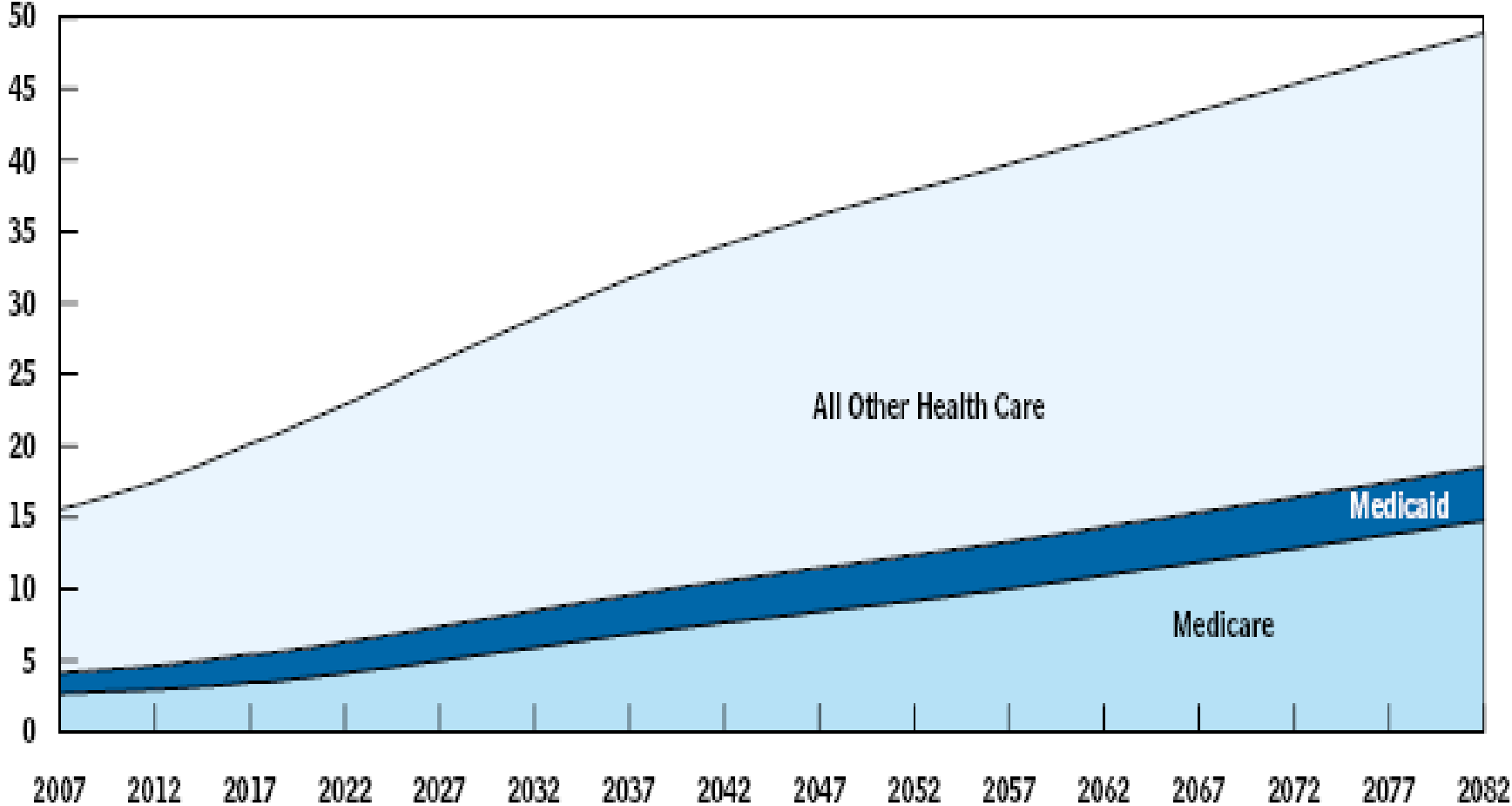
\$2,200 billion



U.S. health care

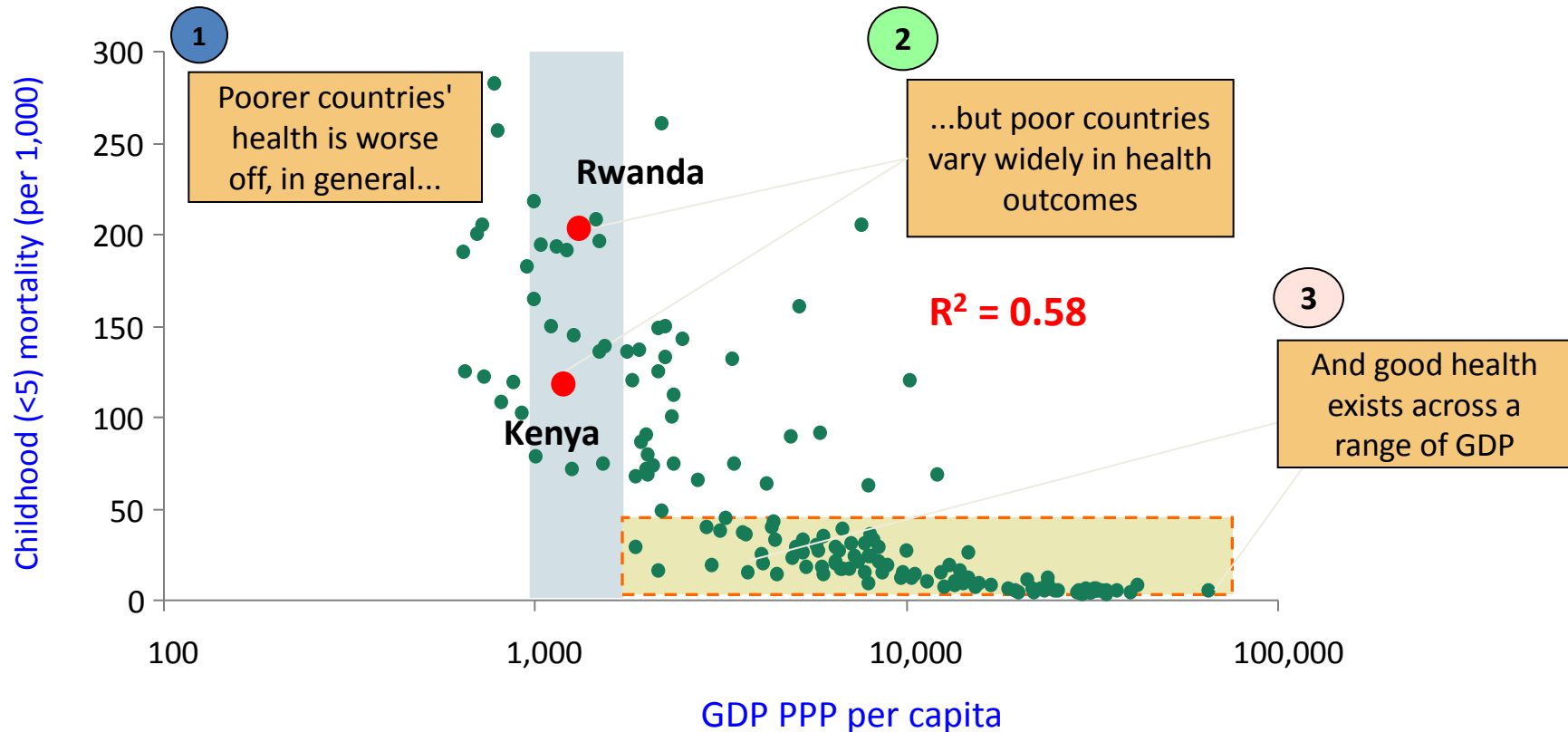
PROJECTED U.S. HEALTH SPENDING

% GDP



Source: US Congressional Budget Office, Nov 2007

...BUT COUNTRIES WITH SIMILAR SPENDING HAVE A RANGE OF HEALTH OUTCOMES



Similar health outcomes at different levels of wealth:
what matters is not total spending, but how it is used

WHAT ARE AMERICANS BUYING?

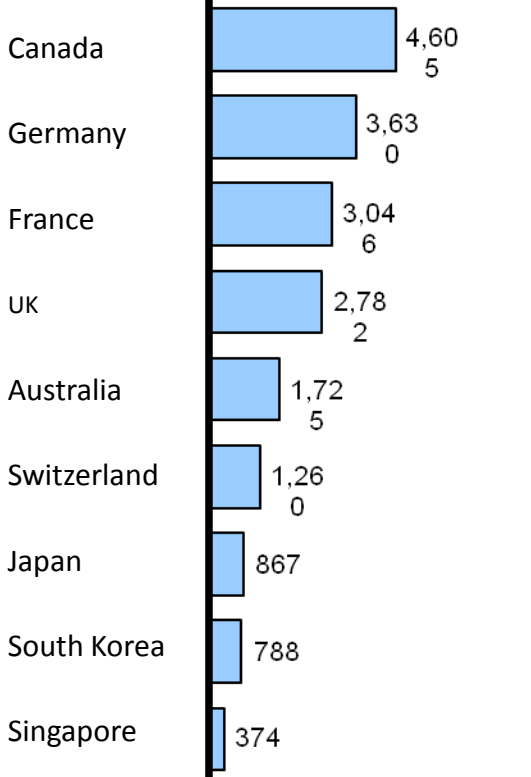
OUR HEALTH SYSTEM'S STRENGTHS

The U.S. enjoys unparalleled medical research and innovation...

Clinical trials by country

Number of trials

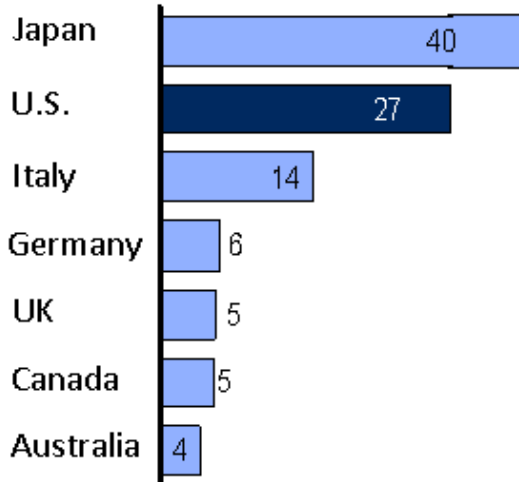
Top 5 US Hospitals



...access to leading technology...

MRI units per million population

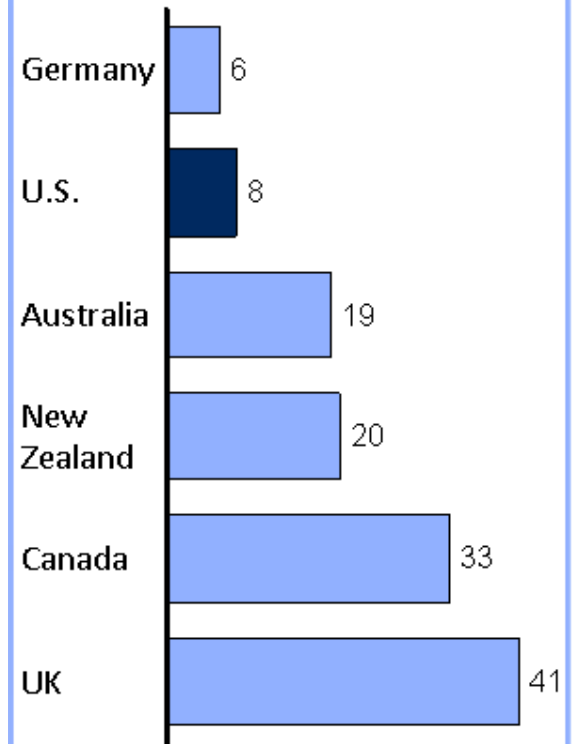
Units



...and the availability of specialized resources without prolonged waiting times.

Percentage who waited four months or more for elective surgery

Percent



ONE VIEW OF EXCESS COSTS (2009)

- Unnecessary services (\$210B)
- Inefficiently delivered services (\$130B)
- Excess administrative costs (\$190B)
- Prices that are too high (\$105B)
- Fraud (\$75B)
- Missed prevention opportunities (\$55B)

WHY WE BUY SO MUCH

- **Wealth**
 - The more we have, the more we spend on health.
- **Insurance**
 - Greater coverage makes us indiscriminating consumers.
- **Aging population**
 - Aging equals more health problems and more demand.
- **Heroics**
 - Make every effort possible, even if there is no chance of a good outcome.

WHY WE SELL SO MUCH

- **Business model**
 - Volume based model promotes unnecessary services.
- **Technology**
 - The more we have to sell, the more we sell.
- **Guideline-based care paradigm**
 - Evidence based guidelines for only 30% of clinical decisions. The rest is opinion.
- **High prices**
 - No price competition.

IMPROVING CARE AND CONTROLLING COSTS

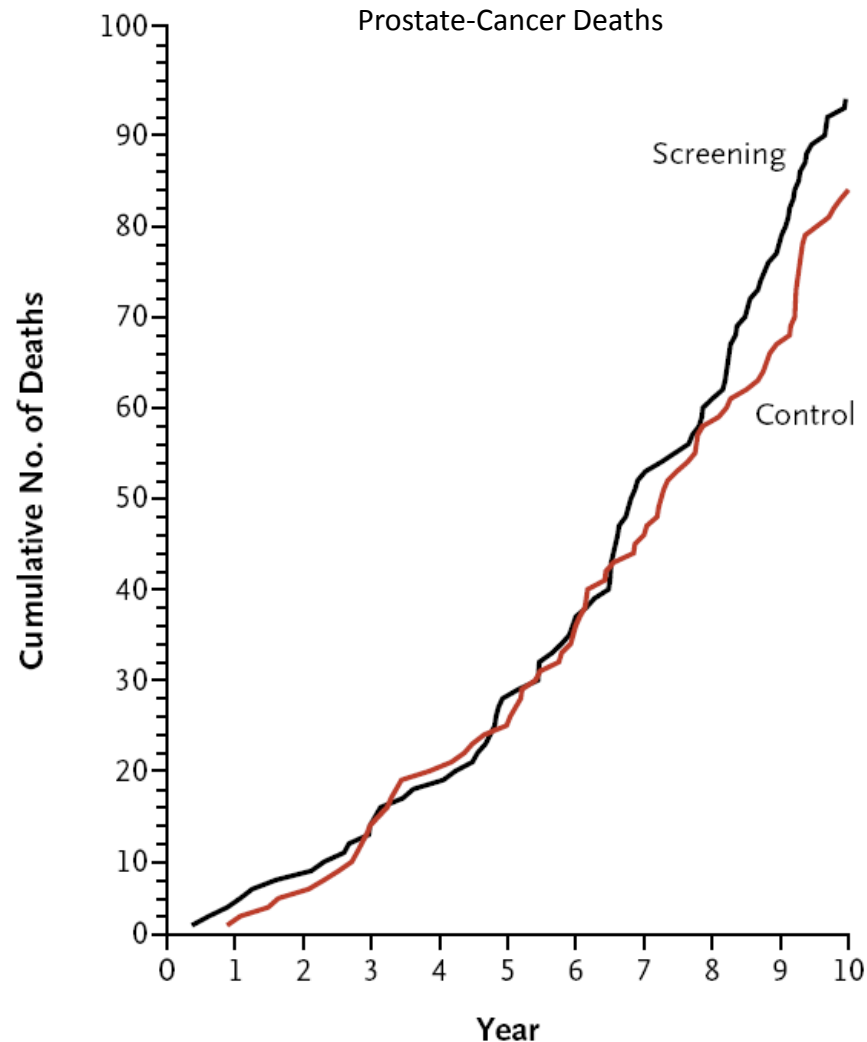
Adoption of costly and unproven technology

Using unproven and costly forms of radiation treatments for many early prostate cancer patients:

- 3-D conformal radiation \$11,000
 - Brachytherapy: \$15,000
 - IMRT: \$42,500
 - Proton Beam: \$80,000
-
- No head-to-head comparative studies
 - No survival difference -- at best a 10% decline in side effects from 14% to 4%

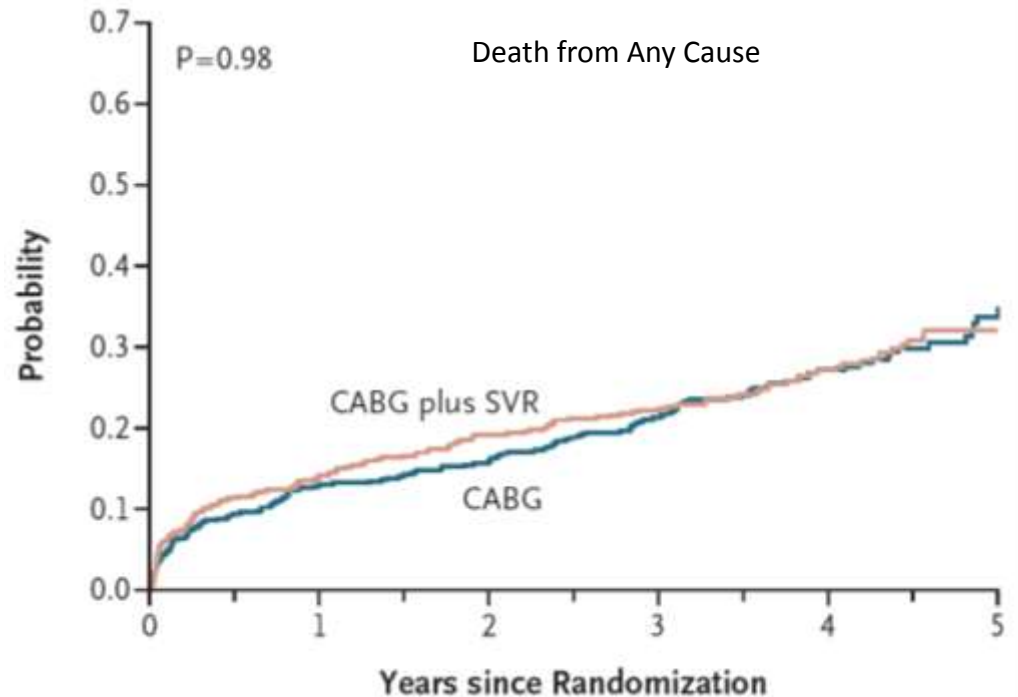
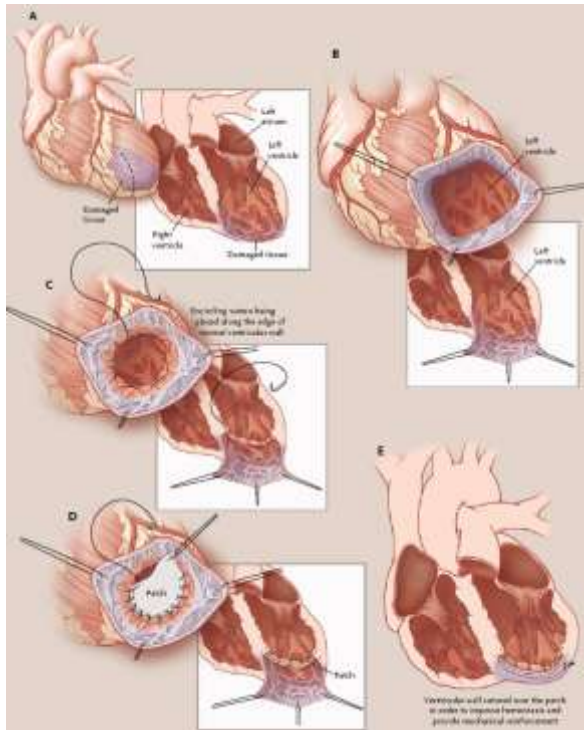
SCREENING VERSUS USUAL CARE: PLCO

Screening PSA and digital rectal exam (N=76,693)



SURGERY VERSUS SURGERY: STICH

LV reconstruction versus CABG only (N=1000)

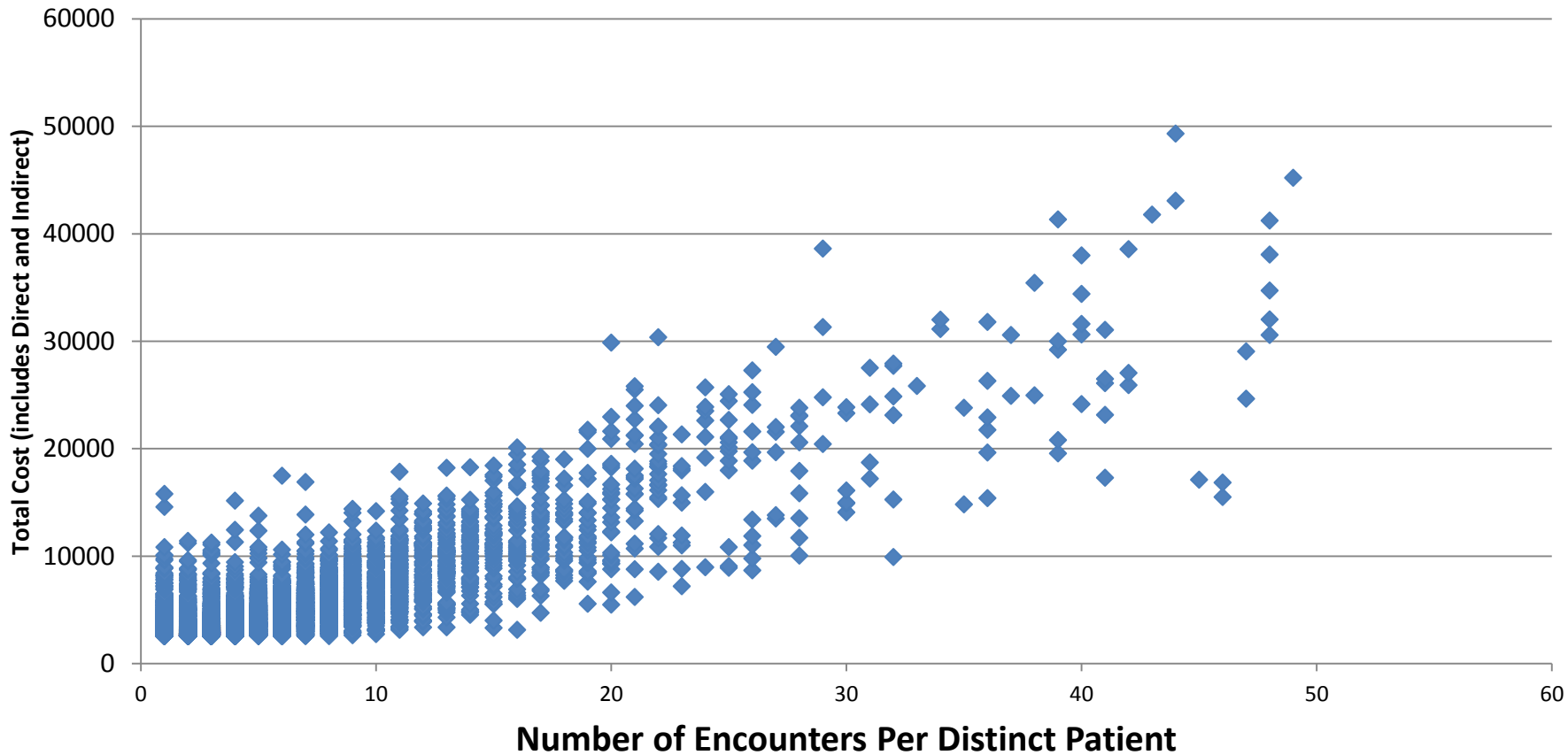


Jones RH, et al. *N Engl J Med.* 2009;360 (on line)

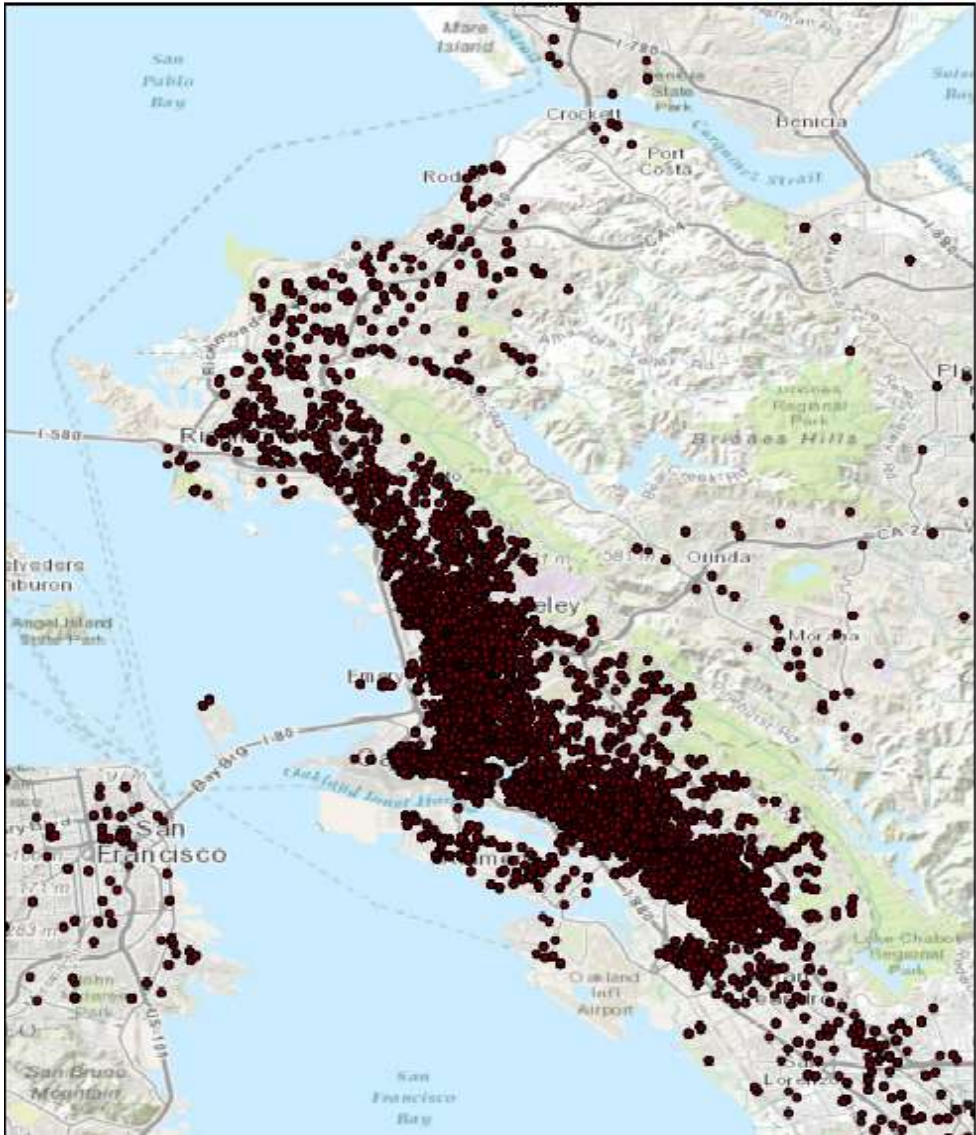
Eisen HJ, *N Engl J Med.* 2009; 360 (on line)

*Approximately 40 Million of 100 million dollars
of emergency department care at Alta Bates
Summit Medical Center is attributed to the top
10% of patients*

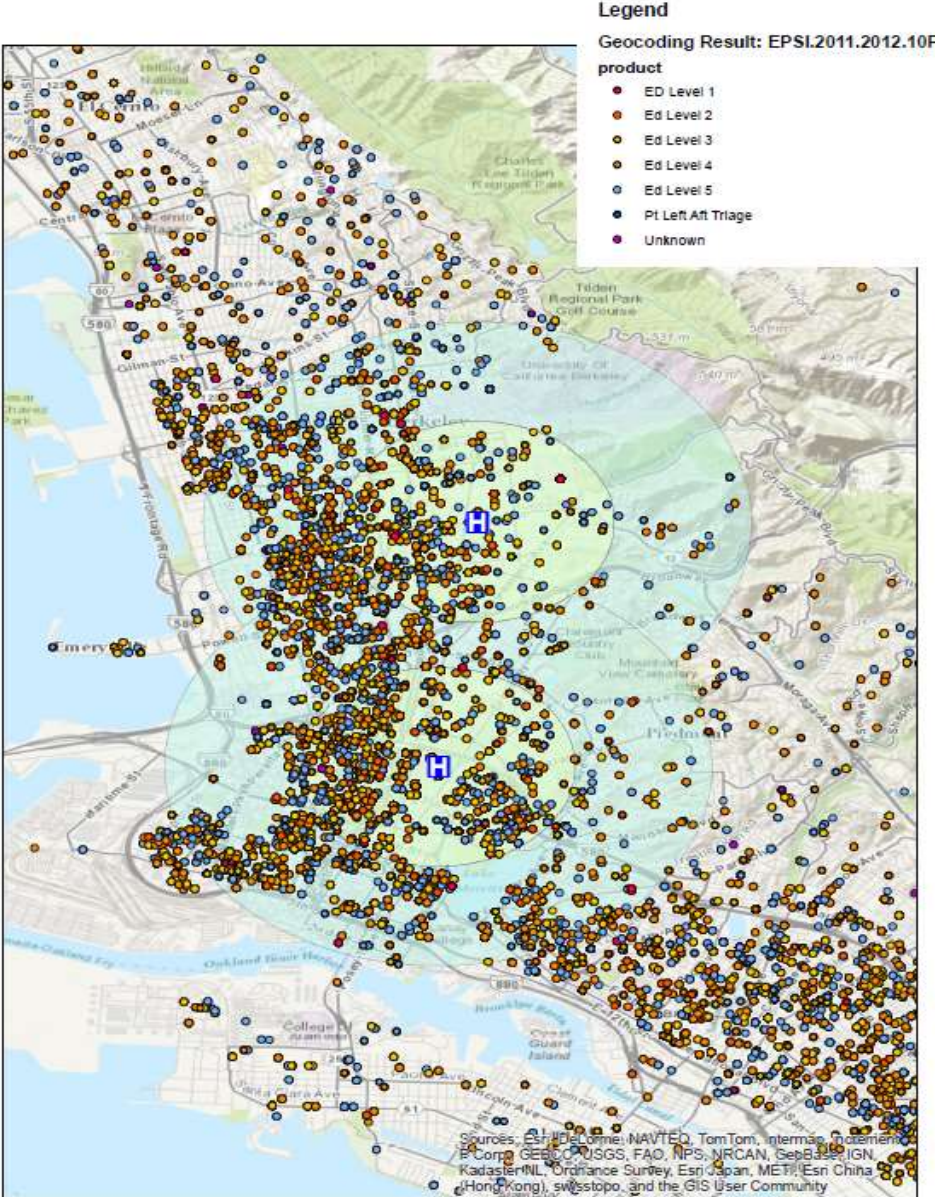
Top 10 Percent of Most "Costly" ED Patients Visiting from 2011-2012 (Cutoff 50 encounters)



Encounters for Patients in the Top 10 % of Cost

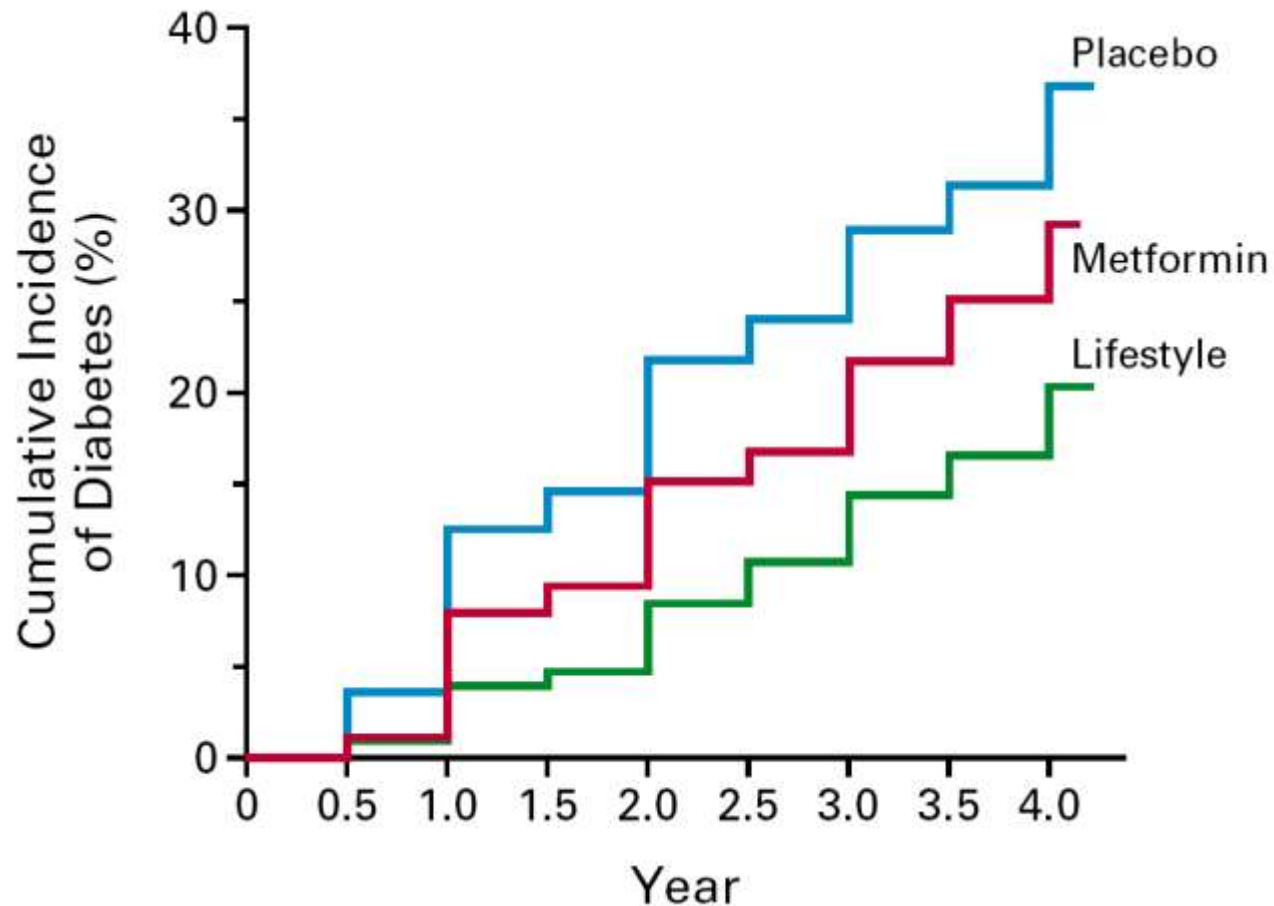


Encounters for Patients in the Top 10 % of Cost



LIFESTYLE VERSUS MEDICAL: DPP

Lifestyle or metformin to prevent DM (N=3234)

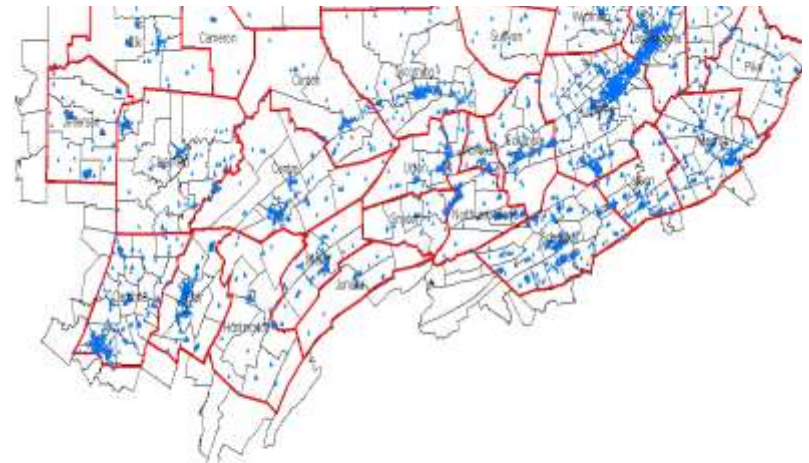


ENVIRONMENT AND HEALTH

- Patients are on their own 99%+ of the time
- Local factors influence diet, activity, & stress levels
- The best health care may have little impact on patient outcomes

*Joe ma
his diak*

Local Food Environment: Food Sources & Retailers in GHS' s 31 Counties



STUFF THAT WILL NOT MATTER MUCH

- **More knowledge**
 - **Stuff that yields the same advice**
 - **Stuff that requires a lot more data**
- New knowledge is a commodity
 - We already know about eating, exercising, addictions, moderation
 - Do customers really want this
 - Does it really matter?
 - Providers clearly are not interested

STUFF THAT WILL NOT MATTER MUCH

- **More procedures & other stuff to sell**
- **Personalized and more expensive**
- **Solving problems in isolation**
- This is what we do now and it does not help that much
- This is what we do now and it does not help that much

ENHANCE CAPABILITIES THAT MATTER

Data Abstraction & Standardization

Liquifying and then purifying for clinical use

Knowledge Access

Exact searching of knowledge by data with intuitive grading

Communication Process

What are you talking about and do you understand me

Extending Reach

Exact, precise, and portable guides

Patient Tools

Knowing where to go, how to choose, and what to avoid
Using tools that work in improving health