

fi360[®]



Healthcare

The View Through a Fiduciary Lens

Wayne H. Miller
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September 2015



We don't have a fiscal crisis in this country. We have a healthcare crisis.

Peter Orszag


Citigroup Vice-Chairman

Former Director – Office of Management and Budget

Agenda

- **Background – facts and stats**
- **Examining healthcare critically**
- **The real epidemic: breach of duty**
- **A market based solution**

Background and Stats

- We have sickness care
- Not a “system” at all
- USA: \$3.2 trillion  5%/yr
- Chronic care is ~ 75%
- Neither responsibility nor accountability are embedded

Background and Stats

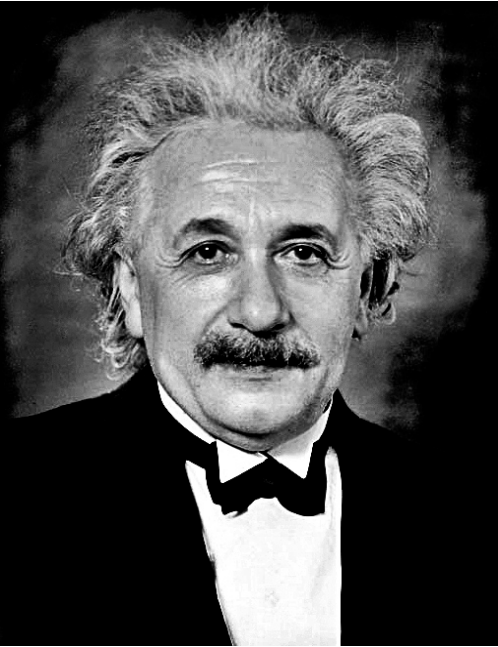
- **Use of most expensive “care” option is incentivized**
- **Cost-Effectiveness Research is NOT ALLOWED**
- **Healthcare capital allocation is constrained by non-market forces.**

Background - Obamacare

- Was not designed to reform health “care”
- Was designed to reform access to health insurance



Fiduciary lens - built upon 5 Principles



Principle #1

"We can't solve our problems by using the same thought process we used in creating them."

- Albert Einstein

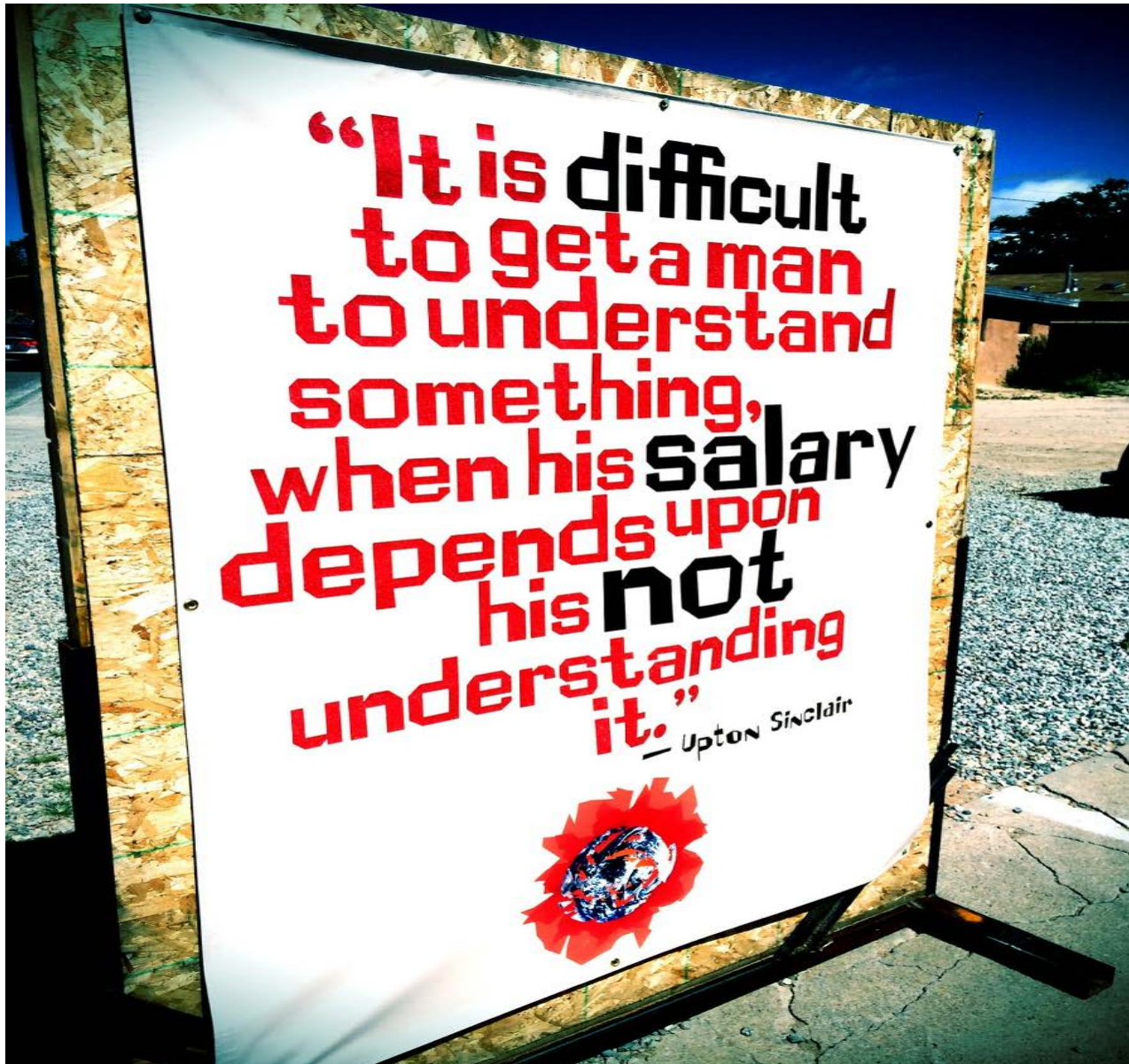


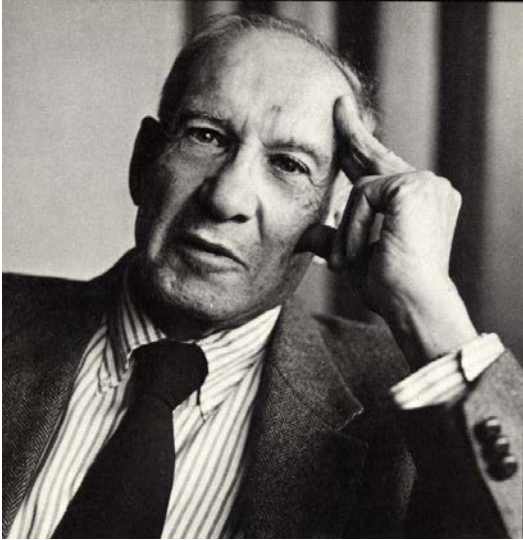
Principle #2

"What the human being is best at doing is interpreting all new information so that their prior conclusions remain intact."

- Warren Buffett

Principle #3





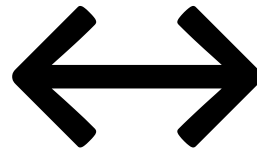
Principle #4

If you don't measure it – it doesn't exist.

- Peter Drucker

Principle #5

What one sees depends upon how one looks.



Fiduciary Lens Is Applied to 5 Topics

Scientific, Clinical, Financial, Regulatory, Behavioral

Topics Examined for Underlying/Unstated Premise

1. **Reductionist vs. Holistic**
2. **Linearity vs. Non-linearity**
3. **Medical “education”**
4. **Scientific Literature -
Evidence Based Medicine**

Reductionism vs. Holism

Collection of parts \neq whole



Emergent Properties

When components of a larger system are conjoined in a specific manner of organization, a novel characteristic emerges that could not have been predicted by a prior examination of the components themselves.

This is a whole system.

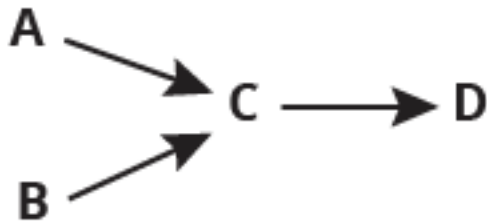


Linearity vs. Non-linearity

Linear (mechanical)

Event Oriented Thinking

Thinks in straight lines

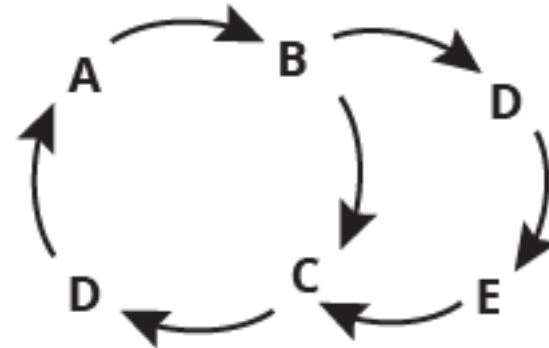


Causality

Non-Linear (complex adaptive)

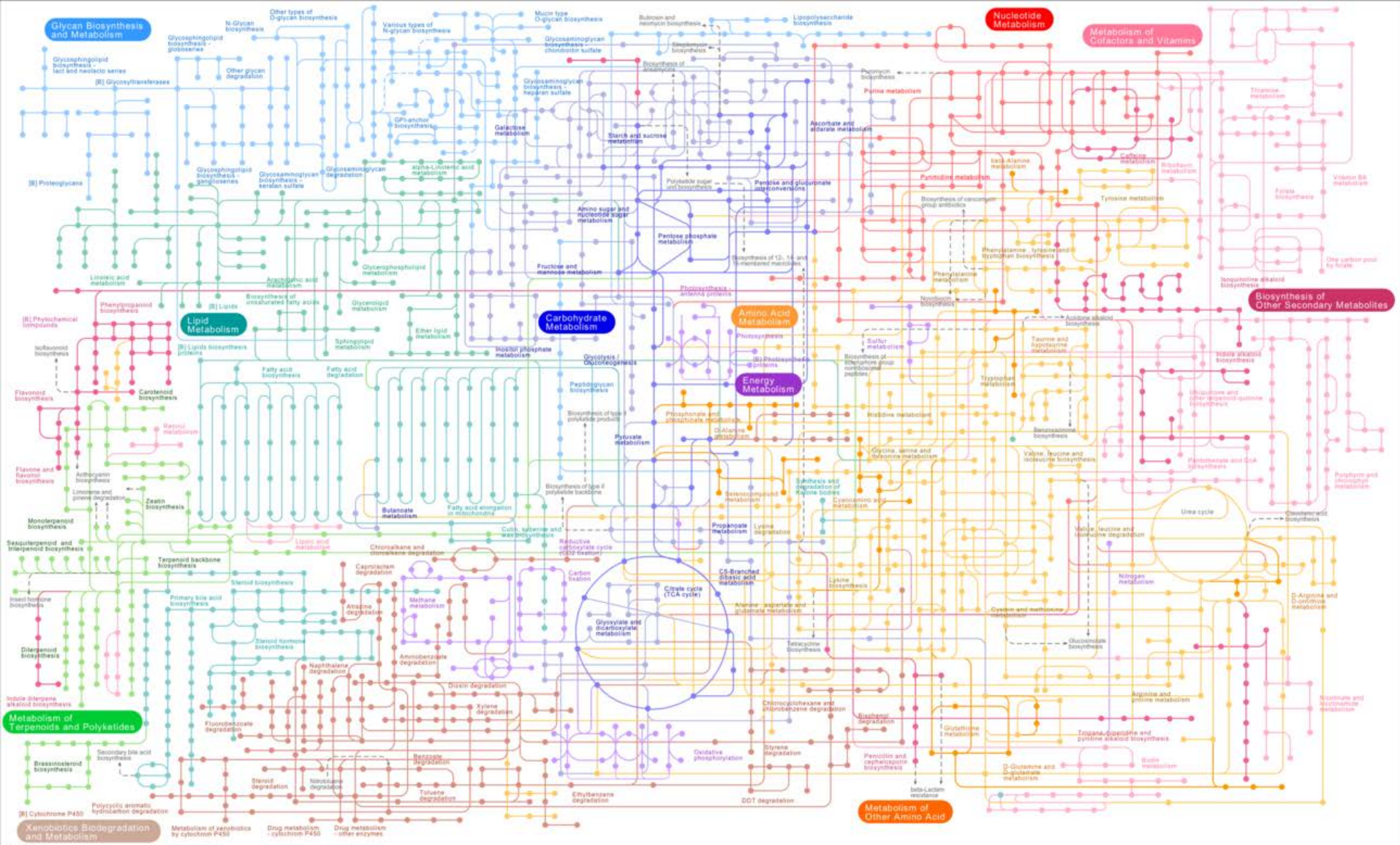
Systems Thinking

Thinks in loop structure

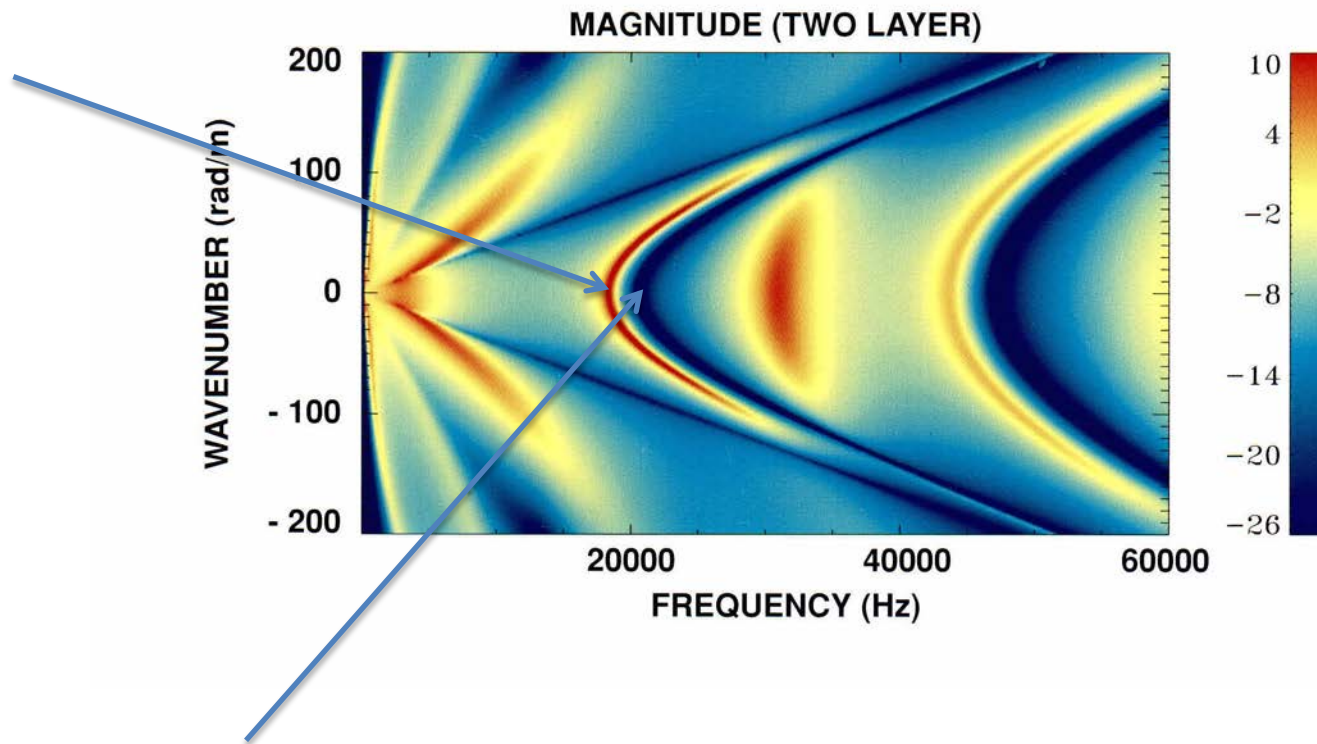


Emergent Properties

Glycan (polysaccharide) metabolism



What non-linearity looks like when measured.



Medical Education

Subjects NOT typically taught in US Medical Schools

Nutrition, physics, biophysics, systems biology, research methods, muscular structure and function, health, homeostasis, bioenergetics, ethics

<http://med.stanford.edu/md/curriculum.html>



March 3, 2009

Harvard Medical School in Ethics Quandary

By DUFF WILSON

BOSTON — In a first-year pharmacology class at Harvard Medical School, Matt Zerden grew wary as the professor promoted the benefits of cholesterol drugs and seemed to belittle a student who asked about side effects.

Mr. Zerden later discovered something by searching online that he began sharing with his classmates. The professor was not only a full-time member of the Harvard Medical faculty, but a paid consultant to 10 drug companies, including five makers of cholesterol treatments.

“I felt really violated,” Mr. Zerden, now a fourth-year student, recently recalled. “Here we have 160 open minds trying to learn the basics in a protected space, and the information he was giving wasn’t as pure as I think it should be.”

Mr. Zerden’s minor stir four years ago has lately grown into a full-blown movement by more than 200 Harvard Medical School students and sympathetic faculty, intent on exposing and curtailing the industry influence in their classrooms and laboratories, as well as in Harvard’s 17 affiliated teaching hospitals and institutes.

They say they are concerned that the same money that helped build the school’s world-class status may in fact be hurting its reputation and affecting its teaching.

The students argue, for example, that Harvard should be embarrassed by the F grade it recently received from the American Medical Student Association, a national group that rates how well medical schools monitor and control drug industry money.

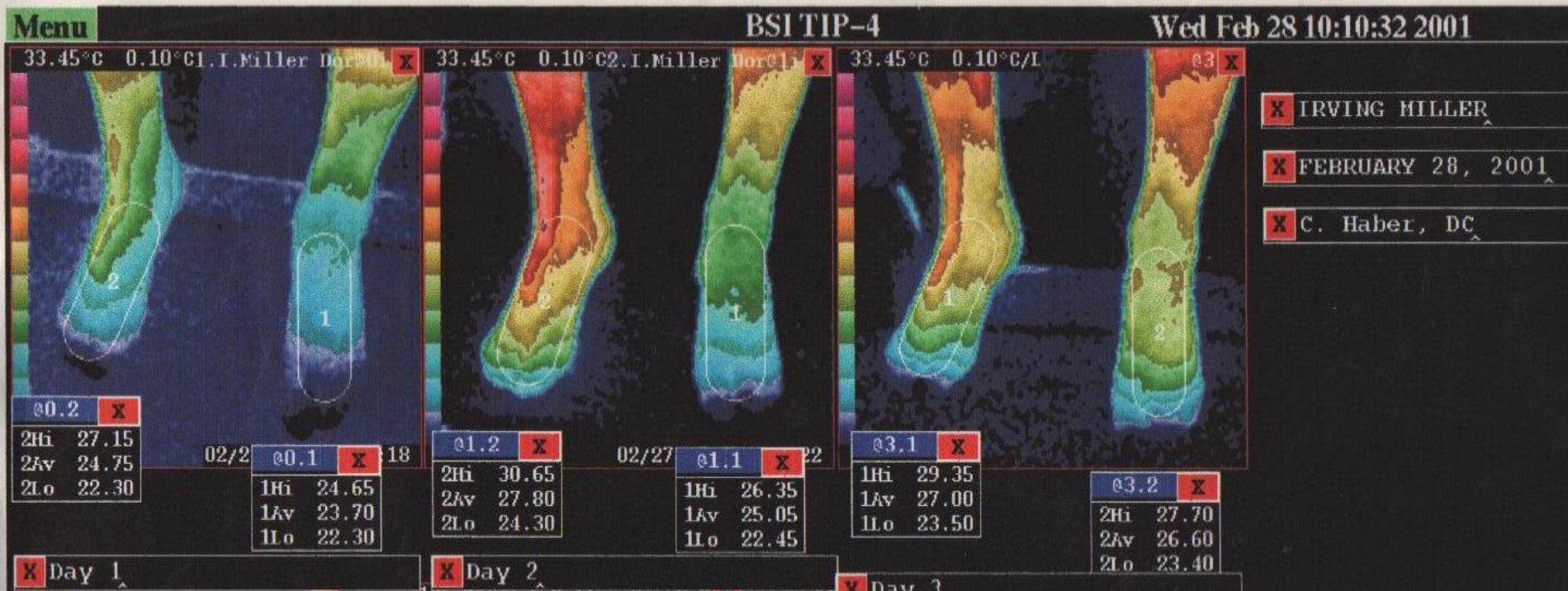
Harvard Medical School’s peers received much higher grades, ranging from the A for the University of Pennsylvania, to B’s received by Stanford, Columbia and New York University, to the C for Yale.

Harvard has fallen behind, some faculty and administrators say, because its teaching

**New York Times
article 3-3-09 by
Duff Wilson**

**Harvard
Medical School
students give
the faculty an
“F” in integrity
due to the
influence drug
companies had
on the faculty
and the
school’s
curriculum.**

Science Often Begins With A Discreet Observation



- 82 year old man, diagnosed with diabetes (12 years prior), diabetic neuropathy, kidney disease, high blood pressure, congestive heart failure and early onset dementia.
- Nine meds/day. Insulin 2x/day. Patient substantially immobile. Lived in wheelchair.
- Peripheral Diabetic Neuropathy is evident (bilateral lower extremities are blue).
- IR photos are taken prior to 25 min treatment with IR light. ~24 hours separates treatment

Evidence Based Medicine



Cancer research, many "discoveries" don't hold up

Amgen's head of global cancer research, C. Glenn Begley, identified and attempted to replicate 53 "landmark" publications (papers in top journals from reputable labs).

47 of the 53 could not be replicated

<http://www.reuters.com/article/2012/03/28/us-science-cancer-idUSBRE82R12P20120328>

Sharon Begley (not related). Published in NATURE March 2012

Journal of the American Medical Association

301:8 pps 831-841, 2009

Scientific Evidence Underlying the ACC/AHA Clinical Practice Guidelines

- “A” = multiple randomized DBC trials or meta analyses – all point to same conclusion**
“B” = a single randomized trial or nonrandomized studies – differing conclusions
“C” = expert opinion, case studies, or standards of care – differing conclusions

- 53 Guidelines made from 7196 clinical recommendations**
- Only 16 of 53 Guidelines reported ANY evidence**
- Of the 16, “A” grade evidence was cited for 11% -19% of recommendations**

Mayo Clinic Proceedings

Volume 89, Issue 1, Pages 16-24, January 2014

Systematic Analysis Underlying the Quality of the Scientific Evidence and Conflicts of Interest in Interventional Medicine Subspecialty Guidelines

- Four specialist societies
- 3425 clinical guidelines
- 11% had “A” grade of evidence
- 89% had “B” or “C” grade
- 61% guideline authors - no COI disclosure
- Of the 39% - avg COI = 5.8/author
- Median age of guidelines was 5.1 yrs

Marcia Angell MD : Editor of NEJM for two decades



“It is simply no longer possible to believe much of the clinical research that is published, or to rely on the judgment of trusted physicians or authoritative medical guidelines”.

“I take no pleasure in this conclusion, which I reached slowly and reluctantly over my two decades as an editor of *The New England Journal of Medicine*”.

Richard Smith: editor - British Medical Journal for 25 yrs



“After 30 years of practicing peer review and 15 years of studying it experimentally, I am **unconvinced of its value.**

Its downside is much more obvious to me than its upside, and the evidence we have on peer review tends to support that jaundiced view. Yet peer review remains sacred...”

Bad Pharma

How Drug Companies Mislead Doctors and Harm Patients (2013)



Ben Goldacre

Study participants are cherry picked

Studies are ghost written – STILL

Bad data is not published – STILL

New drug is better than.... often nothing

Primary outcome changes mid-study

Length of drug trials – long term adverse events not captured

Regulators withhold data from market

Half of all clinical trials done in developing countries – regulatory apparatus ????????

**SCIENTIFIC
AMERICAN™**

Scientific American (2-13-13)

**2010, three researchers (Harvard and U. Toronto)
examined two features of 500 clinical trials:**

- (1) were test results positive and**
- (2) was funding source correlated to results?**

**85% of industry funded studies - positive.
50% of government funded trials - positive.**

Bad Pharma

How Drug Companies Mislead Doctors and Harm Patients (2013)



FDA = \$300 MM fees in drug approval process = “customer” revenue.

Ben Goldacre

We have tolerated the emergence of a culture in medicine where information is routinely (manipulated or) withheld, and we have blinded ourselves to the unnecessary suffering and death that follows from this.



The
Economist

Oct 19th 2013

Problems with Scientific Research: How Science Goes Wrong.

Harvard biologist John Bohannon submitted “fake” paper to 304 peer review journals on the effects of a lichen-derived chemical on cancer cells.

Written by a fictitious researcher and stuffed with major errors in study design, analysis and interpretation of results:

157 journals accepted it for publication

Financial Backbone of Healthcare

- HCPCS I (CPT) & II: ~11,000 procedure codes
- ~8000 owned by the AMA (exclusive contract)
- All electronic medical claims include these codes
- Payment = Procedure code + diagnostic code(s) + payment algorithm
- NO efficacy data is embedded in payment process



Healthcare Finance

No Code

No payment

No data

No knowledge

Little-Known AMA Group Has Big Influence On Medicare Payments



Joe Eaton - Center For Public Integrity
Published by Kaiser Health News
Oct 27, 2010

- **AMA: Specialty Societies (Relative Value Scale Update Committee). RUC is invisible to the public.**
- **Since 1991, the RUC has submitted 7,000+ recommendations to the Centers for Medicare and Medicaid Services (CMS).**
- **CMS accepted 94% of those recommendations.**



Little-Known AMA Group Has Big Influence On Medicare Payments

AMA: “From the AMA’s perspective, the RUC provides a vital opportunity for the medical profession to continue to shape its own payment environment.”

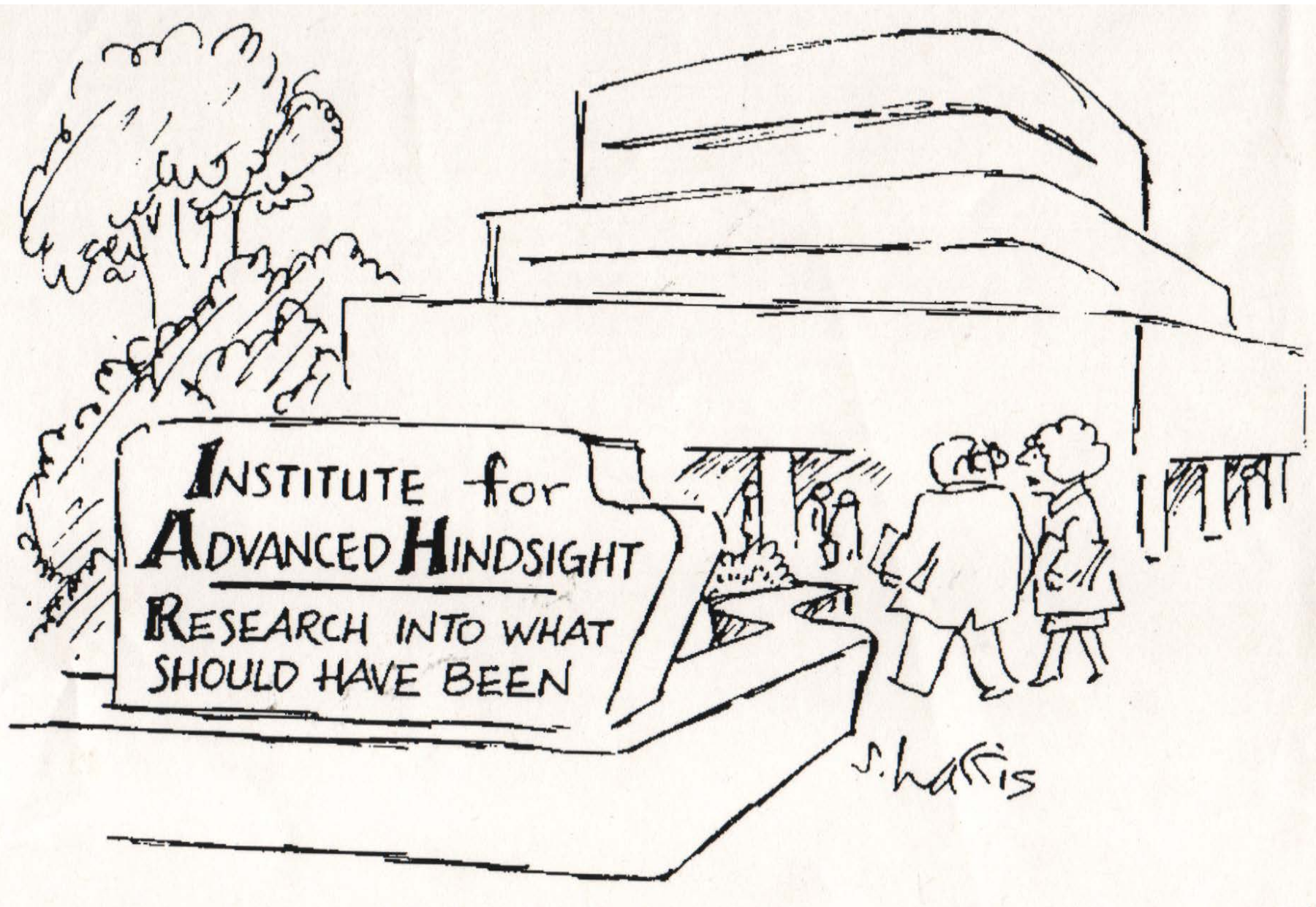
“The use of physician (specialist) surveys has provided a consistent, fair, and relative source of data for nearly twenty years, and the AMA finds no justification to abandon this approach. ”

Behavioral Considerations

When non-purposeful, inefficient and ineffective behavior has been “normalized”, what can one do?

A Path to A Rational Healthcare System

- **Establish the primacy of cost effectiveness**
- **Apply Economic Value Added (EVA) framework**
- **EVA: Globally recognized finance methodology for assessing Value in business operations**
- **EVA: establishes a contrast that enables identification of cost effectiveness**





**It is better to light a
candle than to sit there
and curse the dark.**

- John F. Kennedy



Thank You.

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- Notes:
 - Continuing education: You will receive a follow up email in the coming days with instructions to receive CE for your AIF, AIFA, or PPC designations. CE for CFP Board will be reported automatically on your behalf.
 - A recording and slides will also be made available in the coming days and sent to you via email.