



Helping caregivers deflate medical bills

Teaching Value and Choosing Wisely™: Lessons from the Frontlines

Vineet Arora, MD, MPP
University of Chicago

Disclosures

- **Funded by American Board of Internal Medicine Foundation**



- **Competition developed in conjunction with a national non-profit Costs of Care**

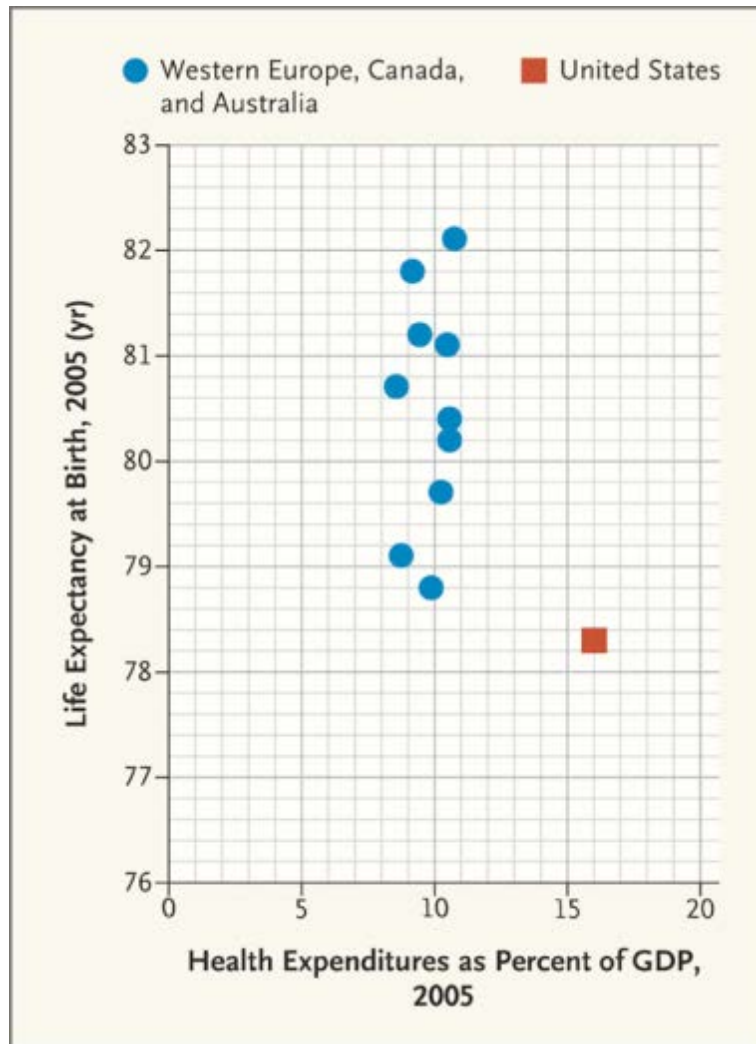


The Problem:

- It's not just that healthcare costs are too high...
- It's not just that healthcare costs are rising...

We're not getting bang for our buck.

We outspend our peers 2:1 and are still less healthy



Obama: Health Costs Are 'Biggest Driver of Long-Term Deficits'



...this undermines our economy and takes away spending from roads, schools and other social services

It's not just that prices are high...we're delivering unnecessary care.

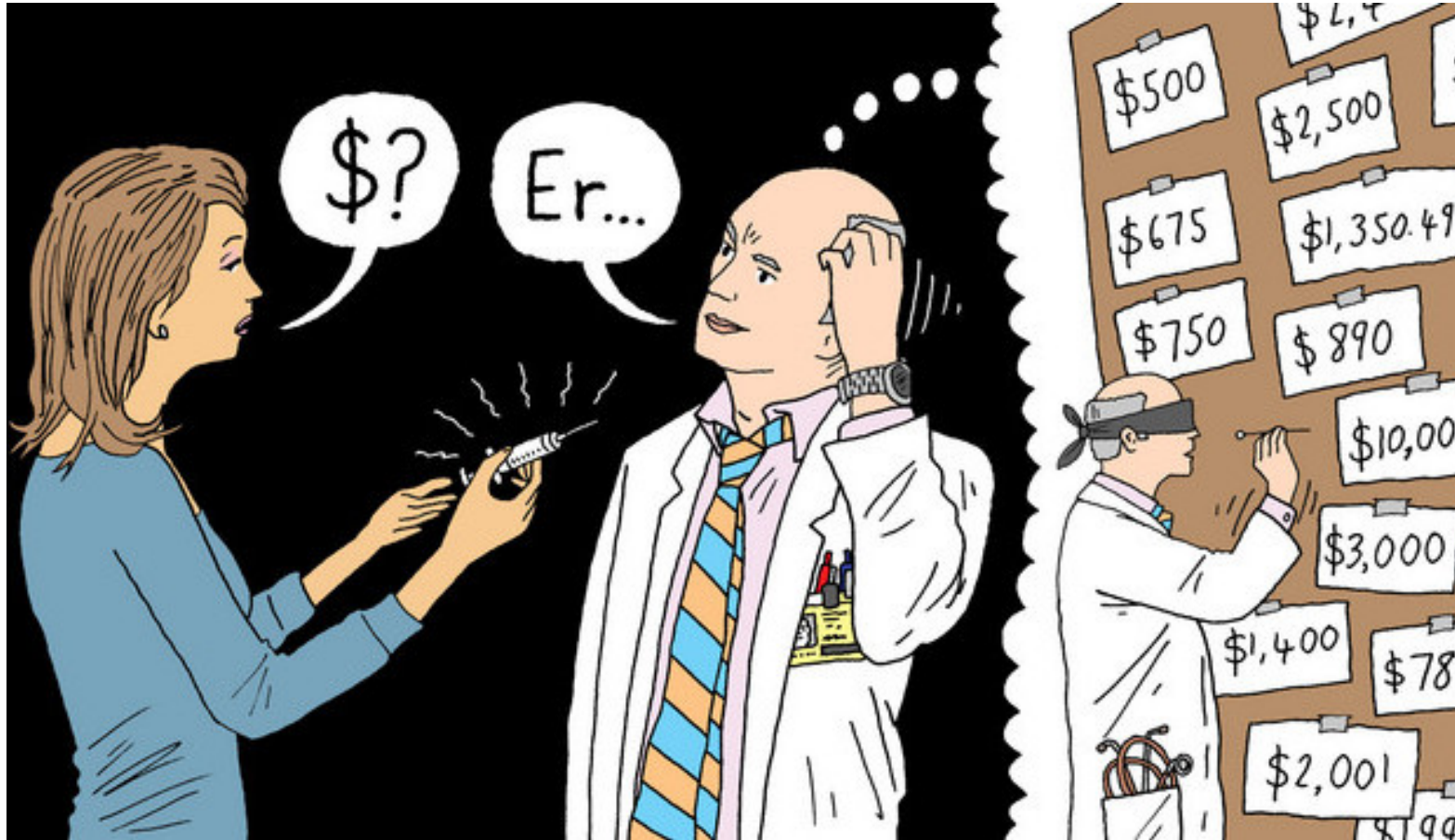
“We seem to have as much as \$700 billion a year in health care tests and services that are unnecessary, that don't improve health outcomes, and that just add to costs ... ”



**Peter Orszag, Director of the White House
Office of Management & Budget.**

February 19th, 2009

Medical bills are a leading cause of personal bankruptcy...



...yet most physicians do not know how our decisions impact what patients pay for care.

NON-INVASIVE CARDIO	3689.00
EEG/EMG	1259.00
RADIOLOGY-GENERAL	340.00
PHARMACY-MAIN	1795.35
EMERGENCY-HOSPITAL	2779.00
PRE HOSPITAL EMS	253.00
C.T. SCANNING	2714.00
MAGNETIC RESONANCE IMAGING	6963.00

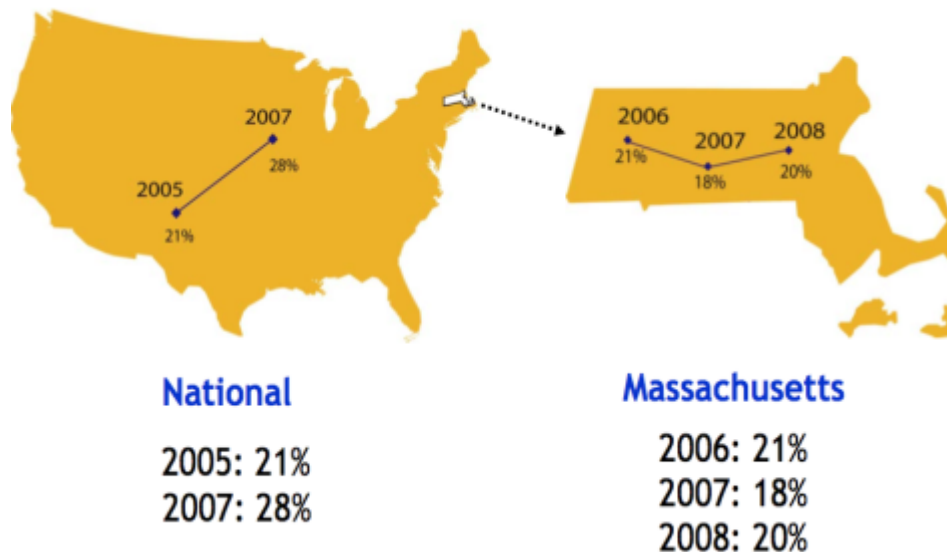
TOTAL CHARGES: 36027.35

USED

RADIOLOGY LAB

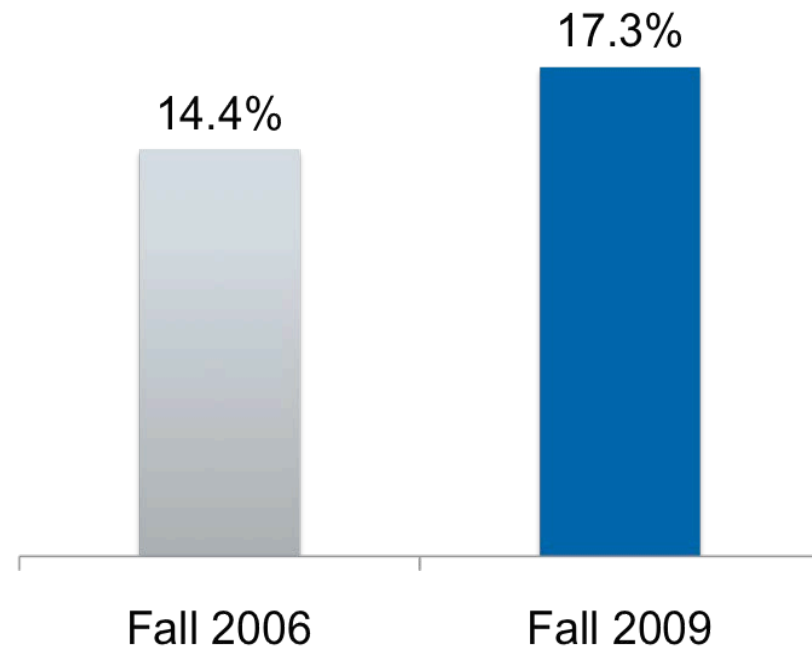
Insurance does not equal affordability.

For example, **98%** of MA residents have insurance, yet...

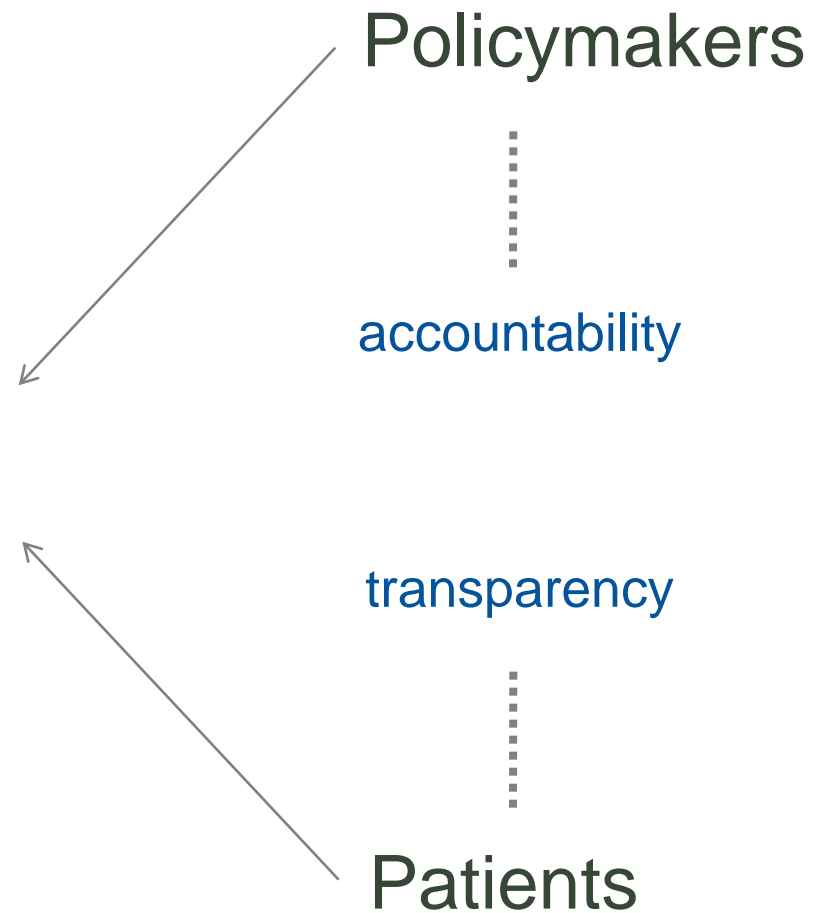


...**medical debt** rates unchanged.

Insured non-elderly adults still report **problems paying medical bills.**



Changing Landscape





New York Times

HEALTH | Patients' Costs Skyrocket; Specialists' Incomes Soar



Sharp Climb

Salaries in some medical specialties have risen much more sharply than in others.



Figures in thousands, adjusted for inflation to 1995 dollars. The actual dollar figures in 2014 are higher.

Source: Medical Group Management Association

[Wood Johnson Foundation.](#)

By 2012, dermatologists — whose incomes were more or less on par with internists in 1985 — had become the fourth-highest earners in American medicine [in some surveys](#), bringing in an average of \$471,555, according to the Medical Group Management Association, which tracks doctors' income, though their workload is one of the lightest.

In addition, salary figures often understate physician earning power since they often do not include revenue from business activities: fees for blood or pathology tests at a lab that the doctor owns or "facility" charges at an ambulatory surgery center where the physician is an investor, for example.

"The high earning in many fields relates mostly to how well they've managed to monetize treatment — if you freeze off 18 lesions and bill separately for surgery for each, it can be very lucrative," said Dr. Steven Schroeder, a professor at the University of California and the chairman of the National Commission on Physician Payment Reform, an initiative funded in part by the [Robert](#)

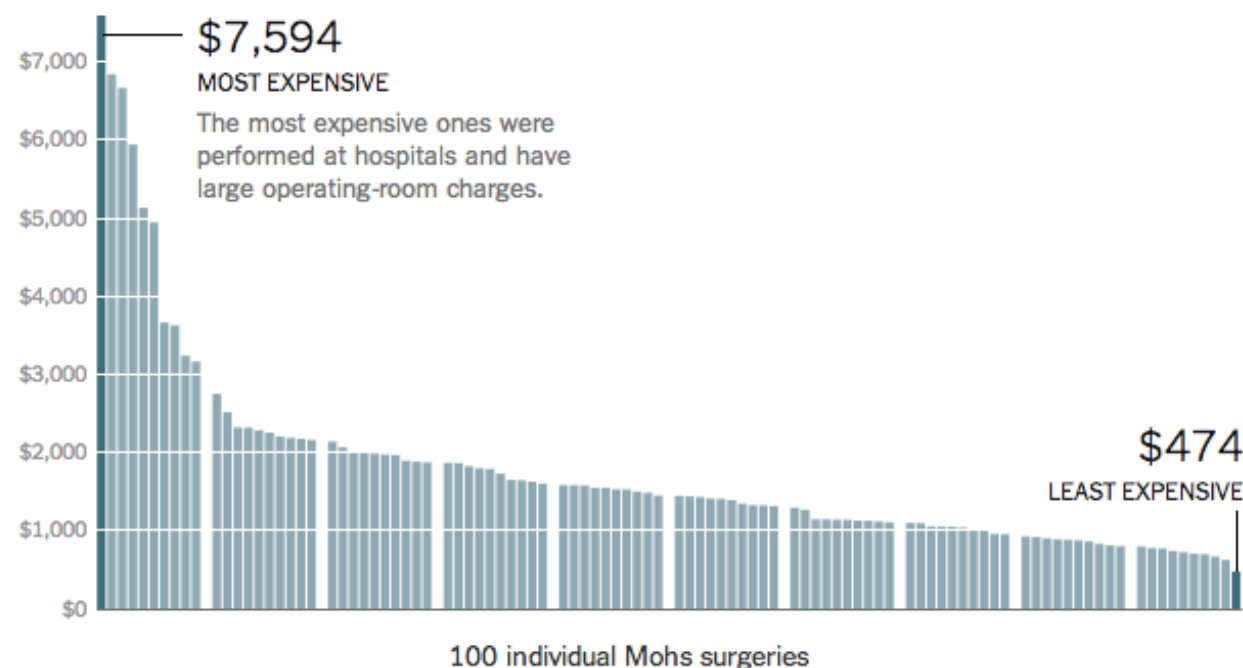
"I felt like I was a hostage," said Ms. Little, who had been told beforehand that she would need just a couple of stitches.

"I didn't have any clue how much they were going to bill. I had no idea it would be so much."

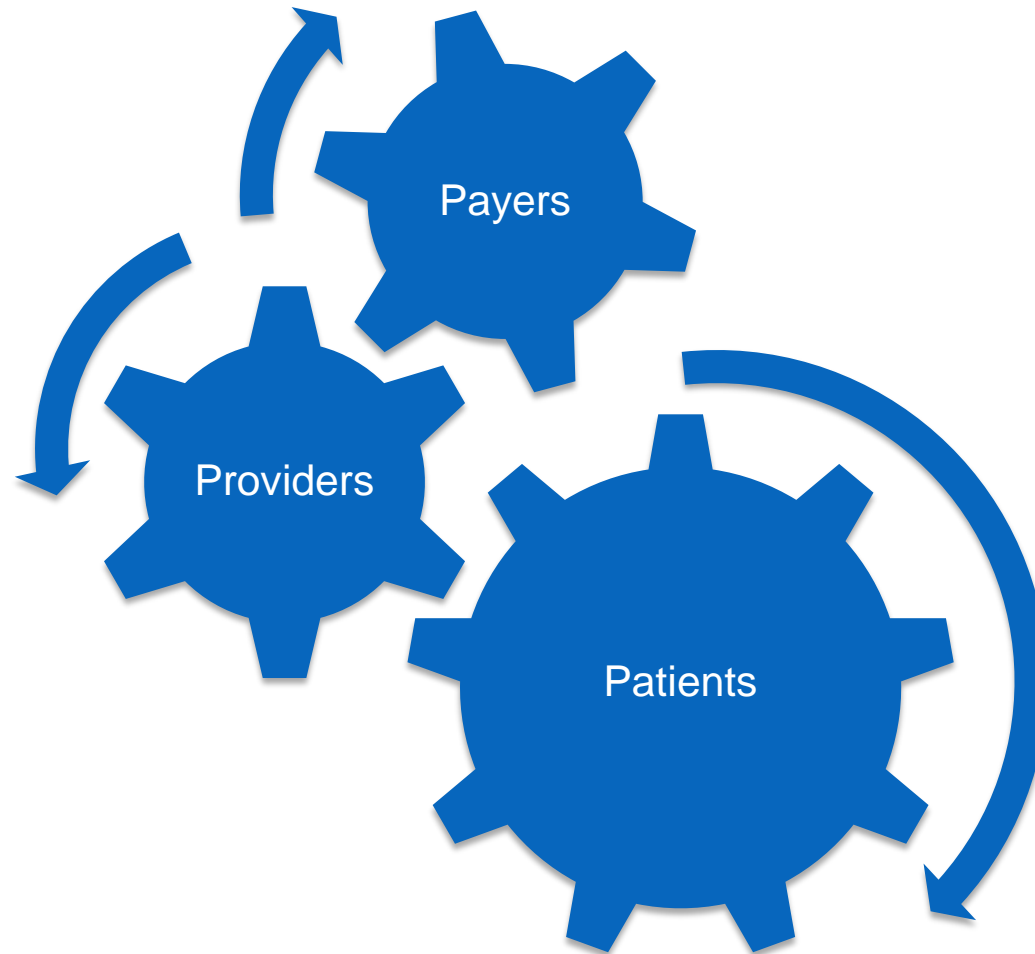
surgery is sometimes used inappropriately. Dr. Brett Coldiron, president-elect of the academy, defended skin doctors as “very cost-efficient” specialists who deal in thousands of diagnoses and called Mohs “a wonderful tool.” He said that his specialty was being unfairly targeted by insurers because of general frustration with medical prices. “Health care reform is a subsidized buffet and if it’s too expensive, you go to the kitchen and shoot one of the cooks,” he said. “Now they’re shooting dermatologists.”

Pricing 100 Mohs Procedures

A random sample of 100 similar outpatient Mohs surgeries shows an enormous range in how much was paid for the procedure. The difference between the most expensive and the least expensive is more than \$7,000.



multiple stakeholders with different information



Policymakers are working on fixing the system...

...but clinicians have an important role to play.



July 2013



Research

Original Investigation

Views of US Physicians About Controlling Health Care Costs

Jon C. Tilburt, MD, MPH; Matthew K. Wynia, MD, MPH; Robert D. Sheeler, MD; Bjorg Thorsteinsdottir, MD; Katherine M. James, MPH; Jason S. Egginton, MPH; Mark Liebow, MD, MPH; Samia Hurst, MD; Marion Danis, MD, MPH; Susan Dorr Goold, MD, MHSA, MA

EDITORIAL

Editorials represent the opinions of the authors and JAMA and not those of the American Medical Association.

Will Physicians Lead on Controlling Health Care Costs?

Ezekiel J. Emanuel, MD, PhD; Andrew Steinmetz, BA

~~36% believe physicians have “major responsibility”~~

93% believe physicians have at least “some responsibility”

Medical educators have issued a call to action.



April 2010, *NEJM*

Cost Consciousness in Patient Care — What Is Medical Education's Responsibility?

Molly Cooke, M.D.



Sep 2011, *Ann Intern Med*

Providing High-Value, Cost-Conscious Care: A Critical Seventh General Competency for Physicians

Steven E. Weinberger, MD



Nov 2011, *Acad Med*

Professionalism, the Invisible Hand, and a Necessary Reconfiguration of Medical Education

Frederic W. Hafferty, PhD, Michael Brennan, MD, and Wojciech Pawlina, MD

Medical educators have issued a call to action.



R E C O M M E N D A T I O N S

The Congress should authorize the Secretary to change Medicare's funding of graduate medical education (GME) to support the workforce skills needed in a delivery system that reduces cost growth while maintaining or improving quality.



doctors are trained to take care of the patient in front of us
... not to assume responsibility for populations

The “system”



The bedside



Overuse is commonly attributed to two phenomena:

1. Financial incentives (to make more money)
2. Defensive medicine (to avoid malpractice lawsuits)

These are not the reasons we will focus on.

Medical litigation is a significant cause of overuse, but...

By one estimate, only about **2.4%** of total healthcare spending is attributable to malpractice claims and defensive medicine.

Component	Estimated Cost (\$B)	Quality of Evidence
Defensive medicine	45.59	Low
Legal expenses	4.13	Moderate
Litigation payments	5.72	Good
Other costs	0.20	Moderate
TOTAL	55.64	

Focusing on ***other*** reasons for overuse is crucial:

1. These reasons don't get much airtime.
1. They are more likely to motivate trainees.
2. We can address them ***right away***, without policy.

Where to start?

We improved *hand washing* in hospitals by **understanding why** it was avoided...



Similarly, we can **reduce waste** in healthcare by first **identifying** reasons for **overuse**.

Hidden Curriculum

- imbalanced focus on identifying rare cases
- sins of omission > sins of commission
- misperception that considering cost is not aligned with patient interests



Teaching Value Project

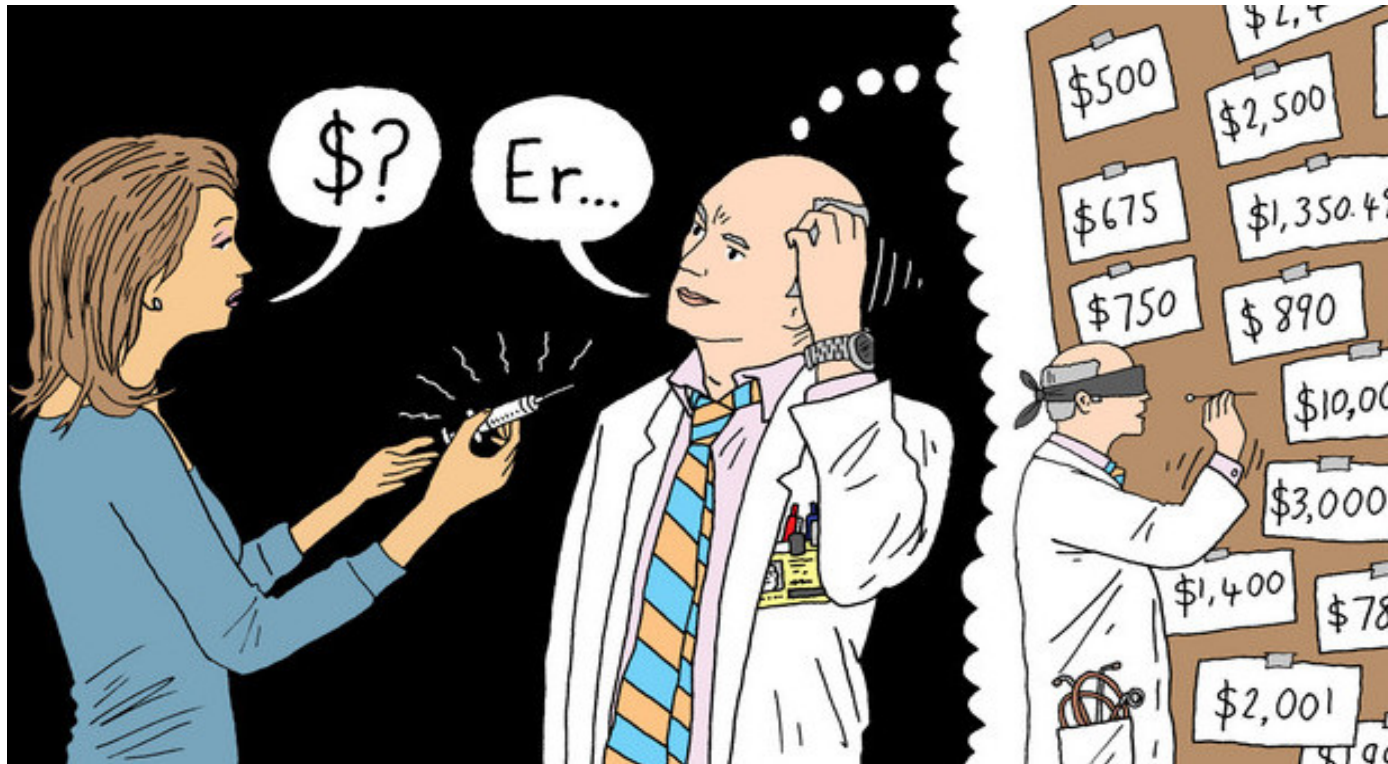
Goal: create **interactive modules that make practicing **value-based care** readily accessible and easily applicable for **trainees**.**



Where to start?

Initially focused on billing process and “prices”

- Transient, system in flux
- Danger of revealing costs without teaching “value”



“Top ten reasons doctors overorder”

www.teachingvalue.org



Insurance does not equal affordability.

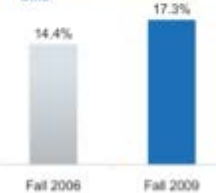
For example, **98%** of MA residents have insurance, yet...



...medical debt rates unchanged.

The Access Project, 2009; Urban Institute, 2009 Health-System Survey, 2010

Insured non-elderly adults still report problems paying medical bills.



Healthcare Access and Affordability Survey, 2010

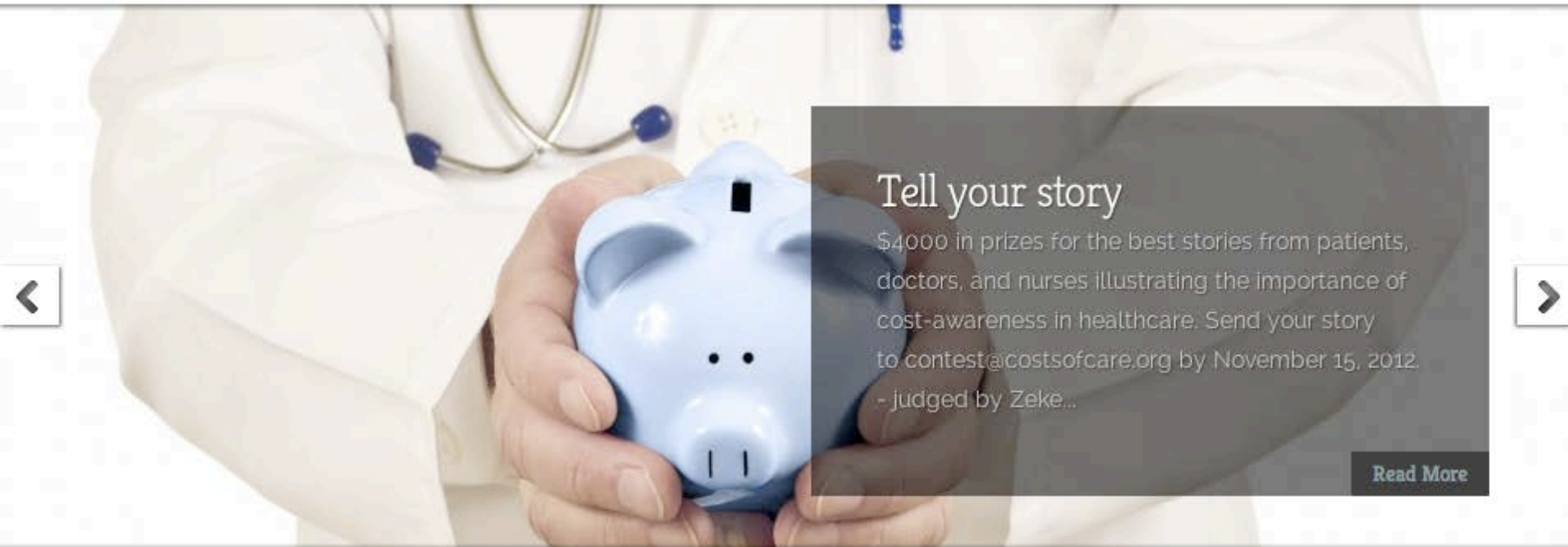
1. According to multiple independent analyses, the US spends in excess of 750 billion dollars on low-value health care, accounting for approximately _____ percent of overall healthcare spending.

- ☐ 10%
- ☐ 20%
- ☐ 30%
- ☐ 40%
- ☐ 50%

2. There is a great debate among politicians, providers and other healthcare stakeholders about how much of this waste can be attributed to malpractice suits and “defensive medicine.” In 2013, a new reputation study by Medscape et al. estimated the total cost of the medical liability system, including both malpractice claims and the cost of defensive practices, to be

- ☐ \$110 or roughly 3.40% of healthcare costs
- ☐ \$889 or roughly 2.4% of healthcare costs
- ☐ \$1100 or roughly 4.6% of healthcare costs
- ☐ \$6500 or roughly 24% of healthcare costs

Costs of Care Essay Contest



Tell your story

\$4000 in prizes for the best stories from patients, doctors, and nurses illustrating the importance of cost-awareness in healthcare. Send your story to contest@costsofcare.org by November 15, 2012. - judged by Zeke...

[Read More](#)



INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

Inertia: don't get swept away

In one study, physicians were made aware of the cost of daily labs...

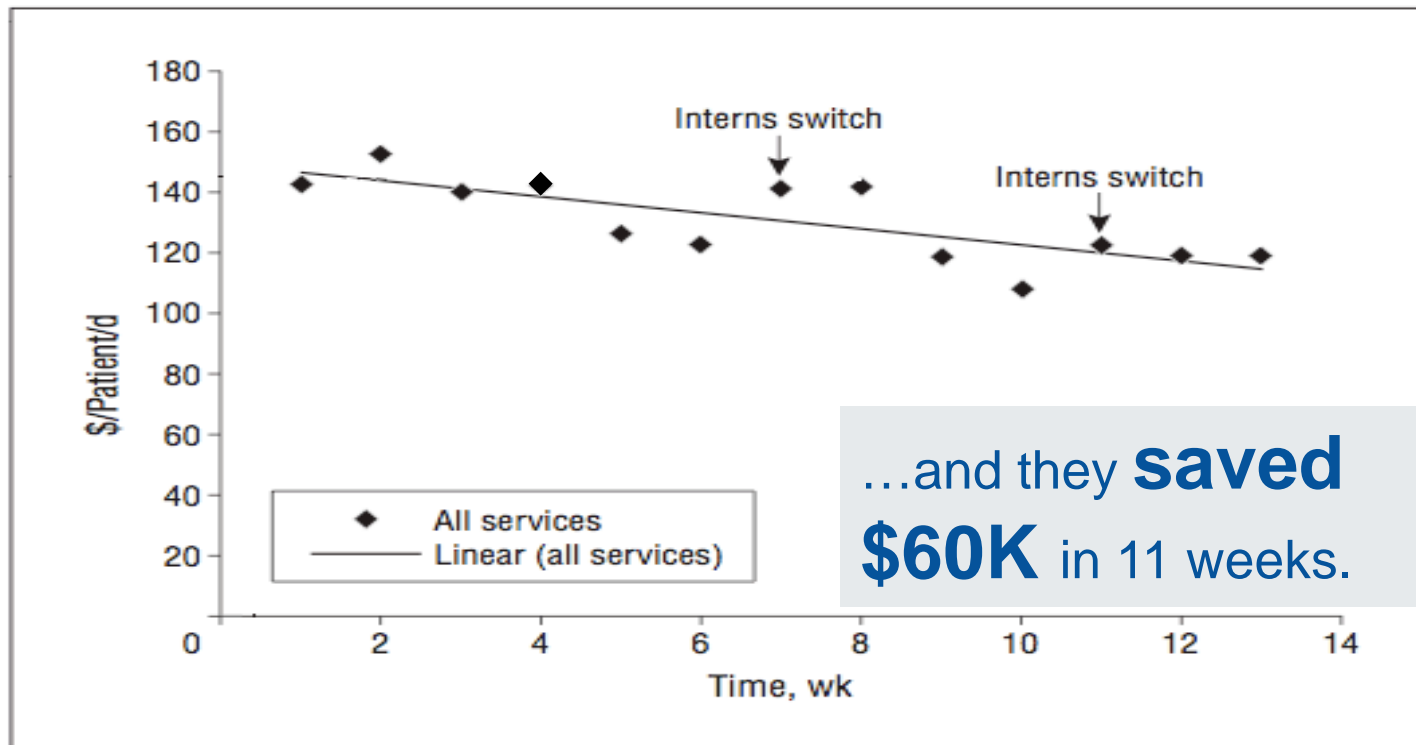


Figure. Weekly value of dollars per patient per day for all services.

Demonstrating Thoughtfulness: or chasing zebras?

A survey of doctors found that many order tests to reassure patients or to look for a **“once in a lifetime”** diagnosis.



Both patients and their physicians seem ok with this...
even when their **clinical outcomes are no different.**

Photograph by Giedo van der Zwan in *National Geographic*.

Jarvik et al. *JAMA*. 2003

Kendrick et al. *British Medical Journal*. 2001.

Patient Requests: educate and ameliorate

They don't even have to ask – patients' **perceived need** for testing alone has been shown to influence physicians.



But **educating patients**, even briefly, has been shown to improve patient recognition of unnecessary testing.

Preemptive Ordering: why wait?

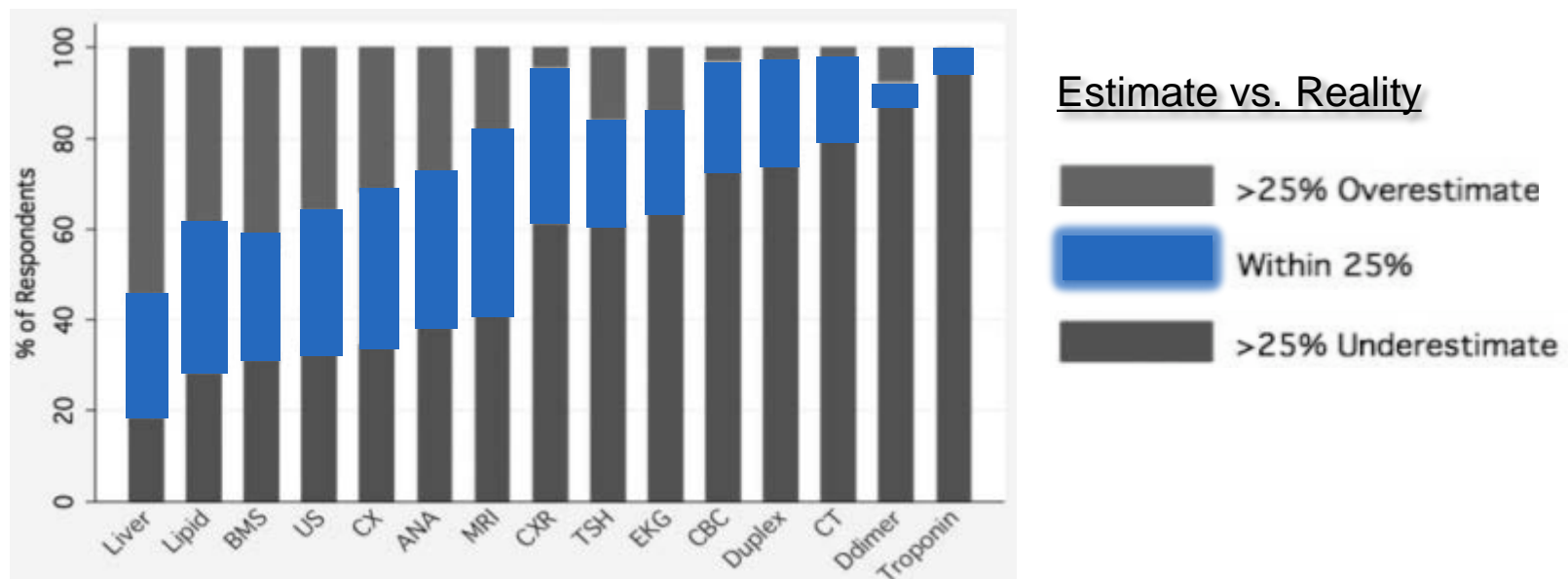
We often order a **bunch of tests at the same time** simply to avoid delaying care.



This behavior almost certainly **increases costs** over time in the form of unnecessary capacity for services.

Prices are Opaque: isn't that expensive?

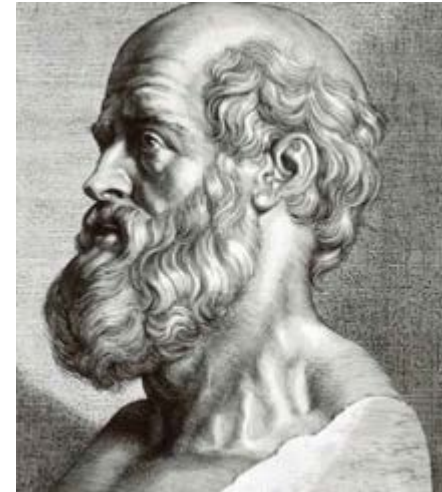
Few of us know how much the services we offer cost...



...nevermind the **financial impact** of our decisions on our **patients** and **society** at large.

How We're Taught: do no harm.

Traditionally, physicians have viewed any **consideration of costs** as a **violation** of the **patient's trust**.



But more recently, trainees have expressed a strong desire to **learn** more about the **costs** of specific medical tests.

Illustration by Peter Paul Rubens at PBS.com

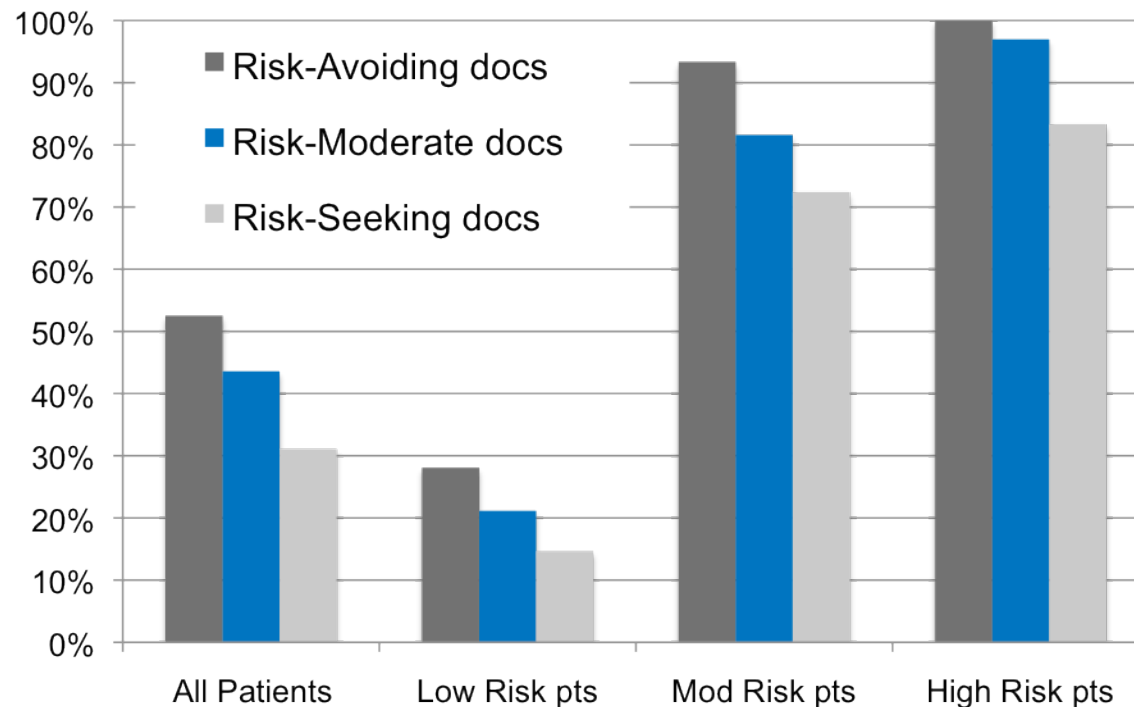
Tek et al. *Journal of Graduate Medical Education*. 2011.

Hall, M. *Making medical spending decisions: The law, ethics, and economics of rationing mechanism*. New York, NY: Oxford University Press. 1997.

Personal Risk Aversion: I got burned once.

In one study of ER physicians' **attitudes** toward **risk**...

...attitudes
closely related
to **rates of
admission**
for chest pain.



Lack of Feedback: autonomy vs. oversight

We fear intrusion...



...but even small prompts can **inform** behavior & **reduce** waste.

Pilot: Overuse Workshop

Item	% Agree
Scenarios portrayed in the video were realistic	100%
This was a useful and effective exercise	100%
I will change my behavior as a result of the exercise	85%

Feedback from National Test Group

“Love the format - the videos with the matching reasons for overuse”

“The debriefs were excellent.”

“An 'ethical' component would be nice.”

“Scenarios are very realistic...all of those are comments that I've heard routinely”



“Spot on in terms of content.”

“Would have been nice to have a quick summary of how the scenario should have gone by evidence-based standards.”

“PGYs are just not comfortable discussing \$\$ with patients.”

Newest Module: **GOTMeDs?**

Cost Conscious Prescribing

- 1. Video Vignette and Debrief**
- 2. Lecture:**
 - PowerPoint
 - Pocket Card
- 3. Practice case**



Screenshot from “GOT MeDS” Video Vignette,
based on actual patient story.



An initiative of the ABIM Foundation

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Lists

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Resources



Resources
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How can physicians and patients have the important conversations necessary to ensure the right care is delivered at the right time? *Choosing Wisely*® aims to answer that question.

An initiative of the ABIM Foundation, *Choosing Wisely* is focused on encouraging physicians, patients and other health care stakeholders to think and talk about medical tests and procedures that may be unnecessary, and in some instances can cause harm.

NEWS FEED

deeceruleo: RT @ABIMFoundation: "Certainly many procedures, tests and prescriptions are based on legitimate need. But many are not."

<http://t.co/gb0rPnZz> #choosingwisely

4 minutes ago from web

ABIMFoundation: Consumer News from @consumerreports - 'Study: Healthy adults should skip

1

Don't prescribe oral antifungal therapy for suspected nail fungus without confirmation of fungal infection.

Approximately half of nails with suspected fungus do not have a fungal infection. As other nail conditions, such as nail dystrophies, may look similar in appearance, it is important to ensure accurate diagnosis of nail disease before beginning treatment. By confirming a fungal infection, patients are not inappropriately at risk for the side effects of antifungal therapy, and nail disease is correctly treated.

2

Don't perform sentinel lymph node biopsy or other diagnostic tests for the evaluation of early, thin melanoma because they do not improve survival.

Patients with early, thin melanoma, such as melanoma in situ, T1a melanoma or T1b melanoma $\leq 0.5\text{mm}$, have a very low risk of the cancer spreading to the lymph nodes or other parts in the body. Further, patients with early, thin melanoma have a 97 percent five year survival rate which also indicates a low risk of the cancer spreading to other parts of the body. As such, the performance of sentinel lymph node biopsy is unnecessary.

Additionally, baseline blood tests and radiographic studies (e.g., chest radiographs, CT scans and PET scans) are not the most accurate tests for the detection of cancer that is spreading as they have high false-positive rates. These tests have only shown benefit when performed as indicated for suspicious signs and symptoms based on the patient's history and physical exam.

3

Don't treat uncomplicated, non-melanoma skin cancer less than one centimeter in size on the trunk and extremities with Mohs micrographic surgery.

In healthy individuals, the use of Mohs micrographic surgery for low-risk small ($< 1\text{cm}$), superficial or non-aggressive (based on appearance under a microscope) squamous cell carcinomas and basal cell carcinomas is inappropriate for skin cancers on the trunk and extremities. In these areas of the body, the clinical benefits of this specialized surgical procedure do not exceed the potential risks. It is important to note that Mohs micrographic surgery may be considered for skin cancers appearing on the hands, feet, ankles, shins, nipples or genitals, as they have been shown to have a higher risk for recurrence or require additional surgical considerations.

4

Don't use oral antibiotics for treatment of atopic dermatitis unless there is clinical evidence of infection.

The presence of high numbers of the *Staphylococcus aureus* (Staph) bacteria on the skin of children and adults with atopic dermatitis (AD) is quite common. While it is widely believed that Staph bacteria may play a role in causing skin inflammation, the routine use of oral antibiotic therapy to decrease the amount of bacteria on the skin has not been definitively shown to reduce the signs, symptoms (e.g., redness, itch) or severity of atopic dermatitis. In addition, if oral antibiotics are used when there is not an infection, it may lead to the development of antibiotic resistance. The use of oral antibiotics also can cause side effects, including hypersensitivity reactions (exaggerated immune responses, such as allergic reactions). Although it can be difficult to determine the presence of a skin infection in atopic dermatitis patients, oral antibiotics should only be used to treat patients with evidence of bacterial infection in conjunction with other standard and appropriate treatments for atopic dermatitis.

5

Don't routinely use topical antibiotics on a surgical wound.

The use of topical antibiotics on clean surgical wounds has not been shown to reduce the rate of infection compared to the use of non-antibiotic ointment or no ointment. Topical antibiotics can aggravate open wounds, hindering the normal wound healing process. When topical antibiotics are used in this setting, there is a significant risk of developing contact dermatitis, a condition in which the skin becomes red, sore or inflamed after direct contact with a substance, along with the potential for developing antibiotic resistance. Only wounds that show symptoms of infection should receive appropriate antibiotic treatment.



Crowdsourcing Competition: Bright Ideas & Completed Innovations



Competition Chairs:
Neel Shah, Harvard
Vineet Arora, U Chicago
Chris Moriates UCSF



Teaching Value & *Choosing Wisely*® Judge Panel

Molly Cooke



ACP

Frank Opelka



ACS

Patrick Conway



CMS

Joanne Conroy



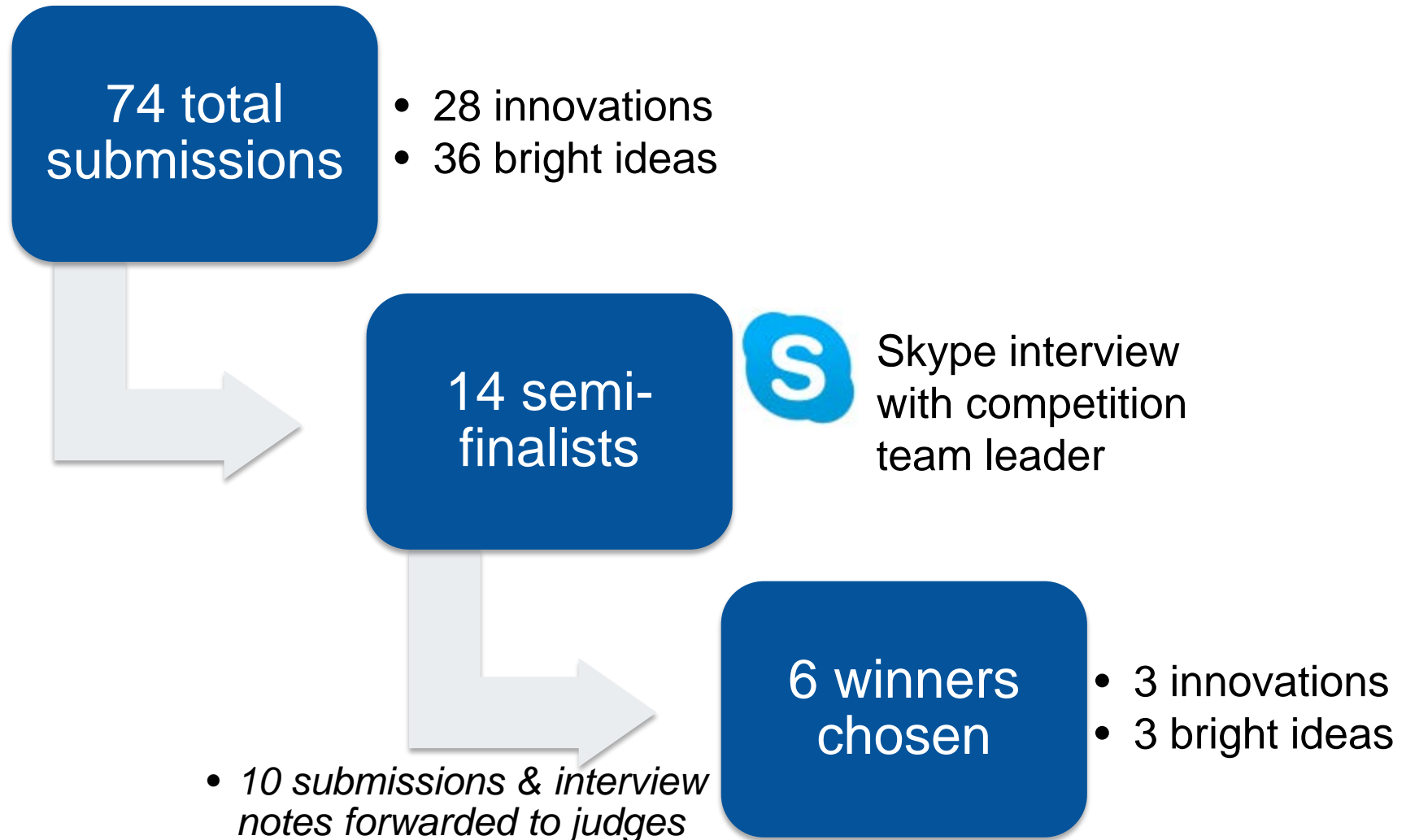
AAMC

Paige Amidon



ACGME

Teaching Value & *Choosing Wisely*®



Teaching Value & *Choosing Wisely*®

Interventions		Description	Example
C	<i>Culture</i>	Valuing cost-consciousness and resource stewardship at the individual and team level	Hospital-wide campaign led by peer-champions to reduce lab tests overuse
O	<i>Oversight</i>	Requiring accountability for cost-conscious decision-making at both a peer and organizational level	Requiring attending to review labs residents order to reduce overuse
S	<i>Systems Change</i>	Creating systems to make cost-conscious decisions using institutional policy, decision-support tools, and clinical guidelines	EHR displays cost of lab tests next to order for specific tests
T	<i>Training</i>	Providing knowledge & skills clinicians need to make cost-conscious decisions	Lecture or workshop on ordering of lab tests

Major Themes

Theme	Example
Friendly competition or “gamification”	I-CARE, Choosing Wisely Canada, Teaching Value AZ
Shame as motivator	GME Dashboards, “App” with feedback of 48h charges
Role Model, Coaches & Champions	“restraint attendings” , “Clinical Coaching” , “lab medicine champions”
Experiential Learning	Review of patient actual bill by medical students
Leverage existing curricula	Incorporate into multimorbidity geriatrics curriculum, “cost-effective” morning report or journal club
Use case vignettes	Do No Harm, Choosing Wisely Canada
Price transparency	EMR shows price
QI projects	Liver ultrasounds, GI prophylaxis

Three Finalists



- **Michelle Lin, New York University**
 - Inspired by hurricane Sandy, developed a resident-led EM curricula on overuse and efficiency for her colleagues



- **Robert Fogerty, Yale School of Medicine**
 - Implemented a case conference 'competition' between residents, interns attendings to see which group could arrive at the diagnosis and be most efficient



- **Amit Pahwa, Johns Hopkins University**
 - Proposed linking clinical data to unique identifiers for each resident to create “GME Dashboards” to be used for benchmarking and feedback of clinical efficiency

[Do No Harm Project](#)[Required Reading](#)[Background Reading](#)[Resident Vignettes](#)[Student Vignettes](#)[Published Examples](#)[Areas Where Harms May
Result from Overdiagnosis](#)[Submission
Instructions/Background](#)[Videos](#)[Contact Information](#)[Housestaff Poster
Presentations](#)

----- WHAT'S NEW -----

The Do No Harm Project has been named an innovation winner of the ABIM Foundation and Costs of Care Teaching Value and Choosing Wisely Competition! Read about it here:

<http://tinyurl.com/muet7ty>

Congratulations to Meredith

Welcome to The Do No Harm Project - Department of Medicine

University of Colorado School of Medicine

Our goal:

To raise awareness among trainees the importance of doing "as much as possible for the patient and as little as possible to the patient."¹ We often do too much to patients that is of little potential benefit and exposes them to unnecessary harm. As an example, 30% of health care costs in U.S. are on interventions that don't benefit patients and 5% of the nation's gross national product is spent on tests and procedures that do not improve outcomes.^{2,3}

We need a Do No Harm Project:

Harms from overtesting, overdiagnosis, and overtreatment are a serious threat to the health of our patients. We are thus *ethically obligated* to limit overuse when possible. Harms of overuse have not traditionally been taught to medical trainees and there are few incentives to pay attention to overuse: performance measures and payment incentives reward doing more and there is a dominant cultural belief that more care is better.

This stuff is going to be on the boards:

The next edition of ACP's Medical Knowledge Self-Assessment Program (MKSAP) will have a focus on optimal diagnostic and treatment strategies, based upon considerations of value, effectiveness, and avoidance of overuse and misuse. Additionally, a high value curriculum for residents has been developed by the ACP.⁴

Important people are talking about the importance of avoiding overuse:

The Choosing Wisely Campaign: top 5 lists from specialty societies to raise awareness of "overuse or misuse of medical tests and procedures that provide little benefit, and in some instances harm."⁵ Additionally, ACP Executive Vice-President and CEO Steven Weinberger has proposed high value care and resource stewardship as



JAMA Internal Medicine

Formerly Archives of Internal Medicine

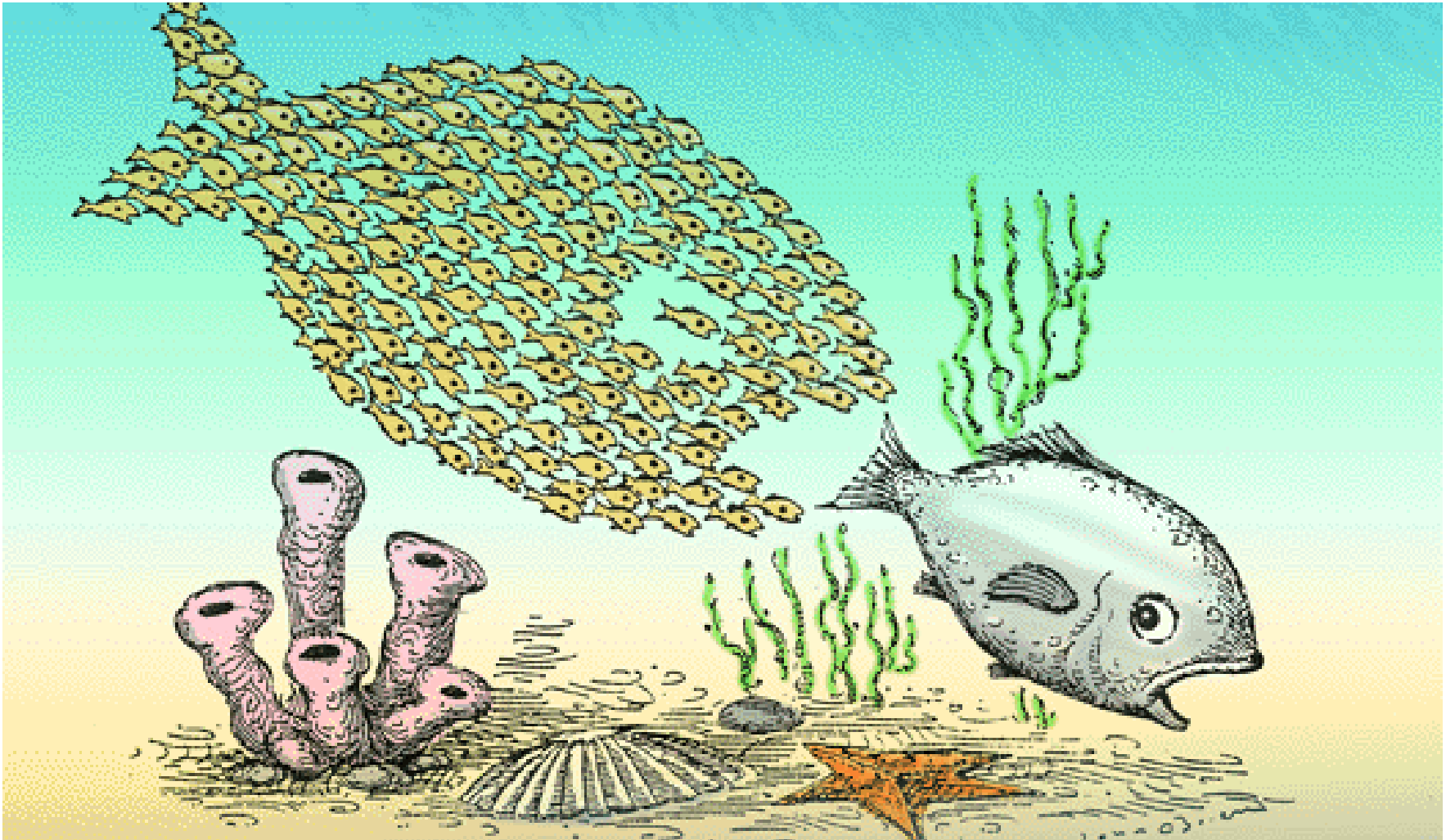
“Teachable Moments”: Trainee Perspectives –
(Accepting articles now!)

- First author must be a trainee
- “Story from the frontlines” illustrating avoidable care
- “Teachable Moment” explaining the evidence
- Suggested total length: 600 words

Lessons

- Enthusiasm for teaching value across professional disciplines and specialties from all levels of training
- Importance of local champions to solve for operational and cultural challenges
- Questions of impact, sustainability, and scalability remain

“Culture Eats Strategy For Lunch”





Our Future Together

- **THE BEST CARE AT THE LOWEST COSTS** for our patients
- **Provide resources for clinicians:**
 - www.teachingvalue.org
 - Teaching Value Modules
 - Teaching Value Forum
- **Create a community of educational leaders**
- **The “Teaching Value and Choosing Wisely” Challenge coming soon in October!**



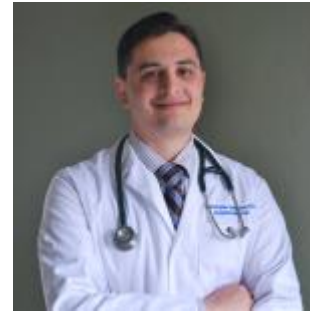
Teaching Value Team



Vineet Arora, MD MAPP
University of Chicago



Neel Shah, MD
Harvard Medical School



Chris Moriates, MD
UCSF



• Other Team Members

- Gregory Menveille
- Laura Ruth Venable
- Jeanne Farnan, MD MHPE
- Mark Saathoff
- Rupali Kumar, MS3
- Jay Bhatt, DO



Andy Levy, MD (PGY-2)
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- Daniel Wolfson
- Leslie Tucker
- John Held



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Resources

In the era of Travelocity and Yelp, it's only a matter of time before price and quality transparency come to healthcare. Want to know how much your healthcare visit will cost? Getting the answer is still not...

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Now Your Turn...

"COST" Framework for High-Value Care Interventions

- **"COST" Worksheet (5 mins)**

- Reflect on your own about the existing barriers/assets at your local institution
 - Describe potential strategies for implementation in your local clinical environment

Interventions	Description	Example	Predisposing Factors (Barriers or Assets) in Your Local Clinical Environment	Potential Strategies to Apply in Your Local Clinical Environment
COST	Culture	Valuing cost-consciousness and resource stewardship as practiced standards of medical professionalism at the individual and team level.	Hospital-wide campaign led by peer-champions to raise awareness regarding overuse of lab tests	*
	Oversight	Requiring accountability for cost-conscious decision-making at both a peer and organizational level	Requiring an attending to review the labs that residents order to promote better stewardship	*
	Systems Change	Creating supportive systems to make cost-conscious decisions using institutional policy, decision-support tools, and evidenced-based clinical guidelines.	Electronic health record displays costs of lab tests next to order for specific tests	*
	Training	Providing the knowledge, skills, and tools clinicians need to make cost-conscious decisions in their clinical environments.	Lecture or workshop on ordering of lab tests	*

- **Share with your neighbor (5 mins)**

- **Share with someone you don't know (5 mins)**

- **Report Out (5 mins)**

Observations about Contest

● FINER Criteria

- Tradeoff between feasibility & novelty
 - Feasible to spread but not novel
 - Novel but hard to know if feasible elsewhere

FINER	Explanation
Feasible	Possible to do, can be spread
Interesting	Method, tool, or learner
Novel	Employs new way of doing things
Ethical	Unbiased, fair, equipoise
Relevant	Related to broad audience of educators