Striving for Value in Pediatrics

Association of Administrators in Academic Pediatrics (AAAP)
2015 Annual Meeting

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University of Pennsylvania

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Disclosures

- The speaker has no relevant financial interests or affiliations with the manufacturer or distributor of any medical products, devices or services to disclose.

- The speaker will not be discussing investigational or unlabeled uses of products and/or services.

Learning Objectives

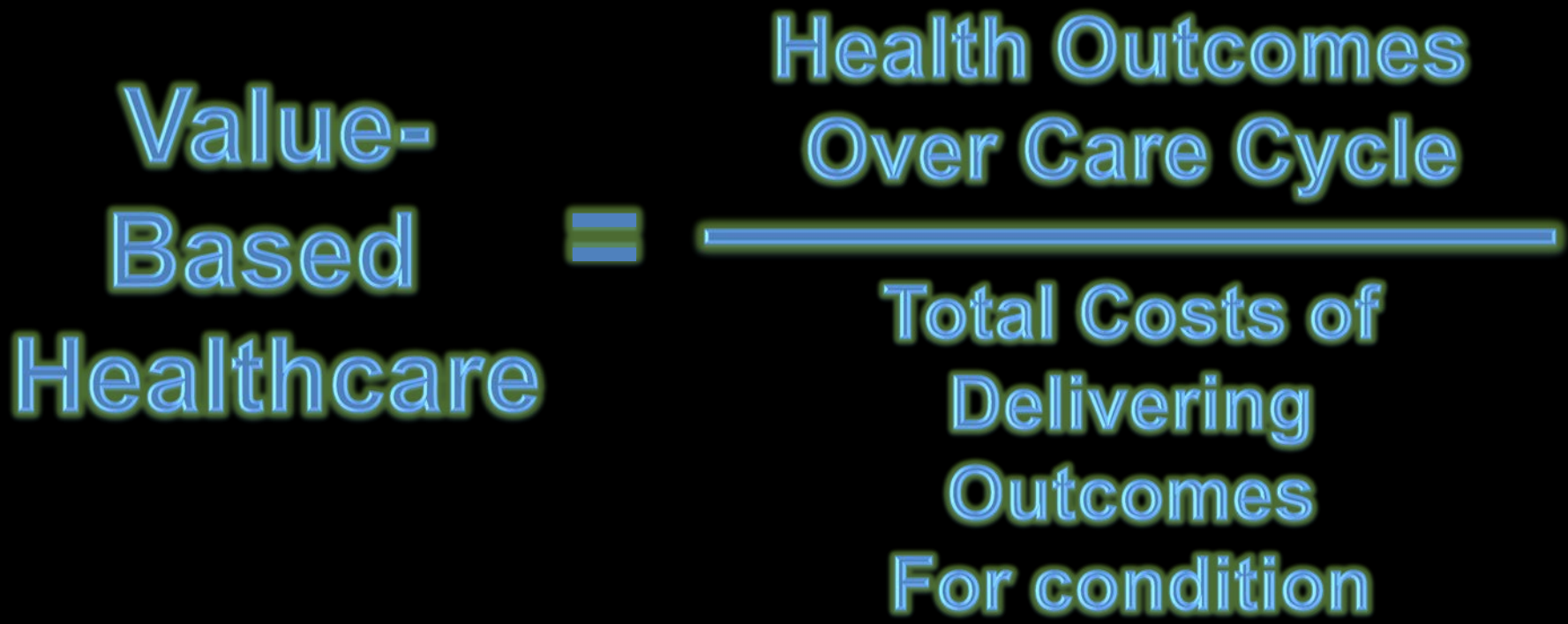
- Define high-value health care.
- Recognize the urgent need for focus on value in healthcare delivery in the United States.
- Review opportunities and challenges to an emphasis on value for pediatric healthcare and academic medicine.

3-year-old male, history of asthma, hospitalized for 2 nights for status asthmaticus via the emergency department

What was the value?

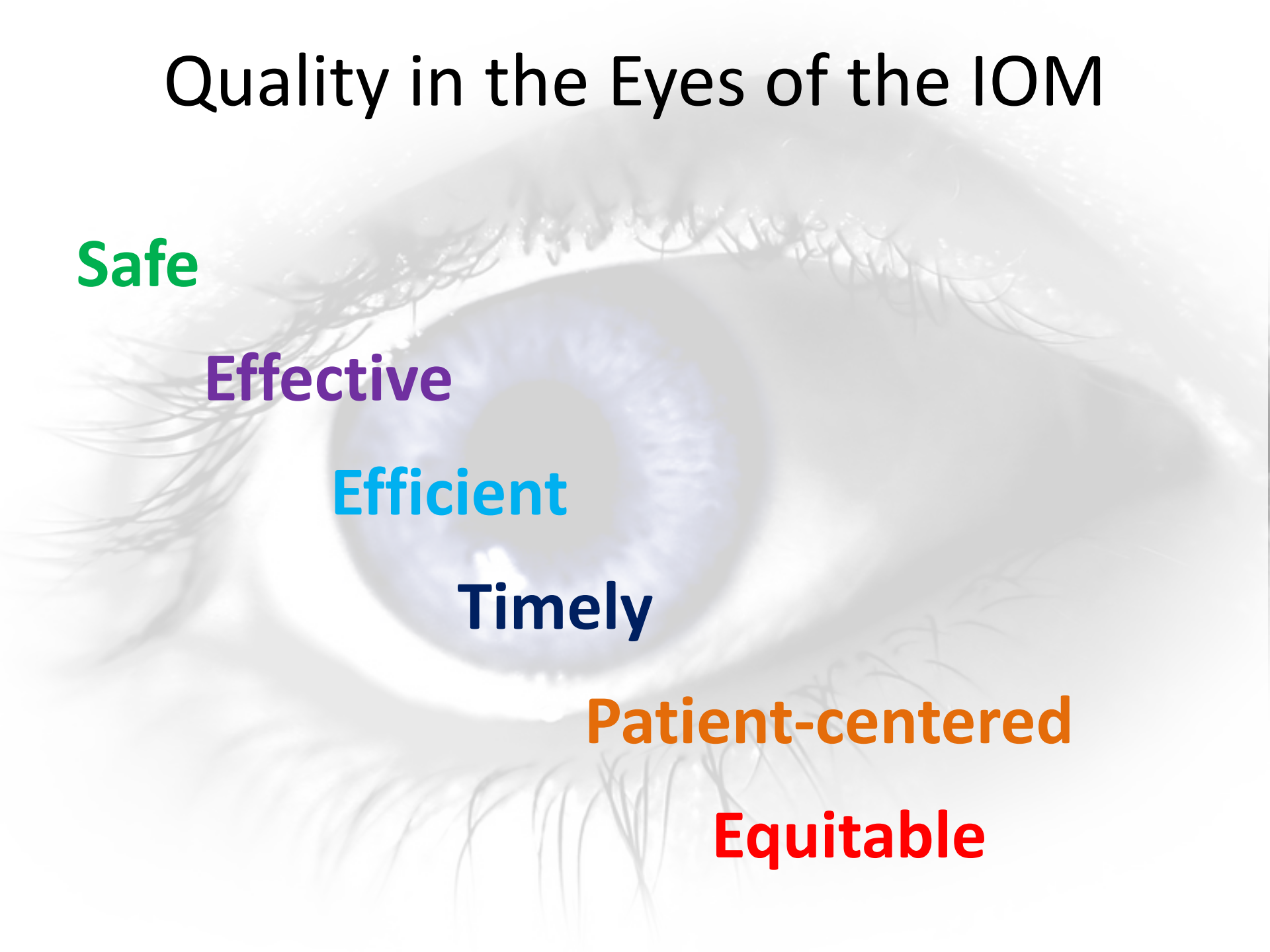
Define high-value health care.

$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$



Adapted from Michael Porter, Value Based Healthcare

Quality in the Eyes of the IOM



Cost

expenditure of something, such as time or labor, necessary for the attainment of a goal

Direct or Indirect Costs

Fixed or Variable Costs

Marginal or Incremental Costs

Short- or Long-term Costs

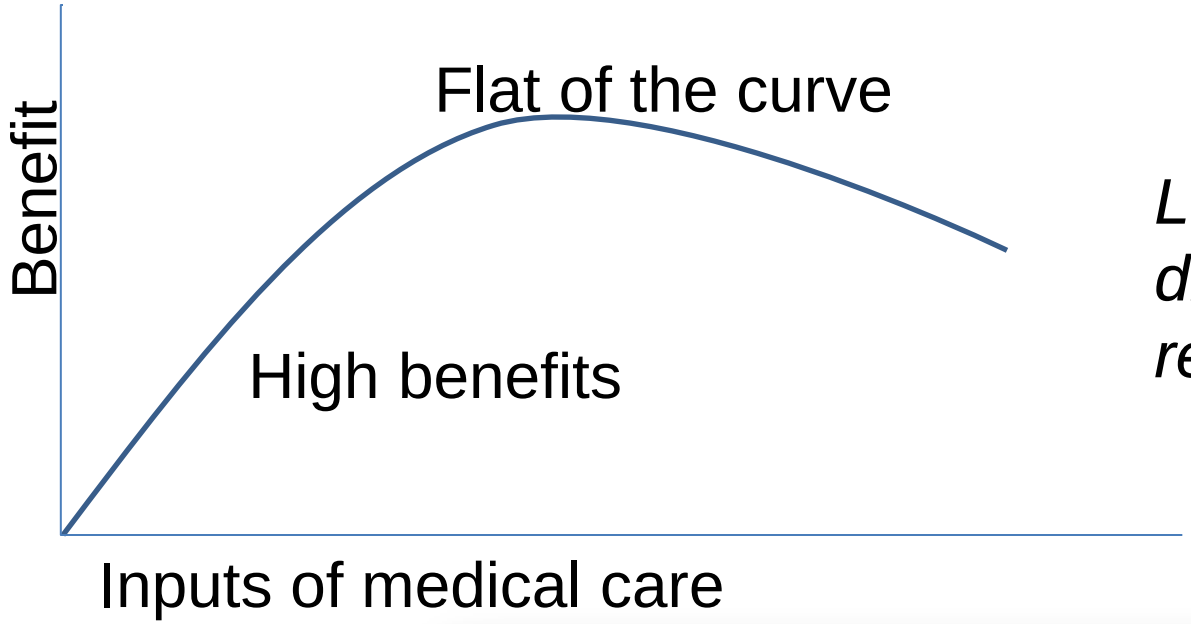
Opportunity or Real Costs

Cost = Price ✖ Quantity

“A billion here, a billion there, and pretty soon you're talking real money.“
– Attributed to Senator Everett Dirksen

What is Not High-Value?

- Doing more without improvement in quality – or actually doing harm



Law of diminishing returns

JAMA®
Online article and related content current as of April 10, 2009.

Avoiding the Unintended Consequences of Growth in Medical Care: How Might More Be Worse?

Elliott S. Fisher; H. Gilbert Welch

JAMA. 1999;281(5):446-453 (doi:10.1001/jama.281.5.446)

Value ≠ Cost ≠ Quality

- Better health – and better, more reliable healthcare delivery is a key driver of reducing costs and increasing value
- High-cost interventions may provide good value because they are highly beneficial
- Low-cost interventions may have little or no value if they provide little benefit or increase downstream costs
- **Attention to value is not intended to discourage appropriate or beneficial care**

Value


Transitions
Condition
Excellence
Specific
Prevention
Efficiency
Time
Outcomes
Physicians
Common Sense
Comfort
Definitions
Certainty
Effort
Families
Expertise
Important
Accuracy
Complex
Necessity
Subjective
Quality
Ideal
Prices
Waste
Lacking
Costs
Improvement
Access
Ethics
Money
Metrics
Geography
Nursing
Affordability
Average
LongTerm
Mental Health
ACA
ACOs
EMRs
Arbitrary
Helpful
Benefit
Value
Tradeoffs
Workflow
Research
Compliance
Primary Care
Medications
Pharma
Administration
Return
Investment
Future
Rationing
Excessive
Trust
Bundles
Professionalism
Payforperformance
Reasonable
Unknown
Consultations
Pathways
Productivity
Readmissions
Business
Hospitalizations
Reliable
Surgery
Product
Respectful
Opportunity
Growth
Tests
Tangibility
Single Payor
Medical Home
Walmart
XXXXX
Appropriateness
Chronic Conditions
CMOP
Yield

Recognize the urgent need to focus on value in healthcare

Why Care About Quality, Cost, Value

Low-value system / Waste

Lack of knowledge

Payment system changes

Stewardship / Duty to patients

Professional accountability

Opportunity costs

Transparency & Public scrutiny

Cost accounting

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We Spend

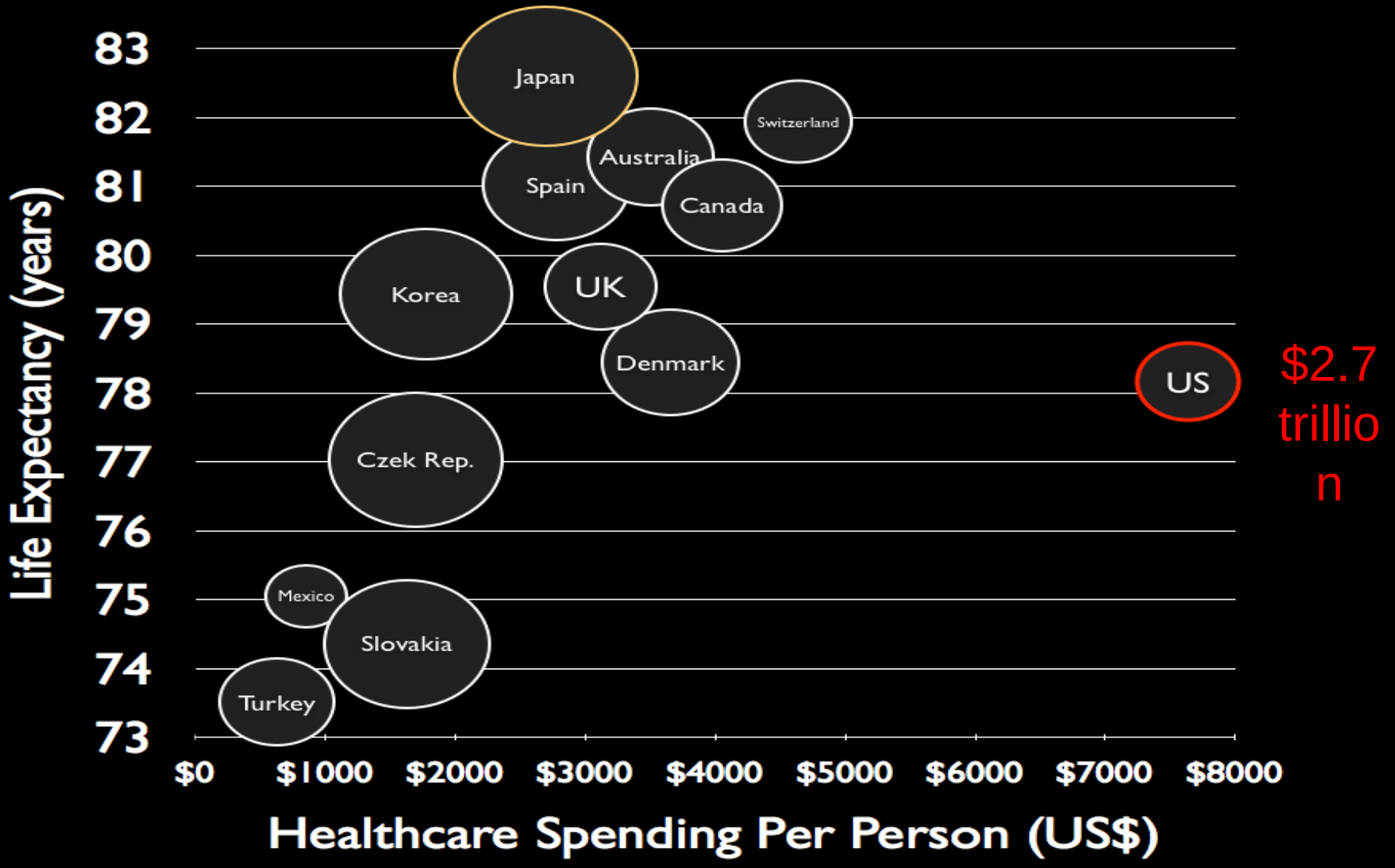
- $2.7 trillion
- $7000
- $837 billion
- $95,547,945

We Spend a Lot

- $2.7 trillion spent annually on health care
- $7000 per American
- $837 billion spent on hospital care
- $95,547,945 spent per hour on hospital care

“Paradox of excess and deprivation”

Enthoven & Kronick 1989

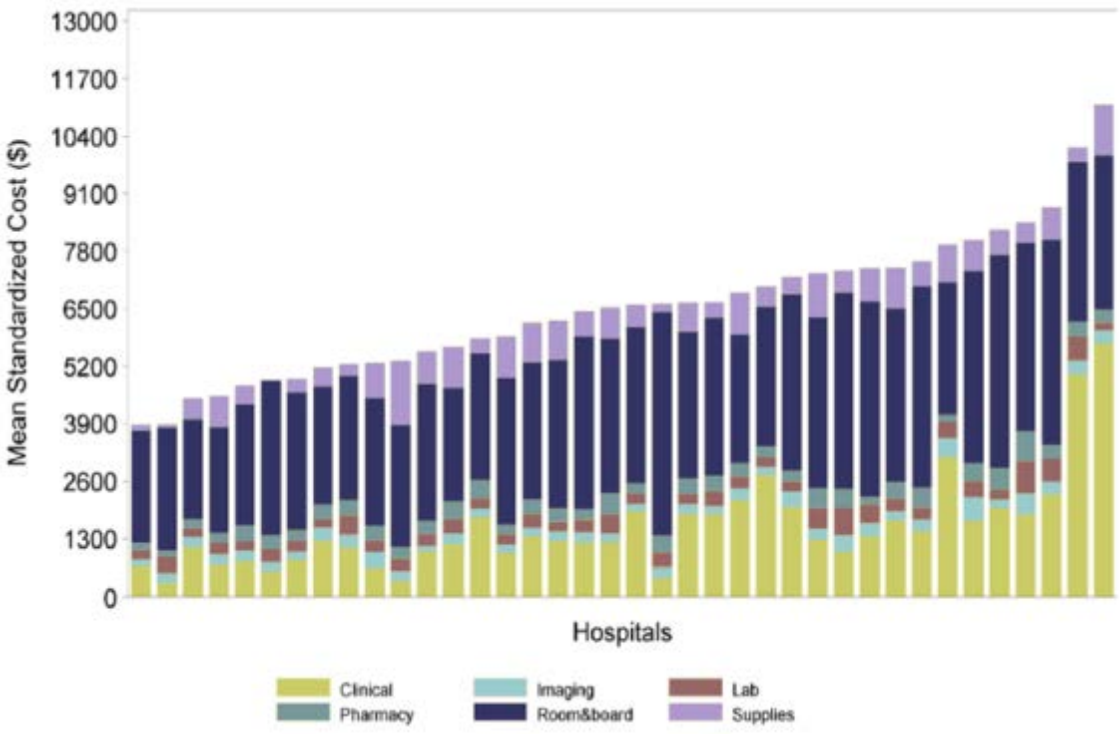


We Waste A Lot of What We Spend

$765 Billion in "Waste"

The Health Care Imperative: Lowering Costs, Improving Outcomes. Institute of Medicine 2011

We Have Unwarranted Variation



Medicare Spending per Enrollee

Pediatric Condition Cost by Cate

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ACA and Beyond

- Accountability
- Transparency
- Value
- Stewardship

Where Are We Going

Pay for services/procedures
Fee for service
Incentives for volume
More facilities & capacity
Hospital-centric
“Savings” accrue to payers mostly

Pay for value
Bundled to global payments
Incentives for outcomes
Appropriate settings
Continuum/Population-health
Shared savings

Payment System Changes are Relevant

- Lower payments are expected from private and public payers
- Episodes and bundling payment shift financial risk to providers
- Exclusion of "high cost" providers from networks, tiers
- Consumers will bear greater share of cost (copayments, coinsurance, deductibles)

- AMC's mission-driven activities in advancing patient care, conducting innovative research, providing quality education, and community engagement depend on margins from clinical care

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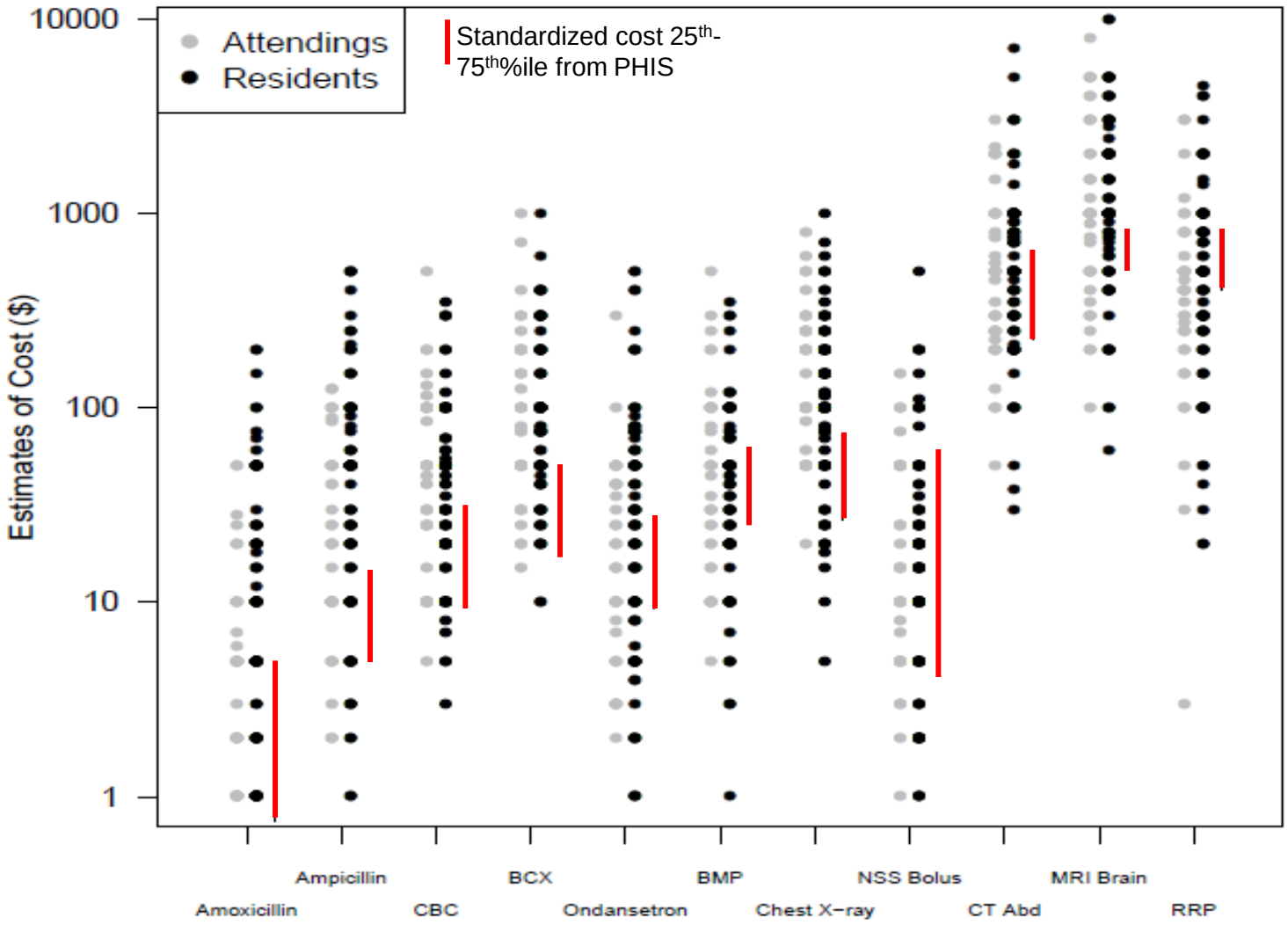
Costs: We Just Don't Know



Rock TA, Xiao R, Fieldston E. General pediatric attending physicians' and residents' knowledge of inpatient hospital finances. Pediatrics.

The Need for Physician Education in Health Care Costs to Enhance Efficiencies in Care Delivery

The article by Rock et al[1] in this issue of *Pediatrics* highlights an important issue surrounding the challenge of high health care costs in the United States: the lack of knowledge by physicians of cost of care. Their research provides 3 key messages that can inform future health care policies. First, physicians generally have limited knowl-

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KEY WORDS

cost containment, health care costs, physician education, quality, value

- "there is an urgent need for implementing educational strategies to provide the necessary training for physicians at every level of experience."

Sachdeva R. Pediatrics 2013

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Transparency is Arriving

FOR IMMEDIATE RELEASE
April 9, 2014

Contact: HHS Press Office
(202) 690-6343

Historic release of data gives consumers unprecedented transparency on the medical services physicians provide and how much they are paid

Today, as part of the Obama administration's work to make our health care system more transparent, affordable, and accountable, Health and Human Services (HHS) Secretary Kathleen Sebelius announced the release of new, privacy-protected data on services and procedures provided to Medicare beneficiaries by physicians and other health care professionals. The new data also show payment and submitted charges, or bills, for those services and procedures by provider.

The New York Times

How to Charge $546 for Six Liters of Saltwater

By NINA BERNSTEIN

It is one of the most common components of emergency medicine: an

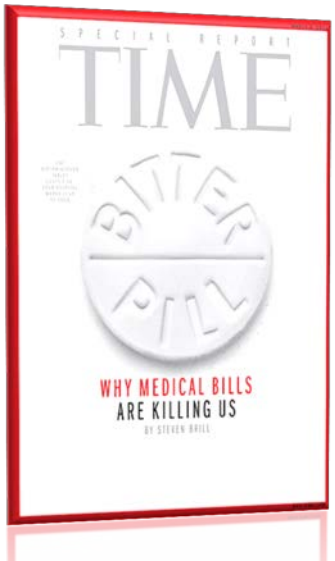
[A hospital spokeswoman] defended the markup as "consistent with industry standards." She said it reflected "not only the cost of the solution but a variety of related services and processes," like procurement, biomedical handling and storage, apparently not included in a charge of $127 for administering the IV and $893 for emergency-room

The Pricing Of U.S. Hospital Services: Chaos Behind A Veil Of Secrecy

An economist's insights into what causes the variation in pricing, and what to do about it.

by Uwe E. Reinhardt

ABSTRACT: Although Americans and foreigners alike tend to think of the U.S. health care system as being a "market-driven" system, the prices actually paid for health care goods and services in that system have remained remarkably opaque. This paper describes how U.S. hospitals now price their services to the various third-party payers and self-paying patients, and how that system would have to be changed to accommodate the increasingly popular concept of "consumer-directed health care." [*Health Affairs* 25, no. 1 (2006): 57–69]



All In | August 26, 2013

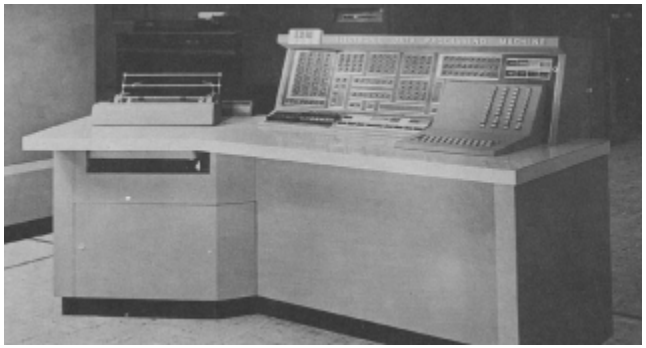
Why do 6 bags of salt water cost you $546?

Chris Hayes explains how the out of control health care system leads to costs of hundreds of dollars for things as simple as saline solution and how we can change that by making health care reform even stronger.

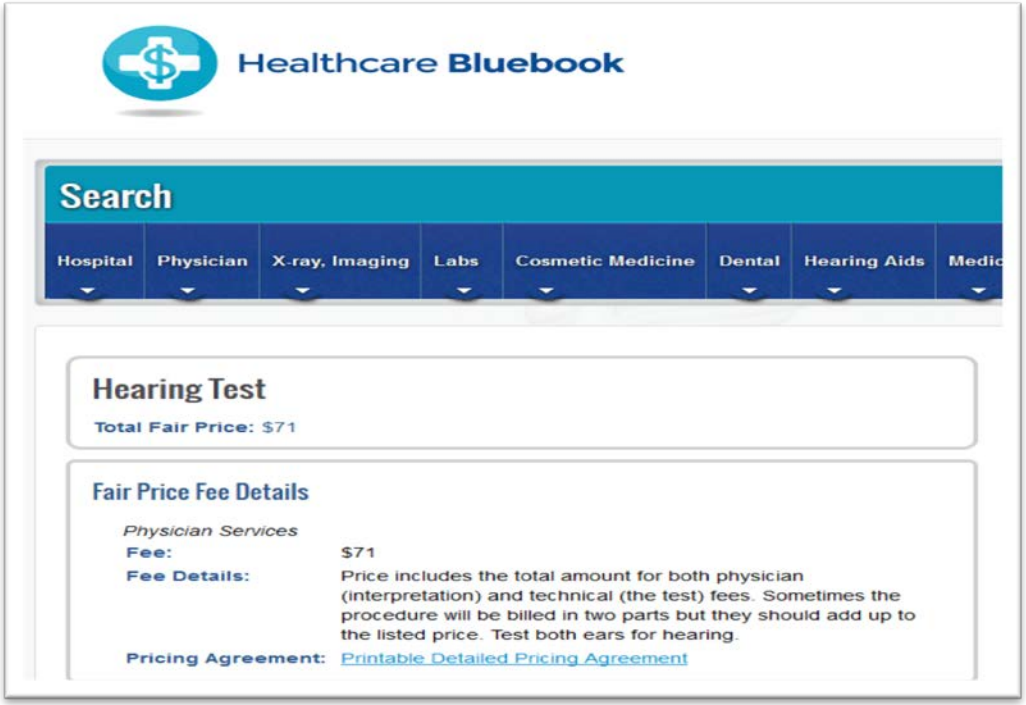
Share This:

Costs Will be Known

- Cost accounting systems are being installed



- Consumers can access comparative costs data online



Why Care About Quality, Cost, Value

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Lack of knowledge

Payment system changes

Stewardship / Duty to patients

Professional accountability

Opportunity costs

Transparency & Public scrutiny

Cost accounting

We walked the halls of CHOP and asked patients the same question:

If you could give one gift to every child at CHOP to cheer them up, what would you give them?

"**A puppy,** because they are cute."

Kenya

AGE 8 • ONCOLOGY

"**Socks!** The socks they have right now aren't fun, and happier-looking socks would brighten your mood."

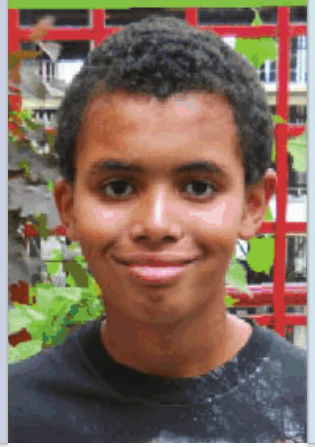
Sara

AGE 17 • GI

"**A million dollars** to pay off their insurance."

Samsan

AGE 10 • GI



"**A stuffed animal,** so they have something to hug."

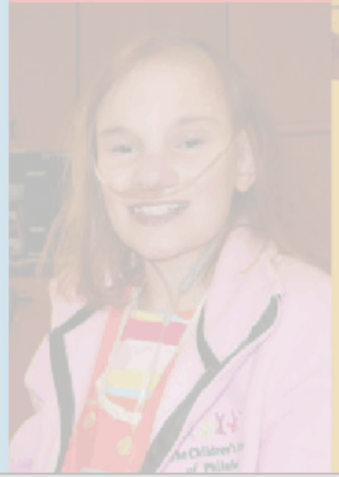
Logan

AGE 23 MONTHS • CARDIOLOGY

"**A dog,** because it will make them feel better."

Abigail

AGE 13 • CARDIOLOGY



"**A 'Mario Kart,'** so they will be able to drive."

Matthew

AGE 5 • CARDIOLOGY

Duty to Patients

- Risks to being identified as the "high cost" provider/system
  - Aggressive utilization review
  - Placement in high-cost tier
  - Patients / families having to bear more of costs
  - Non-contracting

Implications for Families

- Tiering can restrict access for high-needs families akin to pre-ACA policies
- Those using the exchanges are unfairly penalized for their children in determining subsidies
- Narrow networks may extend to employer-based insurance
- Instability in insurance market may lead to higher premiums and out-of-pocket costs in near-term

Duty to Patients & Society

- As pediatricians, we care about health & well-being achieved from medical care & scientific research *(that requires funding)…*

- But also from…
  - Schools & libraries
  - Safe roads & bridges
  - Public services
  - Clean air & water

Gruber J, Schreiber N. Health Care Reform: What It Is, Why It's Necessary, How It Works, 2011.

Stewardship

"…it is the responsibility of the medical profession to become cost-conscious and decrease unnecessary care that does not benefit patients…"

– Weinberger, Ann Int Med, Oct 2011

stew·ard·ship

noun \ˈstü-ərd-ˌship

the conducting, supervising, or managing of something;

careful and responsible management of something entrusted to one's care

The Road Ahead

- **Early Payment Reform: bundled pricing, increased risk sharing**
- **Intermediate Payment Reform: more value-based purchasing and risk**
- **Long Term Payment Reform: Episode of care management and reimbursement; Global capitation?**
- **Imperatives: Reduce costs and re-engineer care models and processes to enhance value**

The Job to Be Done

"People don't want a quarter-inch drill. They want a quarter-inch hole."

– Theodore Levitt, Harvard Business School

Innovation is about getting the job done in a way that increases value

Business Model Innovation

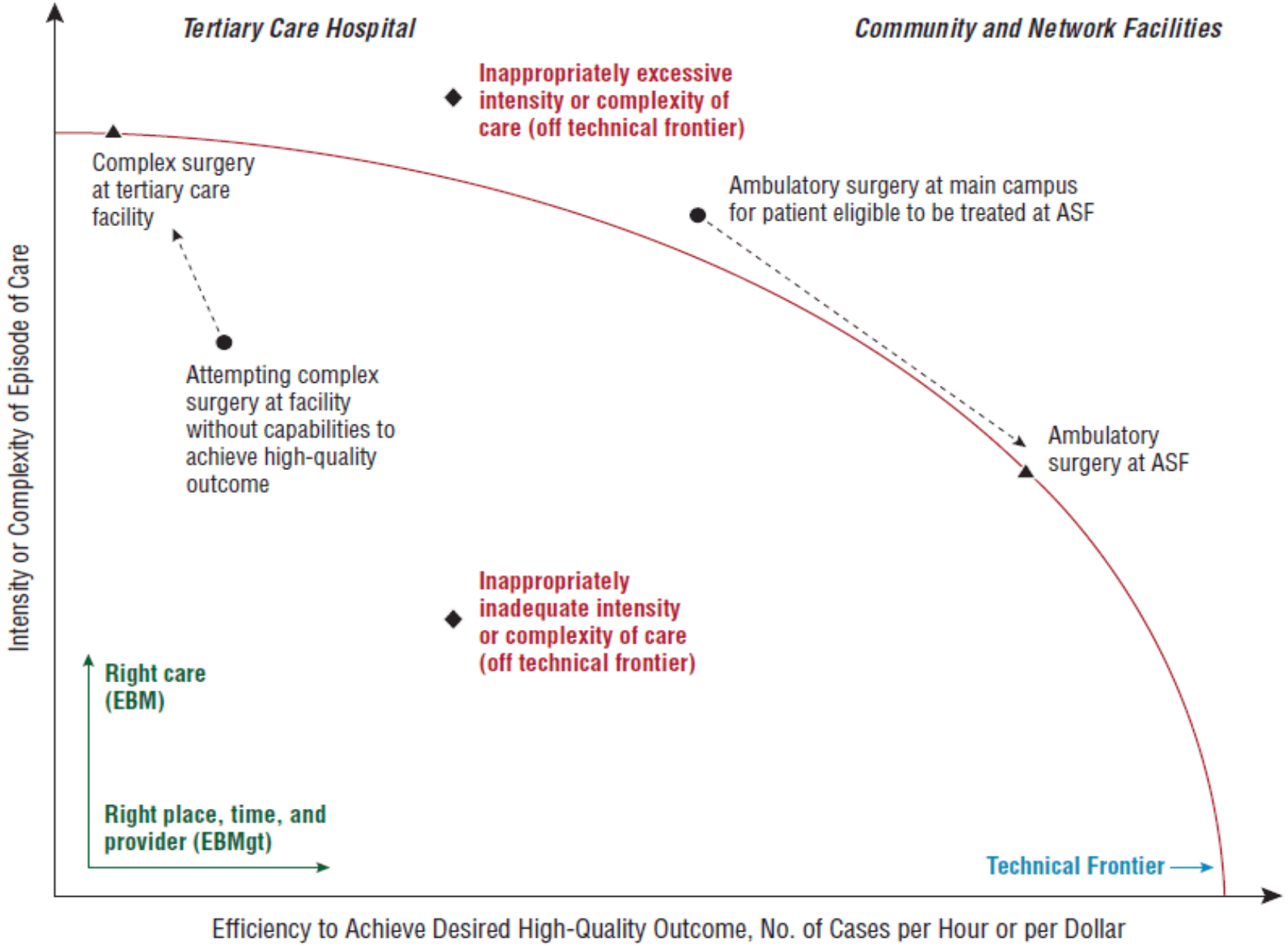
- Emphasis on ***how*** we do things as much, if not more, than *what* we do, to enhance **value**

Netflix innovated on how DVDs are delivered, not the DVD itself

- Right care, right place, right time, right provider to enhance value → business model innovation

Application of Business Model Innovation to Enhance Value in Health Care Delivery

Fieldston, Terwiesch, Altschuler
JAMA Peds 2013



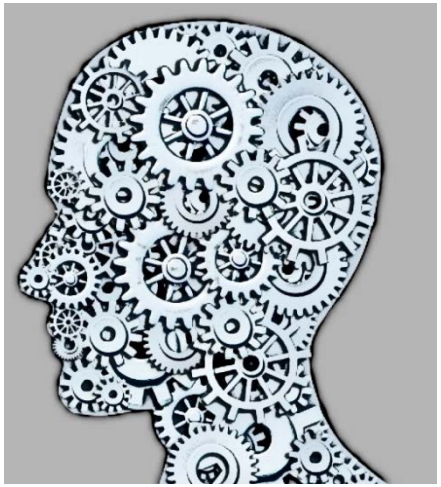
The Job to Be Done

"People don't want a quarter-inch drill. They want a quarter-inch hole." – Theodore Levitt, Harvard Business School

What do you want? We want? Parents want?

Innovation in Pediatric Care?

- ***How*** **to care for patients to increase** ***value*****? To get the job done?**



- New models of care
  - Collaborative care, consultant roles
  - Role of “mid-level” clinicians
  - Medical homes
  - Practicing at top of license

- Resources follow patient demand in time and space
  - Web-based services
  - Telemedicine, tele-consultation
  - Care coordination
  - Integration in primary care, schools, community locations

Adapted from Houston JM, Martini DR, The Delivery of Mental Health Care: Where Are We and Where Are We Going? JAACAP 2013

Bending Curves

- Bending the cost curve down?
- **Bending the *value curve up!***

Questions to Ask Along the Way

- How do we balance multiple dimensions of quality & value?
- How do we consider clinical uncertainty?
- How do we talk about this with families and patients?
- How to incorporate into daily practice?
- How do we balance value-based care with clinical training needs?

Value in Academic Environments

VIEWPOINT

Teaching Value in Academic Environments
Shifting the Ivory Tower

Deborah Korenstein, MD
American College of Physicians, Philadelphia, Pennsylvania.

Minal Kale, MD, MPH
Division of General Internal Medicine, Icahn School of Medicine at Mount Sinai, New York, New York.

In the United States, low-value care is a pervasive problem. Low-value care can be defined as care for which harms, defined in terms of resource use, financial expenditure, or patient harm, outweigh clinical benefits. Defensive medicine, fragmented care, misaligned financial incentives, and cultural factors[1,2] are all associated with low-value care.

The importance of improving the value of care in academic medical
about value are
larly critical beca
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The Role of Educators

Educators have encouraged low-value care in the past and they now must play a central role in improving value. Often academic educators have emphasized completeness, focusing on the generation of exhaustive differential diagnoses with little emphasis on diagnoses for which testing should not be done. These views persist; in 2012 clinical chairs at an AMC agreed that "residents

Trainees must understand that the primary goal is optimal patient outcomes, not knowledge for its own sake.

Opportunities & Challenges to High-value Pediatrics

Mindful Health Care

mind·ful

/ˈmīndfəl/

adjective
adjective: **mindful**

conscious or aware of something.
"we can be more mindful of the energy we use to heat our homes"

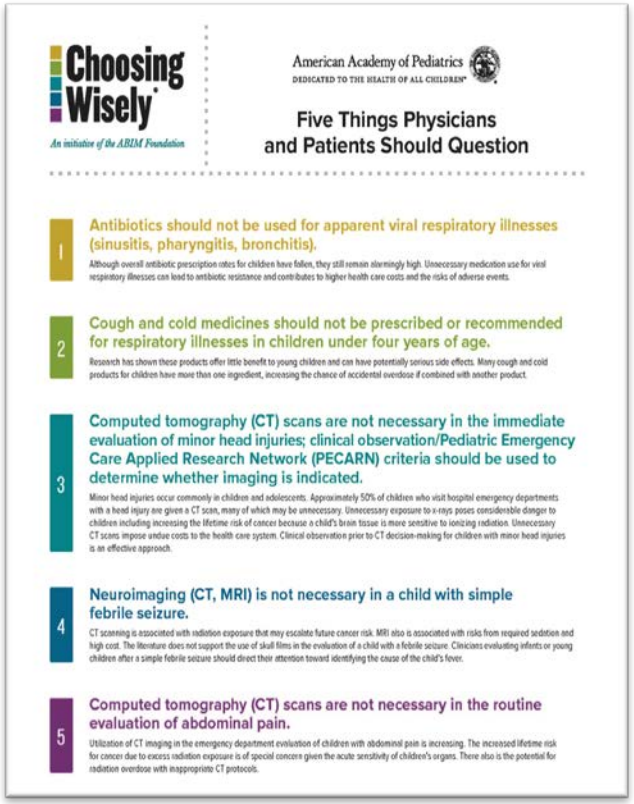
"we can be more mindful of the choices we make about…
… diagnostic testing
… where we deliver care
… what treatments we recommend
… how we discuss resource utilization with trainees
… how we engage families about their financial concerns
… how we design care process, clinical pathways, systems of care"

Achieving High-Value Care

1.	Understand benefits, harms, and relative costs of diagnostic and treatment options	Education, reading, refer to pathway supporting documents
2.	Decrease or eliminate diagnostic or treatment services that provide no benefits and/or may be harmful	Consider evidence, pathway; ask "how will this benefit my patient?"
3.	Select services & care settings that maximize benefits, minimize harms, and reduce costs	Consider right care, right place, right time, right provider
4.	Customize care plans with patients & families, incorporating their values and concerns	Talk to families about their priorities, values, concerns in creating plans
5.	Identify system-level opportunities to improve outcomes, minimize harm, and reduce costs & waste	Work on pathways, quality improvement projects, advocate for system changes

Adapted from Owens DK, et al. High Value Cost-conscious Health Care: Concepts for Clinicians to Evaluate the Benefits, Harms, and Costs of Medical Interventions. Ann Intern Med. 2011; 154: 174-180

Choosing Wisely



Choosing Wisely
An initiative of the ABIM Foundation

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

Five Things Physicians and Patients Should Question

1. Antibiotics should not be used for apparent viral respiratory illnesses (sinusitis, pharyngitis, bronchitis).

Although overall antibiotic prescription rates for children have fallen, they still remain alarmingly high. Unnecessary medication use for viral respiratory illnesses can lead to antibiotic resistance and contributes to higher health care costs and the risks of adverse events.

2. Cough and cold medicines should not be prescribed or recommended for respiratory illnesses in children under four years of age.

Research has shown these products offer little benefit to young children and can have potentially serious side effects. Many cough and cold products for children have more than one ingredient, increasing the chance of accidental overdose if combined with another product.

3. Computed tomography (CT) scans are not necessary in the immediate evaluation of minor head injuries; clinical observation/Pediatric Emergency Care Applied Research Network (PECARN) criteria should be used to determine whether imaging is indicated.

Minor head injuries occur commonly in children and adolescents. Approximately 50% of children who visit hospital emergency departments with a head injury are given a CT scan, many of which may be unnecessary. Unnecessary exposure to x-rays poses considerable danger to children including increasing the lifetime risk of cancer because a child's brain tissue is more sensitive to ionizing radiation. Unnecessary CT scans impose undue costs to the health care system. Clinical observation prior to CT decision-making for children with minor head injuries is an effective approach.

4. Neuroimaging (CT, MRI) is not necessary in a child with simple febrile seizure.

CT scanning is associated with radiation exposure that may escalate future cancer risk. MRI also is associated with risks from required sedation and high cost. The literature does not support the use of skull films in the evaluation of a child with a febrile seizure. Clinicians evaluating infants or young children after a simple febrile seizure should direct their attention toward identifying the cause of the child's fever.

5. Computed tomography (CT) scans are not necessary in the routine evaluation of abdominal pain.

Utilization of CT imaging in the emergency department evaluation of children with abdominal pain is increasing. The increased lifetime risk for cancer due to excess radiation exposure is of special concern given the acute sensitivity of children's organs. There also is the potential for radiation overdose with inappropriate CT protocols.

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Society of Hospital Medicine – Pediatric Hospital Medicine

shm

Five Things Physicians and Patients Should Question

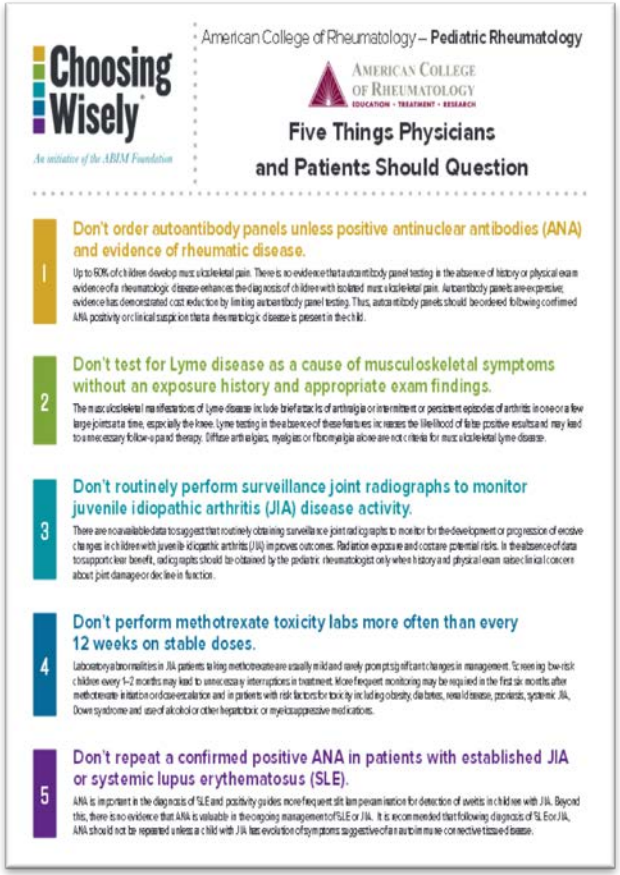
1. Don't order chest radiographs in children with uncomplicated asthma or bronchiolitis.

2. Don't routinely use bronchodilators in children with bronchiolitis.

3. Don't use systemic corticosteroids in children under 2 years of age with an uncomplicated lower respiratory tract infection.

4. Don't treat gastroesophageal reflux in infants routinely with acid suppression therapy.

5. Don't use continuous pulse oximetry routinely in children with acute respiratory illness unless they are on supplemental oxygen.



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American College of Rheumatology – Pediatric Rheumatology

American College of Rheumatology
Education • Treatment • Research

Five Things Physicians and Patients Should Question

1. Don't order autoantibody panels unless positive antinuclear antibodies (ANA) and evidence of rheumatic disease.

Up to 60% of children develop musculoskeletal pain. There is no evidence that autoantibody panel testing in the absence of history or physical exam evidence of a rheumatologic disease enhances the diagnosis of children with isolated musculoskeletal pain. As autoantibody panels are expensive, evidence has demonstrated cost reduction by limiting autoantibody panel testing. Thus, autoantibody panels should be ordered following confirmed ANA positivity or clinical suspicion that a rheumatologic disease is present in the child.

2. Don't test for Lyme disease as a cause of musculoskeletal symptoms without an exposure history and appropriate exam findings.

The musculoskeletal manifestations of Lyme disease include brief attacks of arthralgia or intermittent or persistent episodes of arthritis in one or a few large joints at a time, especially the knee. Lyme testing in the absence of these features increases the likelihood of false positive results and may lead to unnecessary follow-up and therapy. Diffuse arthralgias, myalgias or fibromyalgia alone are not criteria for musculoskeletal Lyme disease.

3. Don't routinely perform surveillance joint radiographs to monitor juvenile idiopathic arthritis (JIA) disease activity.

There are no available data to suggest that routinely obtaining surveillance joint radiographs to monitor for the development or progression of erosive changes in children with juvenile idiopathic arthritis (JIA) improves outcomes. Radiation exposure and cost are potential risks. In the absence of data to support clear benefit, radiographs should be obtained by the pediatric rheumatologist only when history and physical exam raise clinical concern about joint damage or decline in function.

4. Don't perform methotrexate toxicity labs more often than every 12 weeks on stable doses.

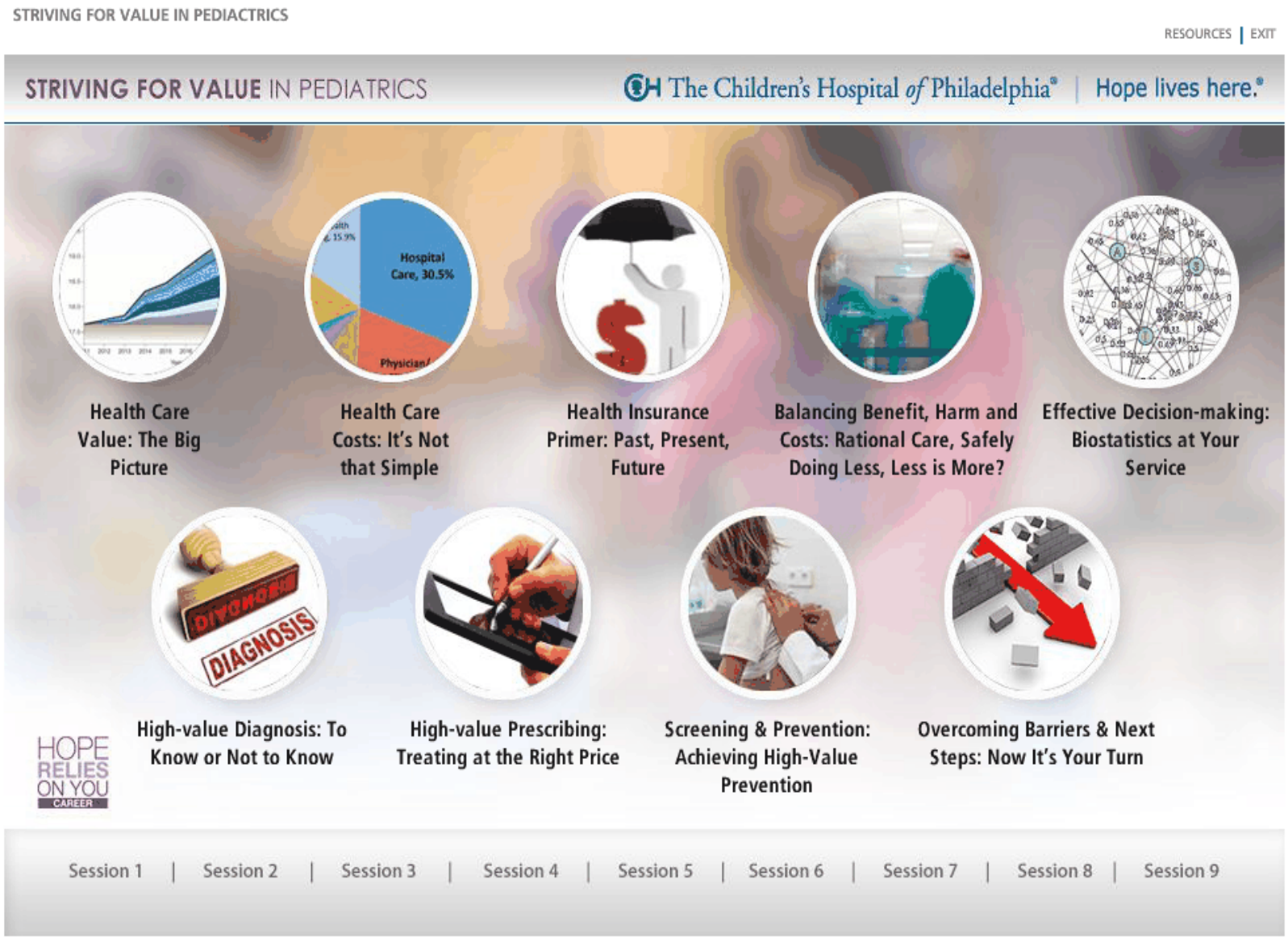
Laboratory abnormalities in JIA patients taking methotrexate are usually mild and rarely prompt significant changes in management. Screening low-risk children every 1–2 months may lead to unnecessary interruptions in treatment. More frequent monitoring may be required in the first six months after methotrexate initiation or dose-escalation and in patients with risk factors for toxicity including obesity, diabetes, renal disease, psoriasis, systemic JIA, Down syndrome and use of alcohol or other hepatotoxic or myelosuppressive medications.

5. Don't repeat a confirmed positive ANA in patients with established JIA or systemic lupus erythematosus (SLE).

ANA is important in the diagnosis of SLE and positivity guides more frequent slit lamp examination for detection of uveitis in children with JIA. Beyond this, there is no evidence that ANA is valuable in the ongoing management of SLE or JIA. It is recommended that following diagnosis of SLE or JIA, ANA should not be repeated unless a child with JIA has evolution of symptoms suggestive of an autoimmune connective tissue disease.

http://www.choosingwisely.org/doctor-patient-lists/

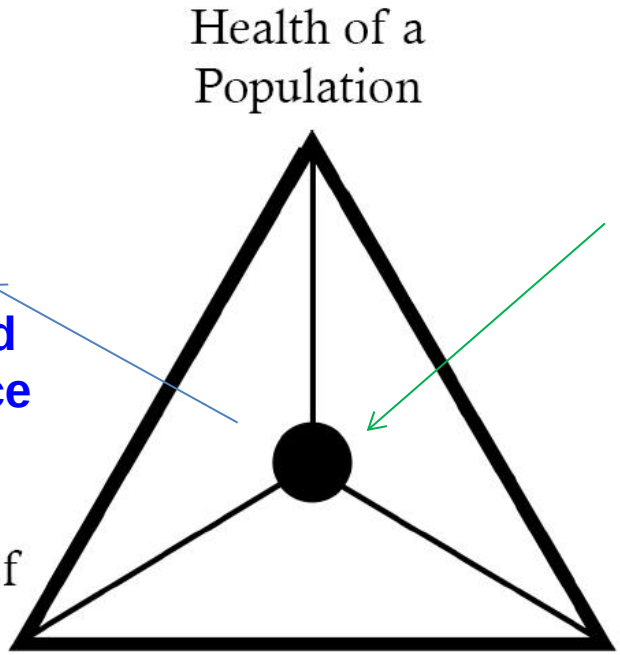
Raising Knowledge



Summary

Resources to advance clinical excellence, innovative research, quality education – and other means to advance well-being

STEWARDSHIP & HIGH-VALUE



- Safe
- Effective
- Patient centered
- Efficient
- Timely
- Equitable

The IHI *Triple* Aim

Better care for individuals, better health for populations, lower per capita costs

Institute for Healthcare Improvement, www.ihi.org

Summary

- The move toward value-based health care is driven by unsustainable growth in the cost of health care and sense of low- or variable-quality care.

- Numerous opportunities exists to improve quality, reduce variation, and have a more mindful approach to resource utilization.

- As stewards, we need to ***bend the value curve up*** by leading simultaneously on quality and cost improvements.