

# Transparency and All Payer Claims Databases

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# Outline

- How we got here: significant problems with quality and cost
- The rationale for building APCDs
- Hurdles to utilizing APCDs, plus some things to get over them

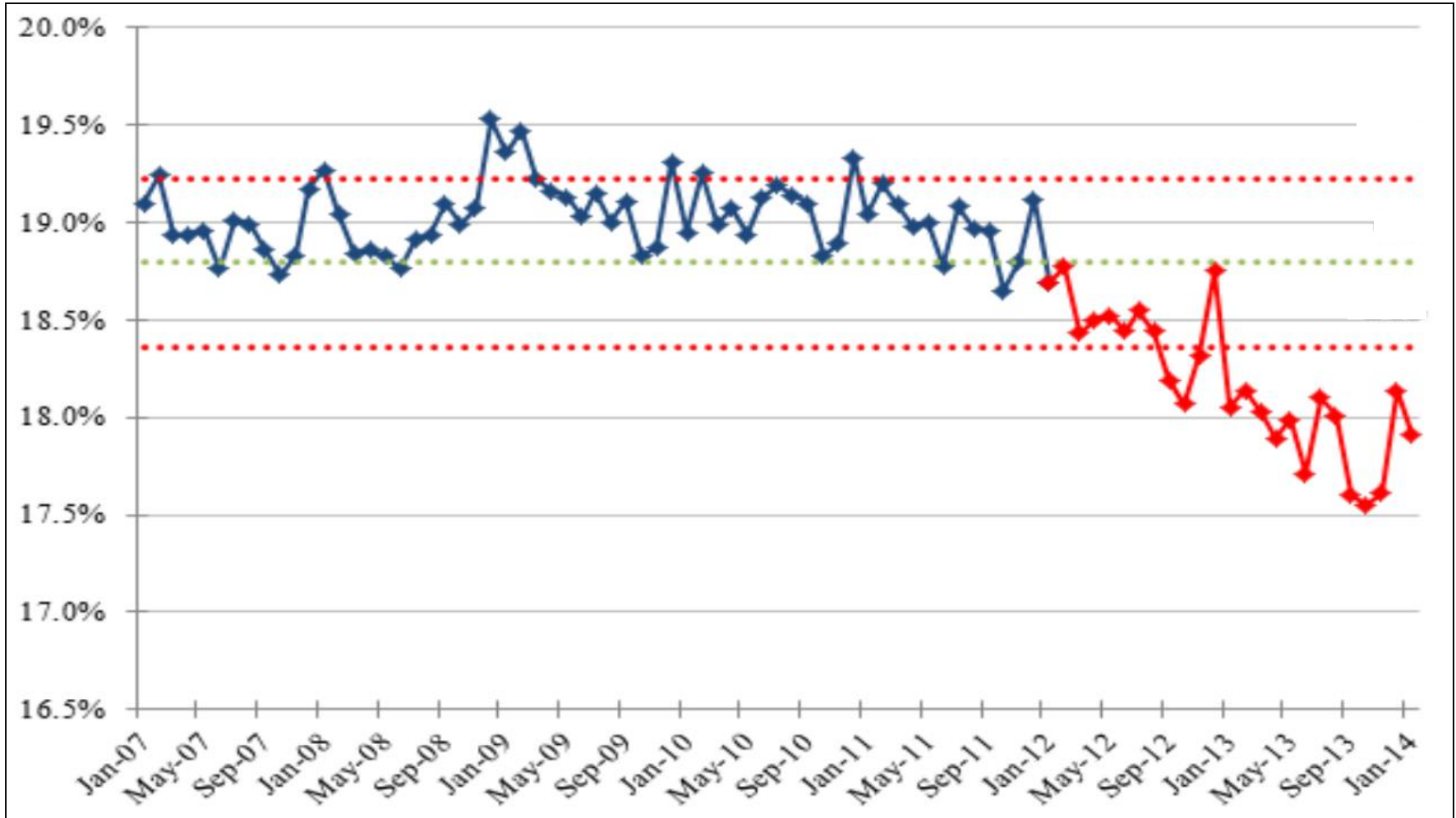
# The Invisible Problem: Quality Shortfalls

**Table 3.** Adherence to Quality Indicators, Overall and According to Type of Care and Function.

Variable	No. of Indicators	No. of Participants Eligible	Total No. of Times Indicator Eligibility Was Met	Percentage of Recommended Care Received (95% CI)*
Overall care	439	6712	98,649	54.9 (54.3–55.5)
Type of care				
Preventive	38	6711	55,268	54.9 (54.2–55.6)
Acute	153	2318	19,815	53.5 (52.0–55.0)
Chronic	248	3387	23,566	56.1 (55.0–57.3)
Function				
Screening	41	6711	39,486	52.2 (51.3–53.2)
Diagnosis	178	6217	29,679	55.7 (54.5–56.8)
Treatment	173	6707	23,019	57.5 (56.5–58.4)
Follow-up	47	2413	6,465	58.5 (56.6–60.4)

\* CI denotes confidence interval.

# When Made Visible, Things We Measure Get Better: Medicare Readmissions Declining



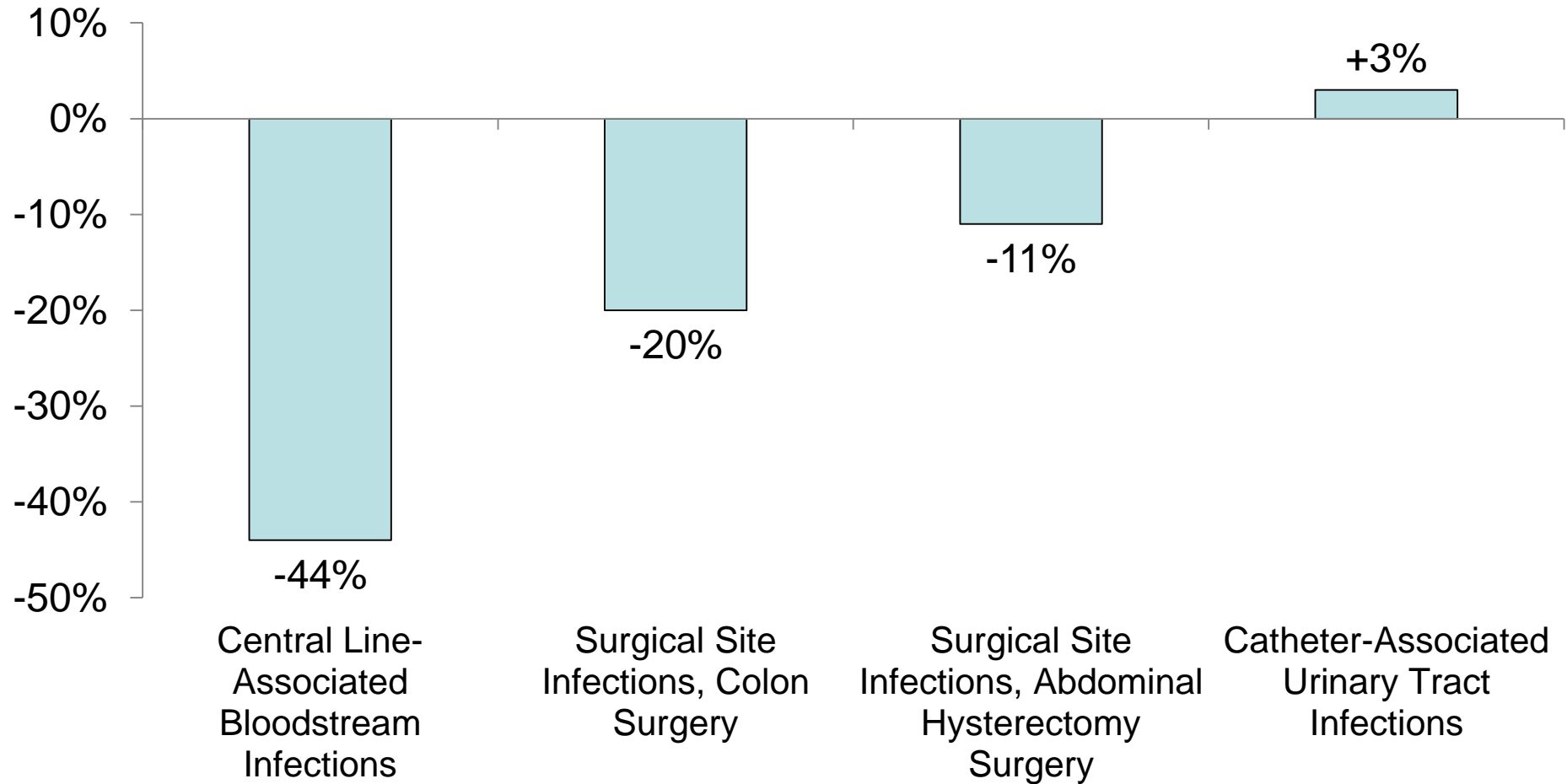
Note: Medicare 30-Day, All-Condition Hospital Readmission Rates January 2007 – January 2014.  
Source: “New HHS Data Shows Major Strides Made in Patient Safety, Leading to Improved Care and Savings,” May 7, 2014, CMS.



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# When Made Visible, Things We Measure Get Better: Healthcare-Associated Infections

2012 Rates vs. 2008 Baseline

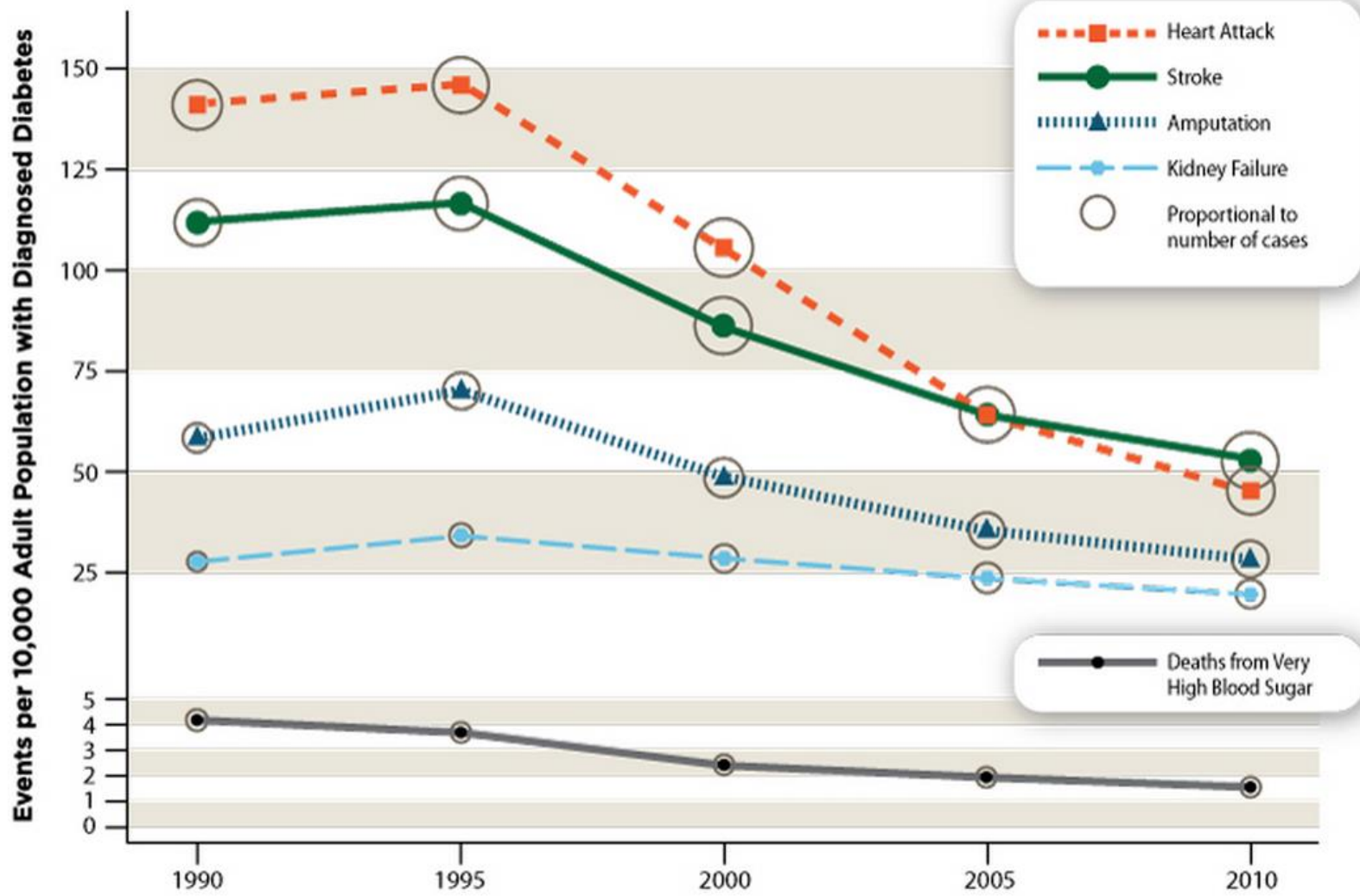


Source: Centers for Disease Control, National and State Healthcare Associated Infections: Progress Report, March 2014. Available at <http://www.cdc.gov/HAI/pdfs/progress-report/hai-progress-report.pdf>.



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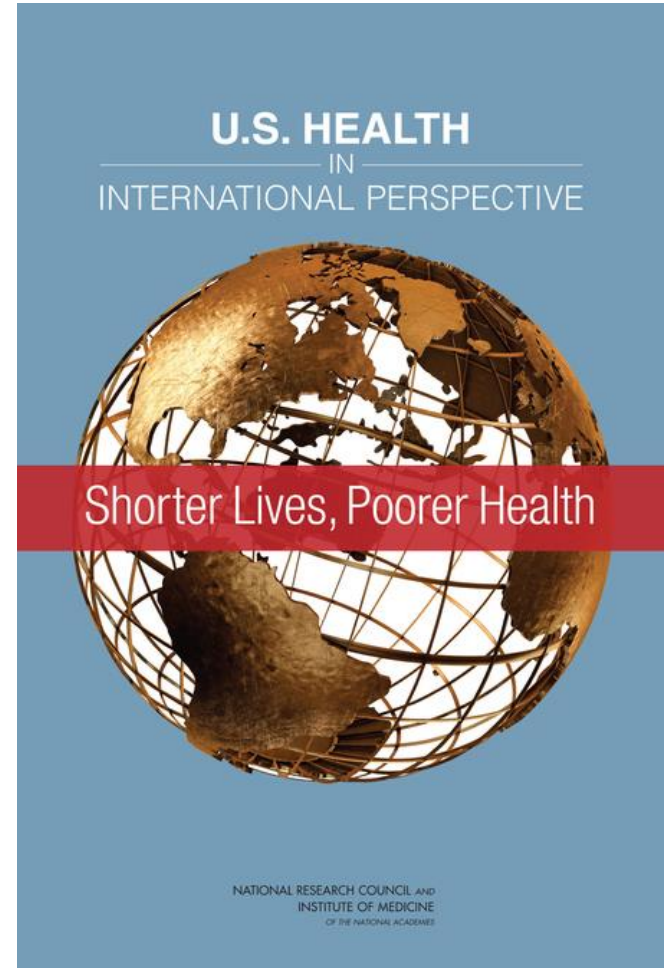
# When Made Visible, Things We Measure Get Better: Diabetes-Related Complications Declining



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# U.S. Health in International Perspective: Shorter Lives, Poorer Health

- Americans live shorter lives and are in poorer health at any age
- Poor outcomes cannot be fully explained by poverty or lack of insurance
- White, insured, college-educated, and upper income Americans are in poorer health than their counterparts in other countries

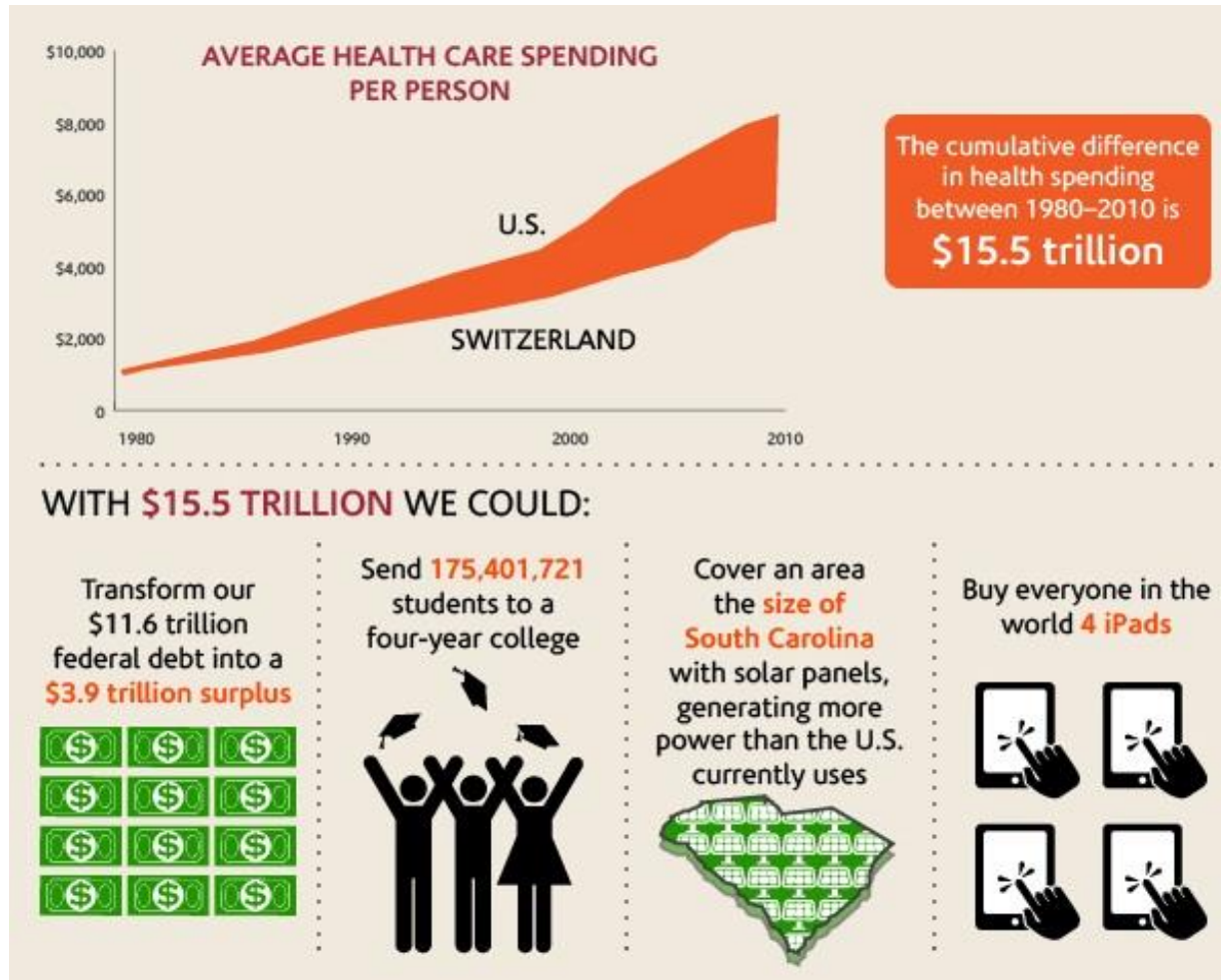


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- So, we routinely miss opportunities to deliver high quality care, and that shortens lives and worsens quality of life
- But there is one area in which we are #1



# If We Were Still #1 in Per Capita Health Spending...But Just Tied for #1 (with Switzerland)



Note: Per capita spending amounts adjusted for differences in cost of living, total U.S. savings adjusted for inflation.

Source: D. Squires, *The Road Not Taken: The Cost of 30 Years of Unsustainable Health Spending Growth in the United States*, (New York: The Commonwealth Fund Blog, March 2013).



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# What Can We Do about Quality & Cost?

- Improvement cannot start until we can measure performance routinely, at low cost, with timely reporting
- One obvious place to start is with the data we already have: claims data

# Why an APCD?

Having data from more payers improves:

- Sample size—so you can make more precise estimates of performance for individual providers
- Geographic coverage—since most payers have higher market share in some areas of a state than in others
- Protecting patient confidentiality—because having more patients in each age range or with a particular increases the difficulty of identifying individual patients

# Why an APCD?

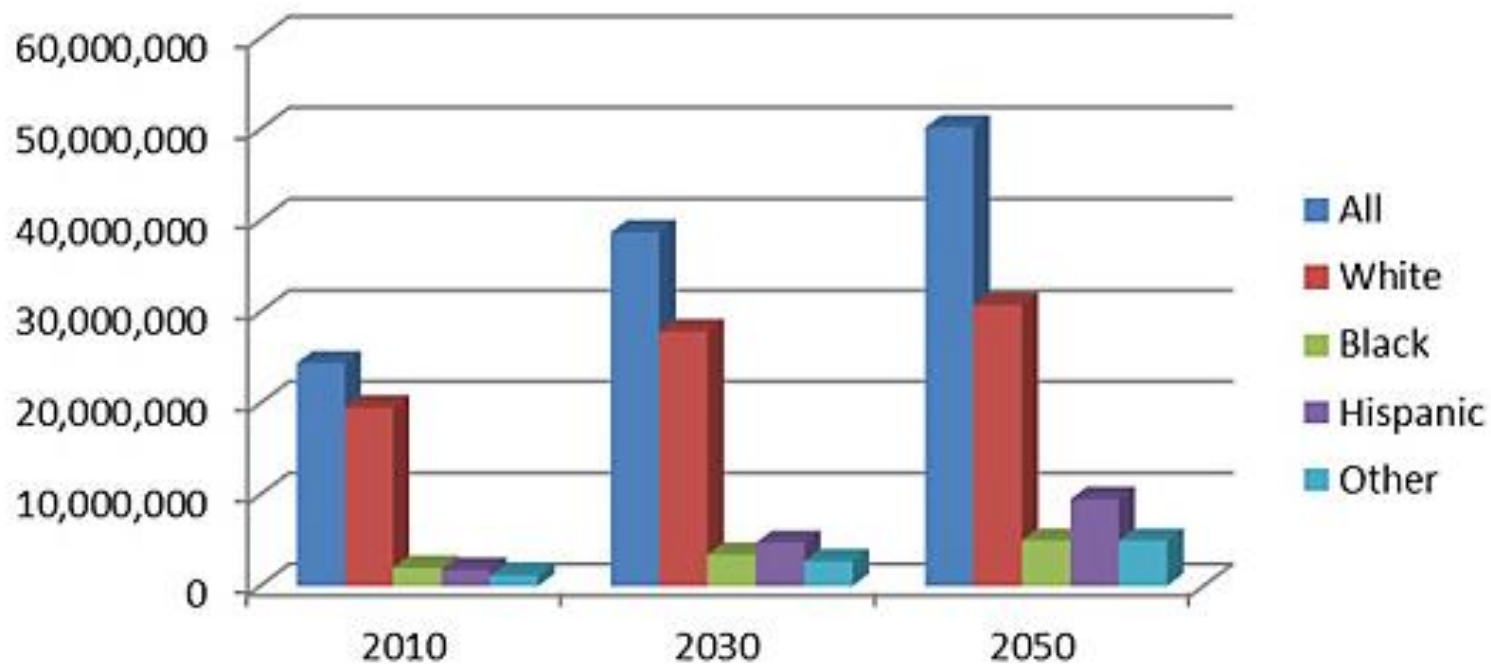
With an APCD, you could:

- Let's take a look

# The Conventional View of Claims Data

- Only created for billing, not a detailed picture of care
- Therefore, not useful for measuring quality, appropriateness, or utilization
- ....BUT
- Two examples suggest otherwise:
  - One from cataract surgery using Medicare claims
  - One from elective coronary stenting using commercial insurer claims

# Projected Number of Cataracts



## THE VALUE OF ROUTINE PREOPERATIVE MEDICAL TESTING BEFORE CATARACT SURGERY

OLIVER D. SCHEIN, M.D., M.P.H., JOANNE KATZ, Sc.D., ERIC B. BASS, M.D., M.P.H., JAMES M. TIELSCH, Ph.D.,  
LISA H. LUBOMSKI, Ph.D., MARC A. FELDMAN, M.D., M.P.H., BRENT G. PETTY, M.D.,  
AND EARL P. STEINBERG, M.D., M.P.P., FOR THE STUDY OF MEDICAL TESTING FOR CATARACT SURGERY\*

### ABSTRACT

**Background** Routine preoperative medical testing is commonly performed in patients scheduled to undergo cataract surgery, although the value of such testing is uncertain. We performed a study to determine whether routine testing helps reduce the incidence of intraoperative and postoperative medical complications.

**Methods** We randomly assigned 19,557 elective cataract operations in 18,189 patients at nine centers to be preceded or not preceded by a standard battery of medical tests (electrocardiography, complete blood count, and measurement of serum levels of electrolytes, urea nitrogen, creatinine, and glucose), in addition to a history taking and physical examination. Adverse medical events and interventions on the day of surgery and during the seven days after surgery were recorded.

**Results** Medical outcomes were assessed in 9408 patients who underwent 9626 cataract operations that were not preceded by routine testing and in 9411 patients who underwent 9624 operations that were preceded by routine testing. The most frequent

erative morbidity and mortality associated with cataract surgery are low.<sup>1,2</sup> Nevertheless, because patients with cataracts tend to be elderly and to have serious coexisting illnesses,<sup>3-7</sup> many physicians believe that a systematic medical examination with laboratory testing must be performed before a patient can be considered eligible for surgery.<sup>4,8</sup>

In 1993, the Agency for Health Care Policy and Research published guidelines for the management of cataracts.<sup>9</sup> The agency endorsed "appropriate" testing but did not provide specific recommendations based on reported data. We subsequently performed a national survey of ophthalmologists, anesthesiologists, and internists and found that the majority of the respondents routinely ordered complete blood counts, measurements of serum electrolytes, and electrocardiograms preoperatively.<sup>4</sup> Other tests, such as chest radiography, blood-clotting studies, and urinalysis, were also ordered often, although less frequently. Many physicians did not think that the tests were necessary but ordered them anyway because of insti-

# Can we tell what is “pre-op” from claims?

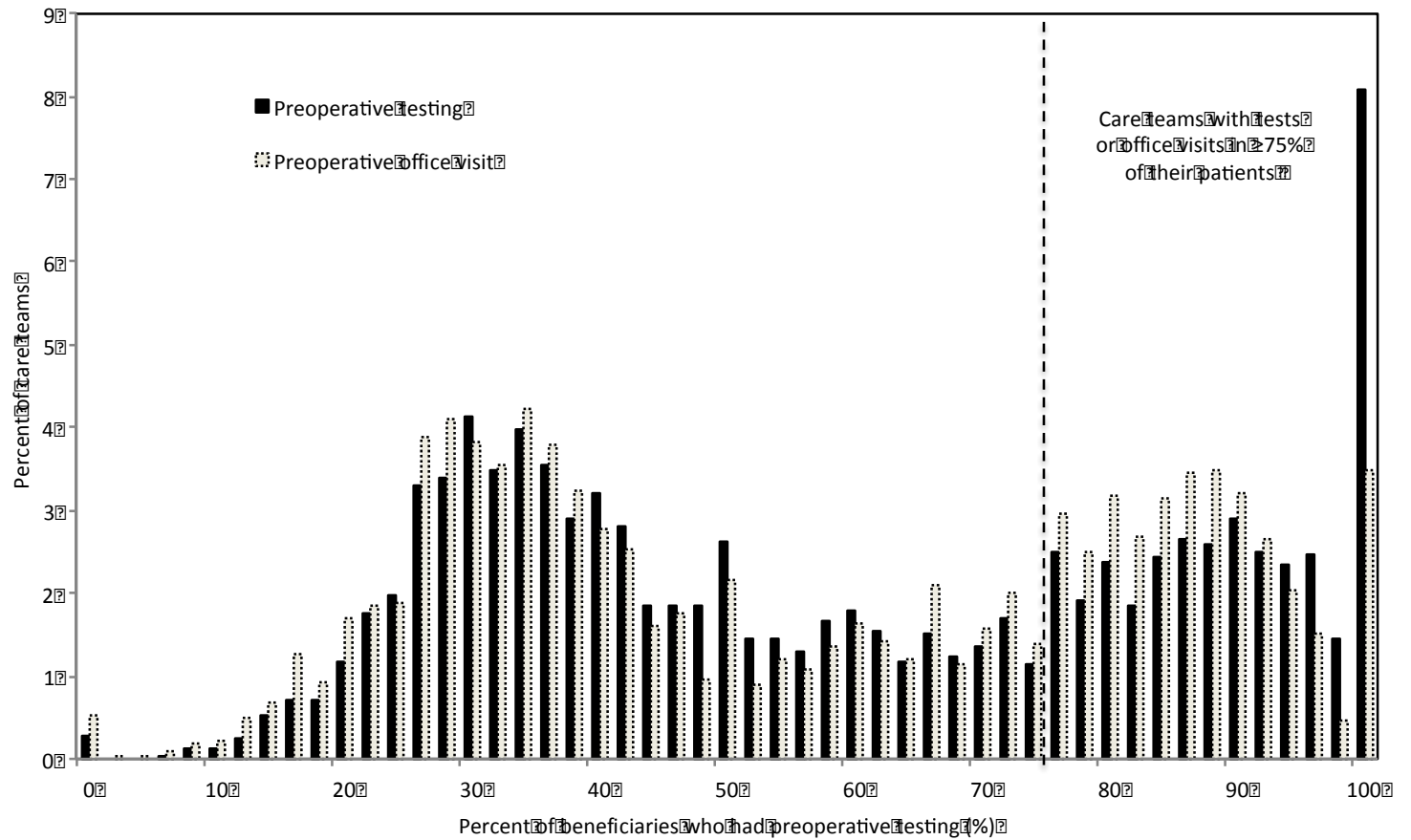
- **Typical tests ordered to clear someone for surgery:**
  - **Labs:** blood count, chemistry panels, coagulation tests, urinalysis
  - **Heart tests:** EKG, cardiac stress test, echocardiogram CXR,
  - **Lung tests:** pulmonary function (breathing tests), ABG
- **BUT:** no code for “pre-op”; older people get these tests all the time



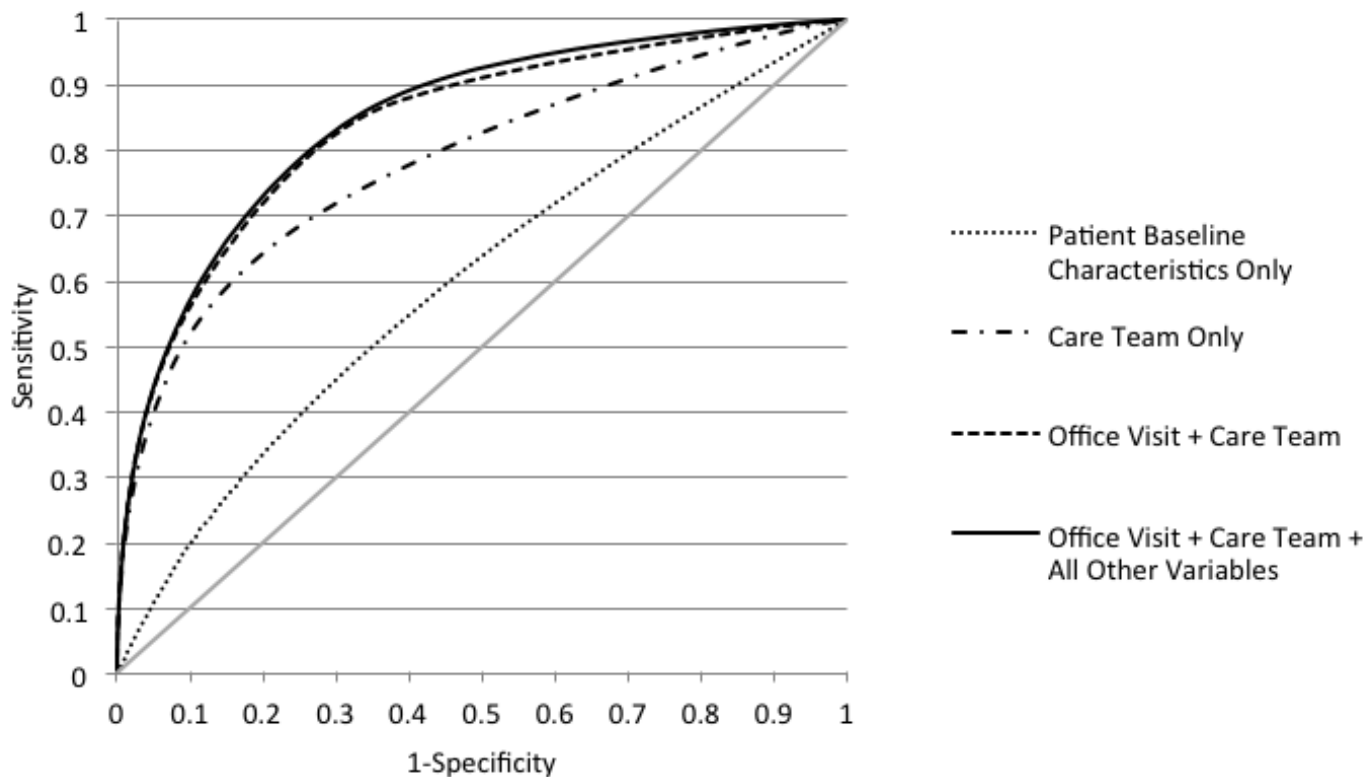
# Tests and office visits per beneficiary per month



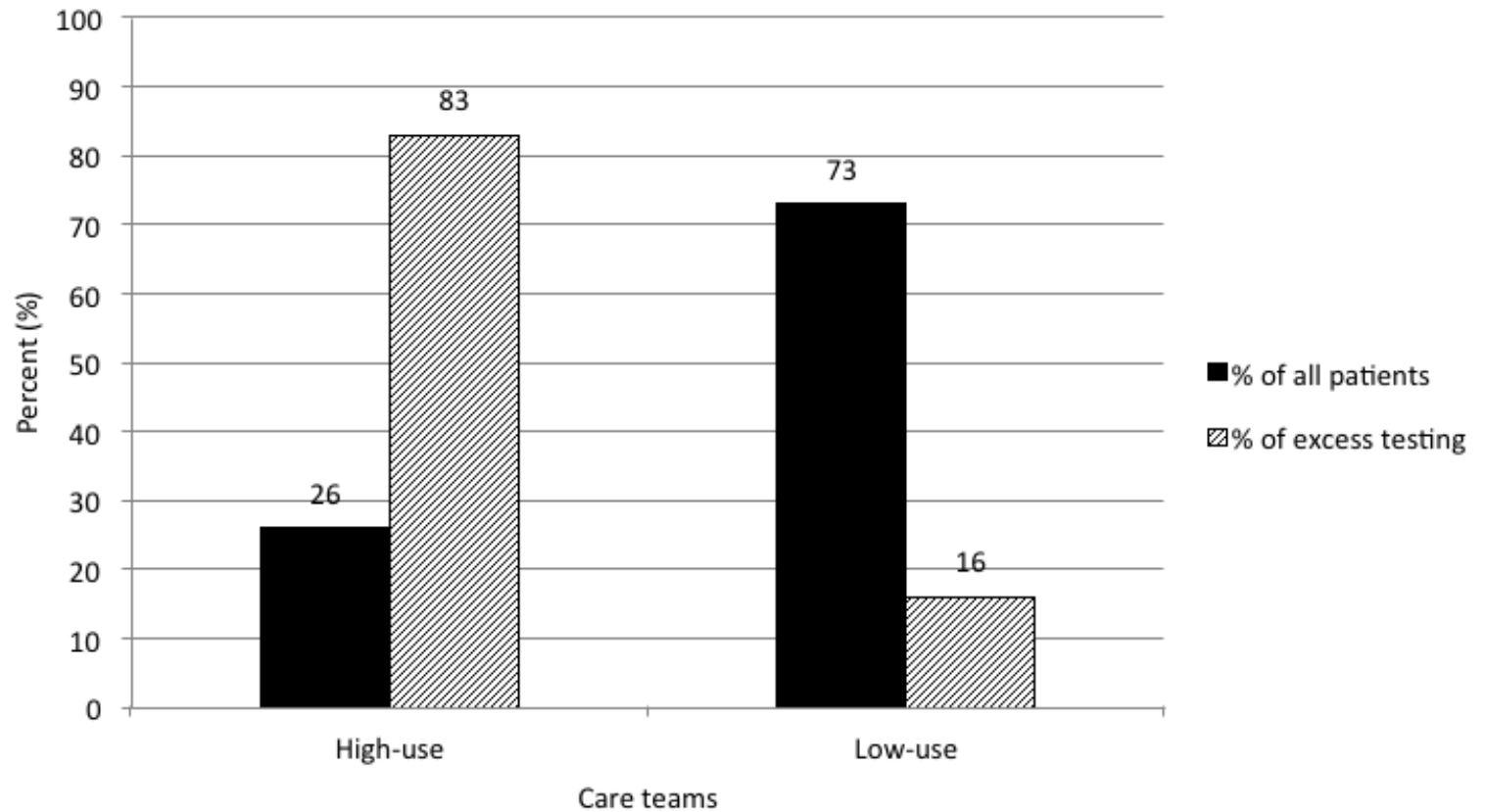
# Variation in testing and office visits among care teams



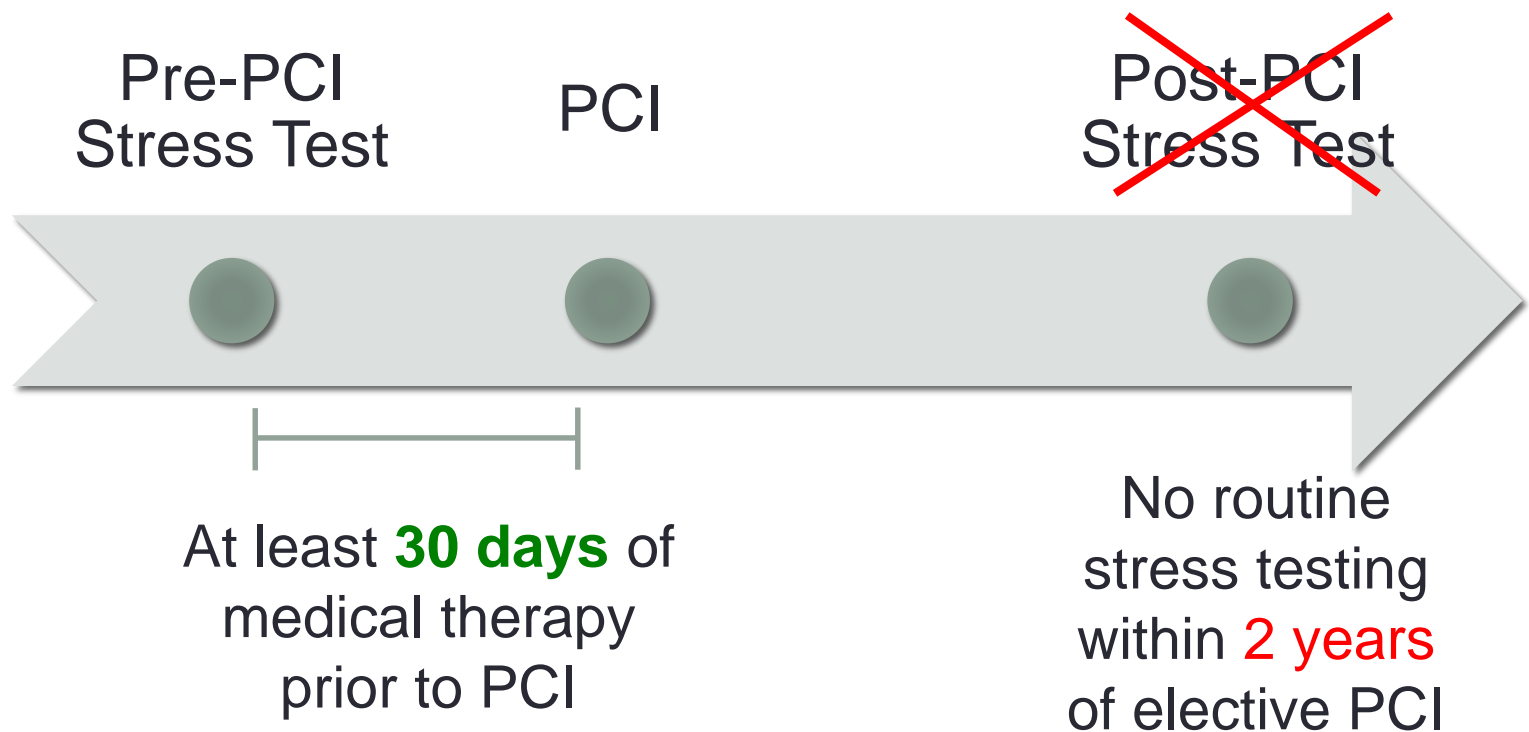
# ROC curves comparing models predicting preoperative testing



# “High-use” providers and excess testing



# Stable Coronary Artery Disease (with Angina) Treatment Timeline – Ideal (per Am Coll Card)

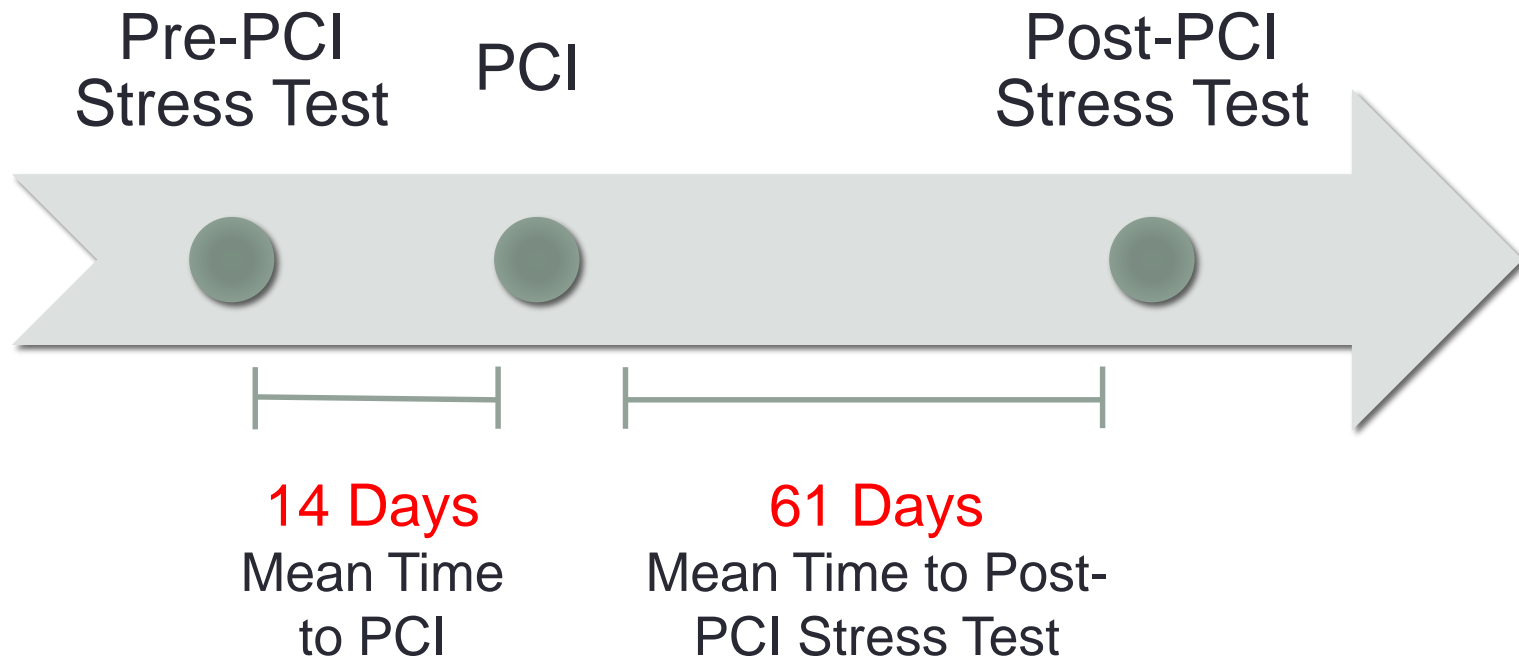


Note: PCI=Percutaneous Coronary Intervention, or coronary stent

# There were indications of overuse and underuse of cardiac procedures

Stress Testing Prior to PCI	N = 1800
Had stress test prior to elective PCI	46%
Had stress test + 30 days of medical therapy prior to PCI	27%
Had stress test in 180 days after PCI	31%

# Stable Coronary Artery Disease (with Angina) Treatment Timeline - **Actual**



# Conclusions about Claims Data

- In many instances, we can use claims to accurately measure:
  - *quality* (gave 30 days of drug therapy before PCI)
  - *appropriateness* (had stress test before PCI to document link between angina and a specific blockage), and
  - *excess utilization* (such as pre-op testing before cataract surgery)



# Obstacles to Creating APCDs

- Social/political/contractual
- Technical

# Brief aside about technical issues

- Start a universal provider directory today!!!

# Starting an APCD: The Social Issues

- Even if you have legislation mandating creation of an APCD, maintaining infrastructure is not often a priority for policymakers
  - Must justify budget
  - Must maintain political support
  - Implication: You're going to need a long-term business case better than, “We have a law that says we have to do it.”
- And some states don't even have a law

# Starting an APCD: How to Think about the Social Issues

- An APCD is a social innovation, so generating stakeholder support is critical
- It is much easier to get stakeholder support if you incorporate that into your planning process from the beginning than it is to get stakeholder support after you have a plan

# Getting Stakeholder Support

- The key is to find shared goals, while also giving everyone the chance to list concerns or hurdles
- You then use the shared goals to get assistance and momentum in overcoming the concerns and hurdles

# Examples

- A shared goal: It's clear that benefits designs are changing to put consumers in the position of being shoppers, *so most people agree they should be able to know their likely out-of-pocket costs*
- Concerns:
  - Consumers will assume high price=high quality
  - My health plan gets better prices, which I don't want exposed
  - My hospital takes on complex cases, which are more expensive

# One Possible Process: The Cycle III Grant to the California Dept of Insurance

- Built in stakeholder input
  - Before selecting any conditions on which to report, CDI is holding a stakeholder summit
  - Planning the summit: key leaders from each stakeholder group contacted, asked for assistance in providing prep materials for the summit, preparing a chapter in a compendium written by the stakeholders about price transparency

# One Possible Process: The Cycle III

## Grant to the California Dept of Insurance

- Compendium chapters
  - Chapter 1: rationale for price transparency and necessary infrastructure (framing PT and APCD as opportunities)
  - Chapter 2: consumer aspirations, concerns, hurdles
  - Chapter 3: provider aspirations, concerns, hurdles
  - Chapter 4: insurer aspirations, concerns, hurdles
  - Chapter 5: purchaser (employers + labor) aspirations, concerns, hurdles
  - Chapter 6: environmental scan for solutions
  - Chapter 7: group-written list of best options going forward



# One Possible Process: The Cycle III Grant to the California Dept of Insurance

- Built in stakeholder input
  - Pre-meeting work: stakeholders by group (e.g., consumers, providers, etc) are giving their input
  - During meeting:
    - Clarify the stakeholder positions and nuances
    - Select Top 5-15 test cases
  - After the meeting:
    - Obtain the data for the Top 5-15 test cases, show what's possible now
    - Then ask if that's good enough, needs adjustment, etc.

# Points of Emphasis

- Inevitability
- Openness
- Early on, have to agree on the process, not the outcomes
- Later, when no one gets exactly what they wanted, all participants can see the process was fair, the outcome was close to optimal given the differing needs and preferences

You will hear more about this in the next  
presentation!

# Conclusions

- The need for more, better data to measure quality and cost is clear
- Claims data offer more information than previously realized
- ...so APCDs offer real potential benefit
- Creating an APCD is much more about social innovation than technical challenges

## If you want help

- [adams.dudley@ucsf.edu](mailto:adams.dudley@ucsf.edu)
- my assistant (highly recommended that you loop her in, too!): [beth.thew@ucsf.edu](mailto:beth.thew@ucsf.edu)