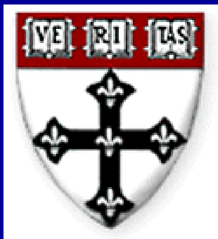
Consequences of Public Reporting and P4P on Quality of Healthcare: Two Decades of U.S. Experience



Ashish K. Jha, MD, MPH

Harvard School of Public Health

Brigham and Women's Hospital

VA Boston Healthcare System

Overview

- Suboptimal Care
- Response
- Cardiac Surgery in NYS
- Short and long-term impacts
- Other efforts
- P4P
- Where we are

Suboptimal Care

- Institute of Medicine's *To Err is Human (1999)*
  - 100,00 Americans die each year from medical errors
- *Crossing the Quality Chasm* (2001)
  - US system often fails to provide optimal care
- Rand healthcare quality study
  - Americans get the right care 55% of the time
  - Wealth and education level matter very little

The Response

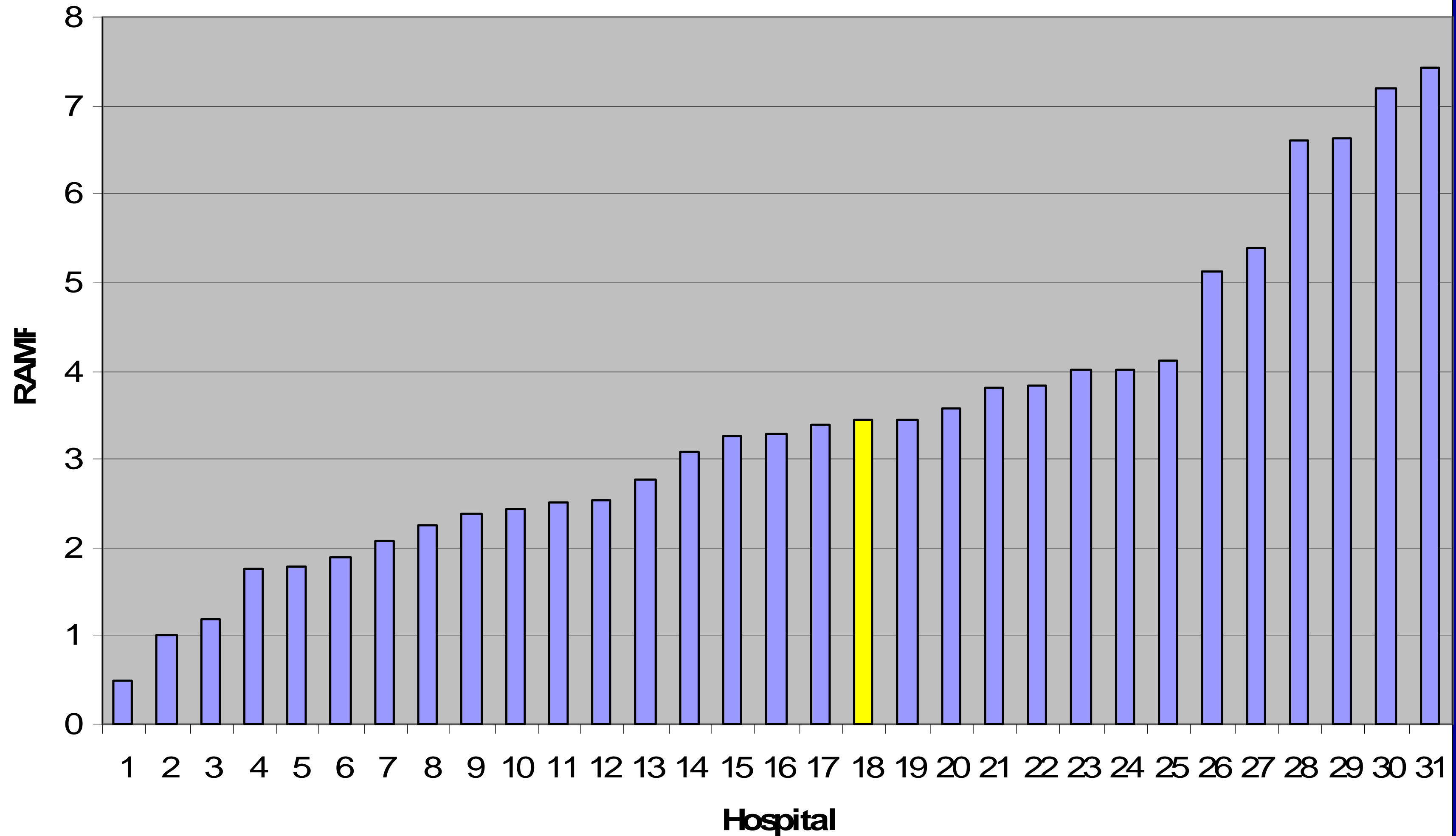
- Performance Measurement: where to focus?
    - Evidence-based interventions (processes)
    - How patients fared (outcomes)
- Public reporting of quality data
- More recently: financial incentives for quality

Quality Improvement Efforts

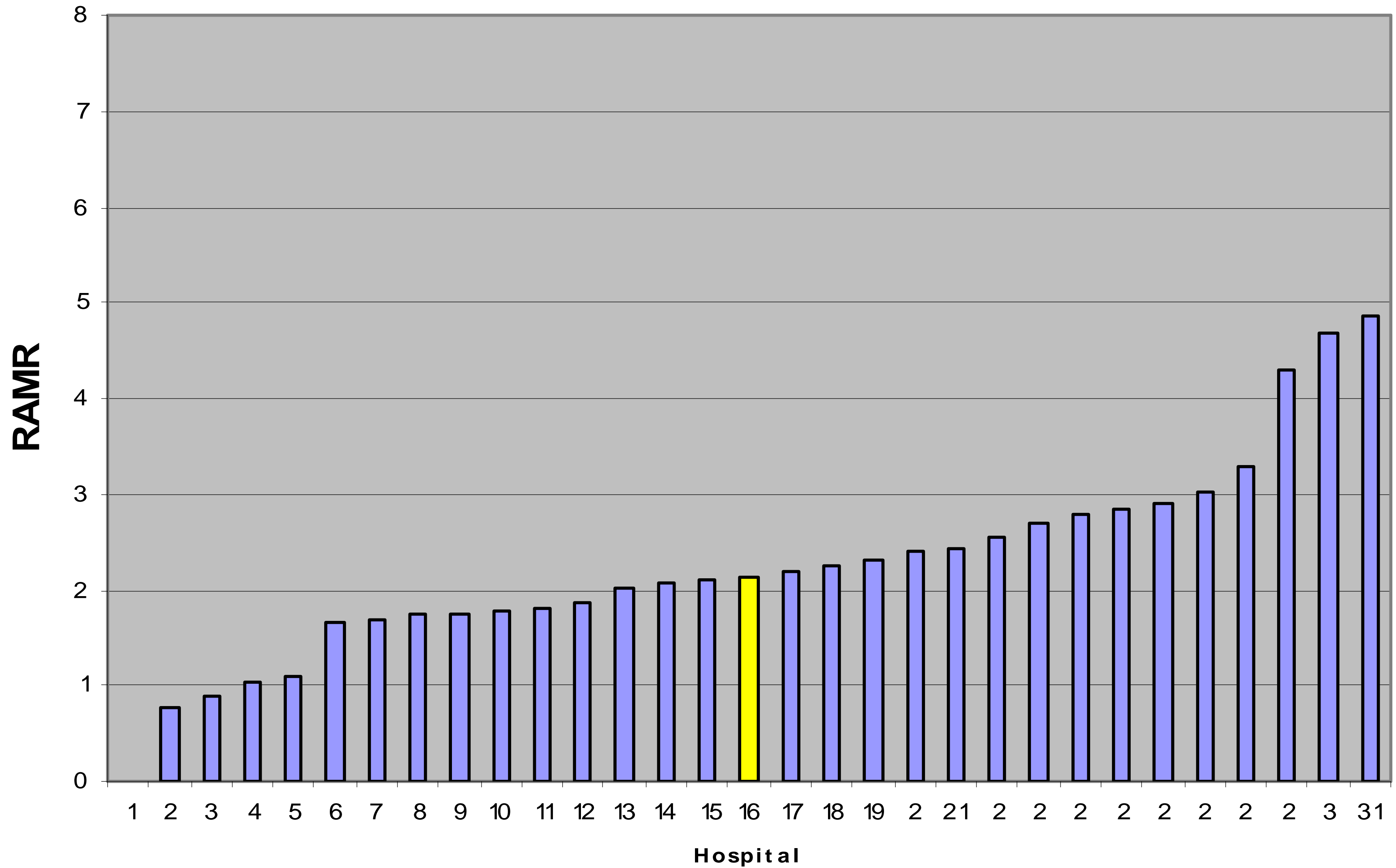
- Cardiac Surgery Reporting System (CSRS)
  - Started by NYS Department of Health in 1990
  - Provided feedback to *hospitals* and *surgeons* on cardiac surgery mortality rates
- Heavy emphasis on risk-adjustment
  - Risk-adjustment based on detailed clinical data
  - Made comparisons more reliable
  - C-statistic of 0.80

Features of CSRS

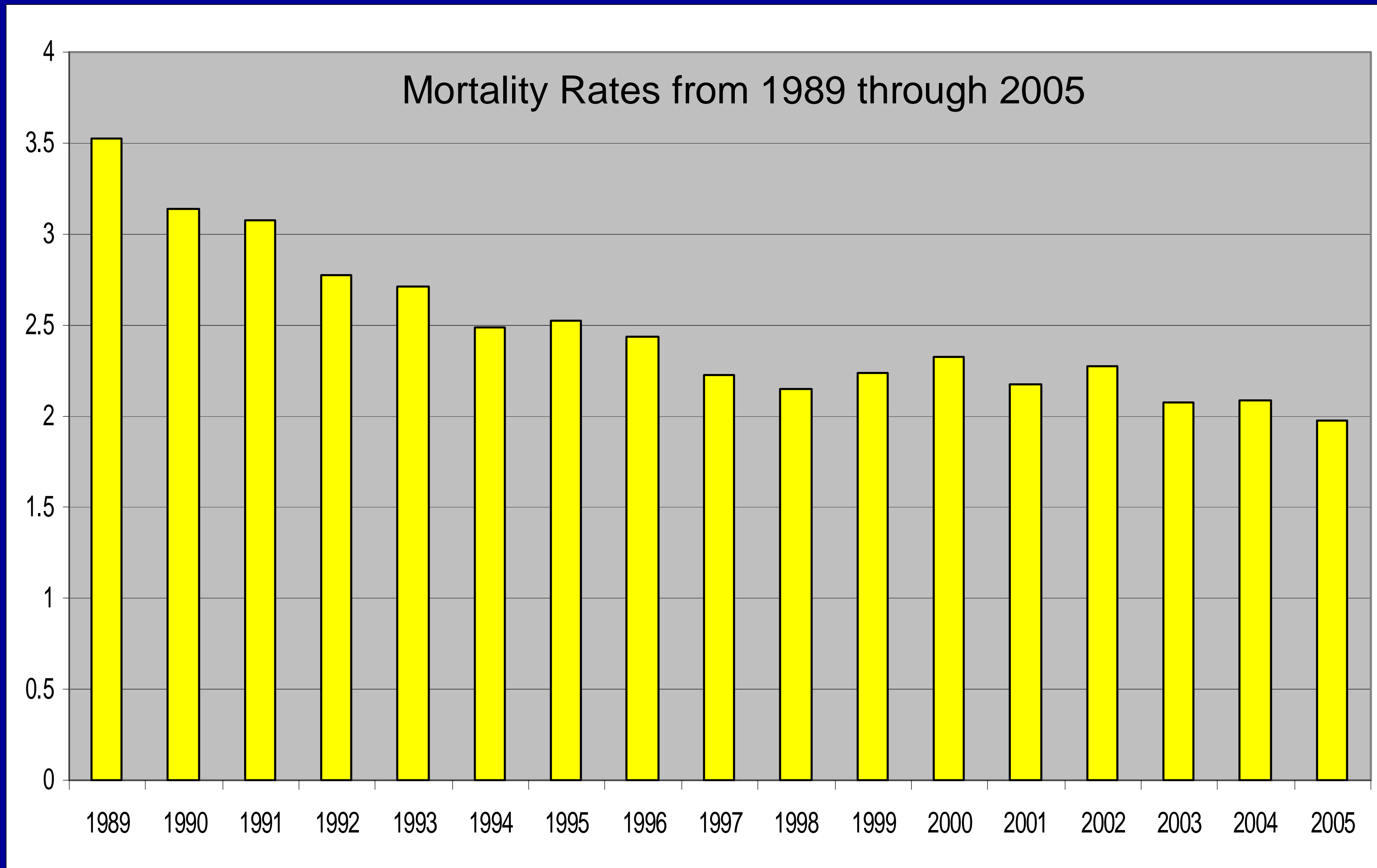
- First began with hospital-level performance
  - Individual surgeon-level data soon followed
- National trend-setter:
  - Pennsylvania (1992)
  - NJ (1997), CA (2001), and MA (2004).
  - Others have projects under development.
- Widespread media attention
  - Cover of NYT, etc


Cardiac Surgery Mortality 1990
RAMF
Hospital
0
1
2
3
4
5
6
7
8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Cardiac Surgery Mortality 2003



New York State CABG Surgery



Not quite as conclusive…

- Lower RAMR due to better documentation?
  - # of co-morbid conditions increased
- Surgical mortality rates fell in other states
  - Were the results part of a trend?
    - Improvements in NY were larger

How did it work?

- Market Share?
- Surgeon Practice?

Did performance drive market share?

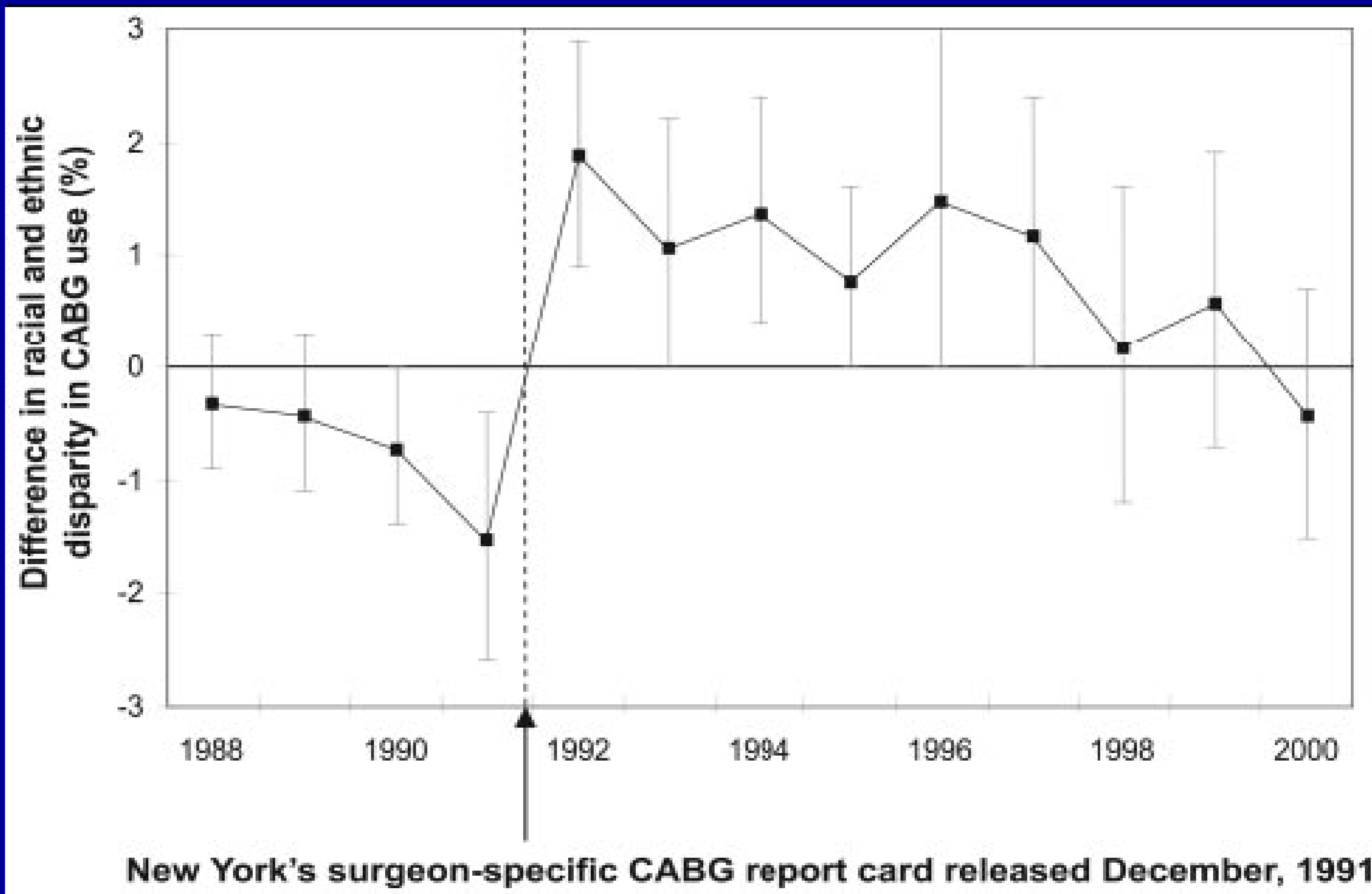
Hospital Performance	Market Share Prior	Market Share Post	% Change
Top 10%	10.9%	10.5%	-0.4%
Top Quartile	28.1%	27.9%	-0.2%
Bottom Quartile	21.8%	21.9%	0.1%
Bottom 10%	8.0%	8.1%	0.1%

Providers paid attention

Surgeon performance in Baseline Report	Left during subsequent 2 years
Top Quartile	3.0%
Second Quartile	4.4%
Third Quartile	4.4%
Fourth Quartile	19.1%
Adjusted Odds Ratio (4th vs. rest)	3.2 P=0.008

Unintended Consequences

- Would providers shun high-risk patients?
  - At least four studies have examined the issue
    - » No convincing evidence one way or the other
- Reduced access for minority patients?



Racial/ethnic disparity in NYS versus other states before & after public reporting

Hospital Quality Alliance (HQA)

- New national public reporting programs
  - Public-private partnership
- Financial incentives for participation
- Nearly all hospitals participate
  - 24 process measures across 4 conditions
  - 3 outcomes measures
  - 9 measures of patient experience
- Early data suggests rapid improvement
  - Those who care for the poor improve more slowly

Pay for Performance (P4P)

- Currently: fee-for-service rewards volume
  - Payment detached from results
- P4P encourages better care
  - Increasingly ubiquitous
  - > 50% of health plans (80% of patients) use P4P
- P4P experiments target hospitals, groups
  - Only 13.3% of plans focused on individual MDs

P4P Results….

- Early results are mixed
  - Few studies show modest impact, others none
- Reward for improvement or achievement?
  - Achievement awards current high performers
  - Still provides impetus for others to improve
- Impact on underserved populations unclear
  - Unpublished data on hospitals that serve the poor
  - No data on disparities

Where are we in 2008?

- Measuring, publicly reporting performance:
  - Probably helpful in driving improvements
    - Likely leads to some unintended consequences
    - Reduction in access to care for very ill
    - Racial and ethnic disparities
  - While hospitals and surgeons pay attention to reports, patients and consumers do not

Where are we in 2008?

- Beginning of a long term process
    - Ambulatory care measures coming
    - Expansion of hospital measures
    - More physician/surgeon-specific data
- P4P is likely to expand, become ingrained
    - Standard part of future payment formulae
- Long-term effects critical to understand