

# A Research Perspective: P4P and Health Disparities

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## I will briefly describe:

- conceptual overview of potential effects of P4P on disparities in healthcare delivery
  - include public reporting
- relevant research (very briefly!)
- design features of P4P programs likely to reduce, or at least not to increase, disparities

## Conceptual Overview Based On:

- principal-agent theory
- surveys of physicians
- experience in other industries
  - including schools and “No Child Left Behind”

## British Reporter Interviewing Mohandas Gandhi During the Indian Revolution:

- Reporter: “Mr. Gandhi, what do you think of Western civilization?”
- Gandhi (after a pause): “I think it would be a very good idea.”

# Teaching to the Test

“If an employee is expected to devote time and effort to some activity for which performance cannot be measured at all, then incentive pay cannot be effectively used for other activities.”

P. Milgrom. *Economics, Organization, and Management*. 1992.

## Some Examples of Possible Effects of P4P on Disparities:

- Reduce disparities
  - ↑↑ minority quality; ↑ majority quality
  - ↑ minority; majority unchanged
- Increase disparities
  - ↑↑ majority quality; ↑ minority quality
  - ↑ majority; minority unchanged
  - ↑ majority; minority ↓
- Leave disparities unchanged

# P4P Programs Could Increase Disparities By:

- reducing access to care
  - rich providers get richer and poor get poorer
  - physicians avoid patients deemed likely to lower their scores
- rewarding “color blind” QI programs
- rewarding “teaching to the test”

## Public Reporting Could Increase Disparities By:

- same mechanisms as P4P, PLUS:
  - differential patient ability to use public reports/report cards

## Rich Get Richer; Poor Get Poorer

- Providers in poor areas have less revenue to invest in improving quality
- More difficult to have high quality scores for poor, less educated, English not primary language, and/or sicker patients
  - true for process measures as well

# Data

- P4P in British NHS: practices that served lower income populations had lower quality scores (Doran)
- Appears to be true in the California IHA program as well
- Lower SES patients: less likely to obtain Pap smears, mammograms, diabetic retinal exams (holding physician practice constant) (Franks; Lipscome, Zaslavsky; Asch contradicts)
- Direction of causality unknown

# Avoiding Patients Likely to Lower Your Scores

- predicted by principal-agent theory
- surveyed physicians state that this happens (Casalino, 2007)

## National Survey of General Internists

- support financial incent if accurate: 72%
- measures are accurate: 29%
- support pub report medical group: 43%
- support pub report individual MD: 31%
- will avoid high risk patients: 82%
- divert attention from imp quality: 59%

“If my pay depended on A1c values, I have 10-15 patients whom I would have to fire. The poor, unmotivated, obese, and noncompliant would all have to find new MDs.”

# Avoiding Patients

- despite risk adjustment for health status, racial disparities in CABG rates:
  - increased in NY State with the onset of public reporting
  - did not increase over the same time period in states without public reporting (Werner 2005a)

# Should Process Scores Be “Risk-Adjusted?”

- Who Is Likely to Achieve Higher Mammography Rates?
  - physicians in a wealthy suburb?
  - physicians in the inner city?

# Rewarding Color-Blind QI

- providers' ROI may be greatest for QI programs aimed at their most prevalent patient type
- higher cost to tailor materials to less educated/culturally different/less English speaking patients
- if white/affluent/educated most prevalent . . .

# Rewarding “Teaching to the Test”

- agency theory predicts: focus attention on measured quality; however, unmeasured quality may be equally or more important (Casalino 1999; Bonner)
- this occurs in other industries (e.g. found in No Child Left Behind - Dillon)
- but why should this affect disadvantaged patients more than advantaged?

# Why Disadvantaged More Than Advantaged? An Example:

- Two patients with diabetes and CHF: affluent vs.. poor non-English speaking
- A1c checks and eye exams rewarded; teaching about CHF not rewarded
- focus on A1c and eye exams
- which patient more likely to be given the time to educate about CHF? Poor non-English speaking patient:
  - takes more time
  - less likely to demand

# Differential Patient Ability to Use Public Reports/Report Cards

- if disadvantaged patients less likely to:
  - see the report card
  - understand the report card
  - act on the report card (may not live or work near highly rated providers)
- But:
  - if advantaged already know who is good, public reports could help level the playing field (Mukamel)

# What Can Be Done? (I)

- reward both absolute scores and improvement
- reward both overall scores and minority-specific scores
- use risk-adjustment or stratification for ethnicity and/or SES and/or primary language and for health status
- use methods to minimize teaching to the test

## What Can Be Done? (II)

- permit “exclusions” of certain patients
- plan P4P and public reporting programs with disparities in mind
- more research into effects of P4P and public reporting on disparities

# Reward Both Absolute Scores and Improvement

- IHA is beginning to do this
- not helpful for public reporting  
(providers in poor areas will still look worse)

# Reward Both Overall Scores and Minority-Specific Scores

- may not be possible in most settings (small numbers, data collection, politics)
- Massachusetts Medicaid hospital P4P is partly linked to disparity improvement

# Use Risk Adjustment or Stratification

- For outcome AND process measures
- For SES and/or ethnicity and/or primary language, and for health status
  - may not need to adjust for health status for process measures

## Problems with Risk-Adjustment for SES, Ethnicity . . .

- data collection
- technical obstacles
- political obstacles
- reward inferior health care on an ongoing basis

## Problems with Stratification for SES, Ethnicity . . .

- problems with data collection, technical aspects, politics
- small numbers may make impossible to stratify accurately for many providers
- advantage is stratification makes quality of care for minorities visible to providers (risk adjustment does not) and makes possible to reward quality care for minorities

# Methods to Minimize Teaching to the Test

- rotate and/or expand measures
- include patient satisfaction measures
- highest scoring providers may receive substantial additional income if score well on an additional set of measures not announced in advance (Sinclair)

## Permit “Exclusions” of Certain Patients

- this could go far to meeting provider concerns and to leveling the playing field
- could be used in addition to risk adjustment
- audit providers with highest exclusion rates ( $\pm$  random audits)
- used in British P4P

## Few Programs Have Been Designed With These Features

- Chien AT et. al. Pay for Performance, Public Reporting, and Racial Disparities in Health Care. *Med Care Res Rev.* 2007;64(5):283S-340S.

# What to Do?

- implementing P4P and public reporting programs with disparities in mind may take longer, be more expensive
- avoid provider, patient, Congressional backlash?

# Selected Useful Literature (1)

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# Useful Literature (III)

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