

# Health Care Cost Containment, Consumer Incentives, and Value- Based Insurance Design

Michael Chernew

Jan. 18, 2008

# Outline

- What drives cost growth
- Cost containment options
- Value Based Insurance Design

# Definitional issues matter

- Do we mean:
  - Cost per service?
  - Cost per disease?
  - Expenditures at the national (or program) level?

# Cost Drivers

# Could obesity be driving spending

- Probably contributes to cost growth
- The effects interact with technology
- Costs were growing faster than real GDP for EVERY 10 year period since WWII
  - Even before obesity epidemic
- If the only change between 1987 and 2001 were BMI related then real, per capita spending would have risen ~ 1%

# Could Pricing be Driving Cost Growth

- Price measurement is inherently challenging because of unobserved quality
- Over short time periods, price fluctuations can have significant cost impacts
- Over time it is unlikely that price increases, holding utilization constant have driven cost growth

# Long run cost drivers

- Medical technology
  - New knowledge (and associated stuff)
- Less important factors
  - Prices
  - Aging
  - Rising incomes
  - More generous coverage
  - Inefficiency
  - Liability

# Evidence

- Several literature reviews document the role of technology
  - Chernew et al. (1998)
  - Smith et al. (2000)
- Different methodological approaches
  - Residual approach
  - Affirmative
- 81% of economist cite technology as main cost driver (Fuchs, 1996)
- Estimates suggest 50% of cost growth related to 'technology' (Cutler, 1995)

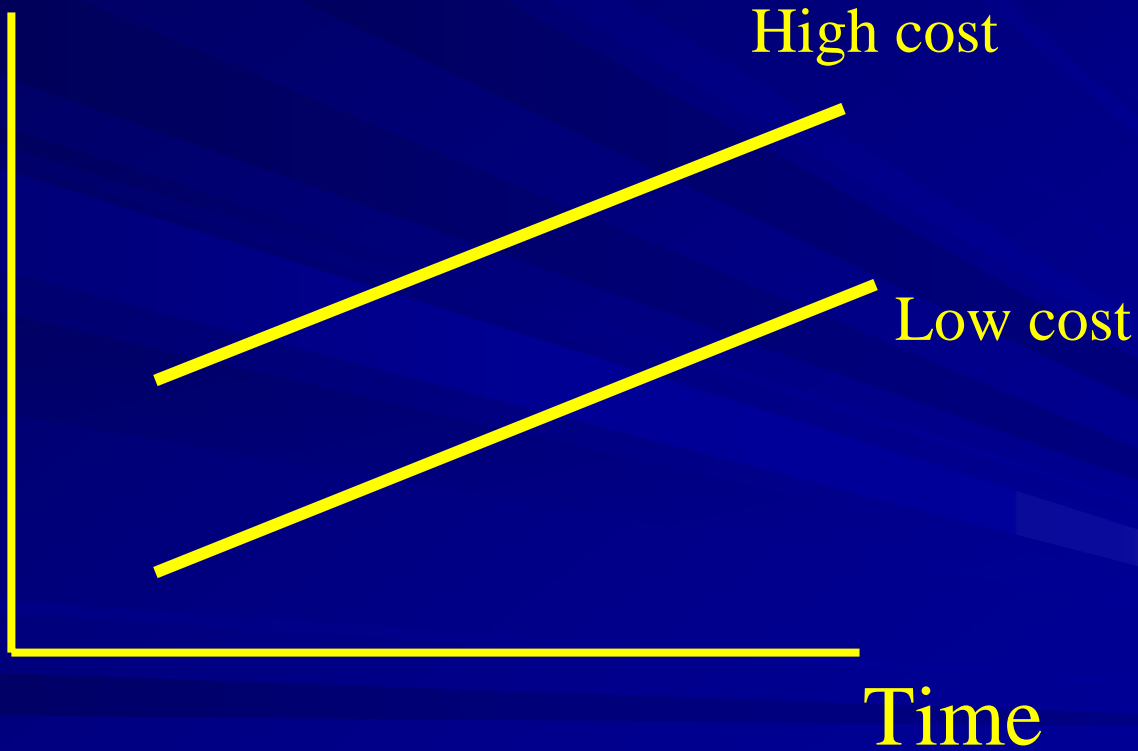
# Types of technology changes

- 1951 - 1971 : little ticket items
  - lab tests
  - X-Rays
- 1971 - 1981 : big ticket items
  - CABG
  - C-section
    - radiation & chemotherapy for breast cancer
- Early and Mid 1990s
  - Pharmaceuticals

# Cost Containment

# Level vs Trajectory

Costs



# Explaining the 1990s

- Transition from the high curve to the low curve slow cost growth, but then it resumes.

# Options

- Managed care/ capitation/ competition
- Lower provider prices
- Higher consumer cost sharing

# Managed care and technology

## ■ 1976 - 1981

- No difference in premium increases (HMOs vs. Indemnity Policies)
- HMOs adopt technology at same rate?

## ■ 1990s

- Cost growth slows
- Slower cost growth in managed care dominated areas with competitive provider systems
- No difference in rate of technology adoption

# Capitation

- Capitation can control cost growth
- Effects are stronger with broader capitation
  - Global capitation likely is stronger than episode based capitation
- The challenge is maintaining the level of capitation
  - Chernew et al.
  - Cutler

# Summary of managed care/capitation evidence

- Manage care lowers costs
- Possibly some modest reduction in rate of cost growth
  - Concentrated in areas with considerable provider competition
  - Cost growth still exceeds income growth
  - Hard to maintain impact
- Capitation lowers cost growth and can lower trend
  - Hard to maintain impact

# Lower provider payments

- Can reduce spending
  - Utilization effects as well
- Concerns about access
- Conceptually could affect growth as well as level
  - Scant evidence
  - What are the thresholds?

# Patient Cost Sharing

# Pros and Cons of High Cost Sharing

## ■ Pros

- Save money
  - Consume less
  - Seek less expensive providers

## ■ Cons

- Forgo valuable services
- Make poor provider choices
- Exacerbate disparities

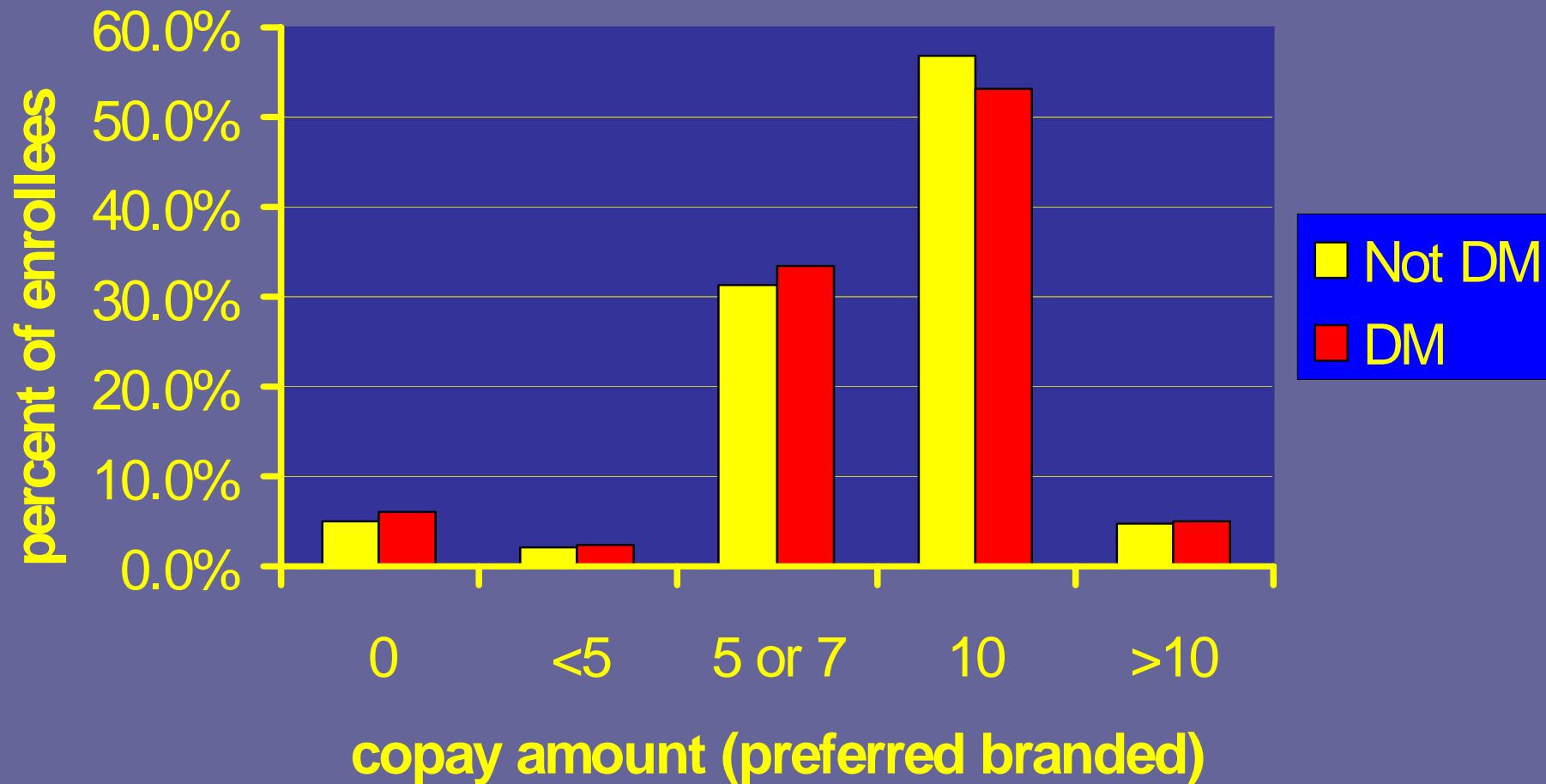
# Consumers do not respond to cost sharing as economists would like

- Reductions in appropriate use same as for inappropriate use (Sui et al. 1986)
  - Lack of coverage is associated with worse outcomes
    - Effects concentrated on poor and chronically ill
  - Copays reduce use of preventive services
  - Copays reduce use of ‘valuable’ pharmaceuticals

# Value Based Insurance Design

- Reduce (or keep low) copays for high value services
  - For high value patients
- Recognize heterogeneity in value
  - By service
  - By patient
- Recognize that for high value services, higher copays lead to under-consumption

# Copays Within and Outside of Disease Management



# Types of VBID

## ■ Targeting

- By service

  - Pitney Bowes

- Targeted service AND patient group

  - University of Michigan

## ■ Scope

- Lower copays only

- Lower high value, raise low value

# The New York Times

February 21, 2007

## To Save Later, Some Employers Are Offering Free Drugs Now

By [MILT FREUDENHEIM](#)

For years, employers have been pushing their workers to pay more for health care, raising premiums and out-of-pocket medical expenses in an effort to save money for the company and force workers to seek only the most necessary care.

Now some employers are reversing course, convinced that their pennywise approach does not always reduce long-term costs. In the most radical of various moves, a number of employers are now giving away drugs to help workers manage chronic conditions like [diabetes](#), [high blood pressure](#), [asthma](#) and [depression](#).

Major employers like [Marriott International](#), [Pitney Bowes](#), the carpet maker [Mohawk Industries](#) and Maine state government have introduced free drug programs to avoid paying for more expensive treatments down the road.



# THE WALL STREET JOURNAL.

O N L I N E

May 10, 2004

THE JOURNAL REPORT: LEADERSHIP

## A Radical Prescription

*While most companies look to slash health costs by shifting more expenses to employees, Pitney Bowes took a different tack. The results were surprising.*

By VANESSA FUHRMANS

Staff Reporter of THE WALL STREET JOURNAL

May 10, 2004; Page R3

In the fall of 2001, **Pitney Bowes Inc.**'s corporate medical director, John Mahoney, proposed an unusual experiment: Slash the amount that employees pay for diabetes and asthma drugs, and see what happens.

# Picture it:

*Lower copayments for  
asthma controllers*



**Blue Care  
Network  
of Michigan**

A nonprofit corporation and independent licensee  
of the Blue Cross and Blue Shield Association



**Beginning Jan. 1, 2006, Blue Care Network is charging the lowest copayment (Tier 1) for brand-name formulary drugs used to control asthma.\***

# Financial Effects of VBID

- Greater use of high value services
- Greater employer share of spending for high value services
  - Including the services that would have been used anyway
- Administrative costs
  - Depends on design
- Offsets
  - Lower costs due to fewer adverse events

# Literature

## ■ Pitney Bowes

- 6% decrease in overall diabetes costs
- Savings exceeded \$1 million

## ■ Asheville

- Reduced annual, per participant, total cost for diabetes by \$1,200 to \$1,872

## ■ Retired public employees in CA

- 20% offset overall
- 50% in highest spenders

# Simulations

- How much must compliance reduce non-RX costs to completely offset extra RX spending
  - Aggregate perspective: 17%
  - Employer perspective: 48%
- Could break even with less effectiveness if:
  - Add in productivity gains
  - Add in disability savings
  - Target more effectively

# Cost Sharing and Cost Containment

- Higher copays lead to lower spending (even with offsets)
  - Because of this copays will rise
- VBID allows firms to mitigate deleterious consequences
  - Allow firms to hit a cost target in a more efficient manner
- Targeted copay reductions will generate offsets
  - May offset some or all of increased drug use
- VBID can VBID cannot be perfect, but imperfect may be better than non-existent
- We know very little about cost sharing and cost growth
  - Uninsured spending growth same as insured spending growth

# Summary

- Cost growth is driven by new technology
- Continued cost growth will:
  - Consume a large share of income growth
  - Contribute to coverage declines
- No magic cost containment options
  - level vs trajectory
  - Cost containment vs quality/ access

END

# Transparency

- For cost sharing to work, consumers must be aware of prices (and charged those prices).
  - I am skeptical that simply telling people what employers or plans pay will influence choice
- Transparency about quality improves choices
  - Effect sizes are modest
  - Some evidence suggests that quality information makes people more price sensitive
    - More willing to go to less expensive providers if quality is the same

# Separate Dolphins from Tuna

