# Value Based Insurance Design: initiatives outside of oncology

Michael Chernew

Feb 10, 2009

Portions of this research were funded by Pfizer and GSK.

# Value

- Value reflects Costs AND Quality
  - Similar to the concept of cost effectiveness
  - Measurement from the societal perspective

- Explicitly not synonymous with:
  - High quality
  - Low cost

**è** To be a VALUE measure or VALUE based initiative, cost and quality must considered jointly

# Value Based Insurance Design

- Charge lower copays for high value services than for other services
  - For high value patients
- VBID focuses on patient incentives
- As opposed to: Value Based Purchasing
  - Focus on contracting with providers and provider incentives
- Areas of overlap: incentives for beneficiaries to select high value plans or providers (Tiering)

Sources:

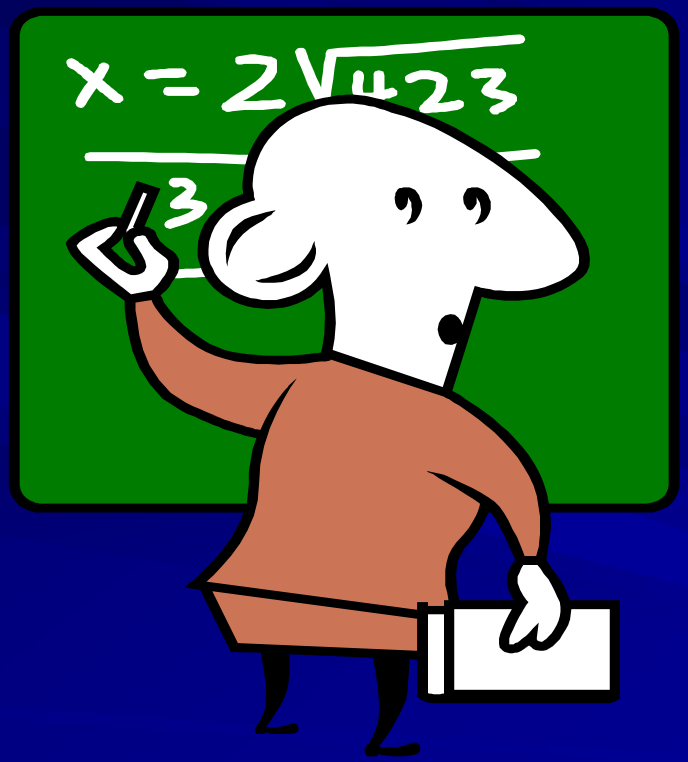
Fendrick, et. al American Journal of Managed Care, 2001

Chernew. et al. Health Affairs. 2007; Chernew. et al. Health Affairs. 2008

# VBID Premise

- Basic premise:
  - Patient demand and preferences should pay a role in the care that is delivered
  - Patients should share some of the financing burden because it can encourage efficient care
  - Standard economic theory of demand should not be blindly applied

# Insurance Theory

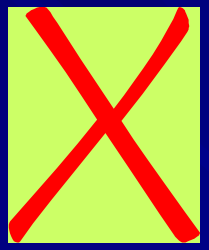


# Insurance basics

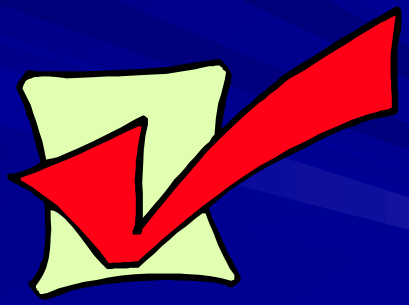
- Insurance lowers prices at the point of services
  - Alleviates risk
- Insurance induced problems (assuming traditional FFS insurance)
  - Consumers over consume (moral hazard)
  - Prices rise

# Why the cost sharing?

- To lower premiums



- To improve incentives
  - Reduce ‘excess use’
  - Encourage price shopping



# Optimal insurance theory

- Balance moral hazard with risk aversion
  - Low copays if ‘perfectly informed’ demand is not responsive to price
    - Without moral hazard, no co-insurance
  - High copays if ‘perfectly informed’ demand is responsive to price
    - Patients reduce inappropriate use before appropriate use

# 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

# Back to VBID

# Dimensions 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痴 state government have introduced free drug programs to avoid paying for more expensive treatments down the road.

WSJ.com THE WALL STREET JOURNAL. ONLINE

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

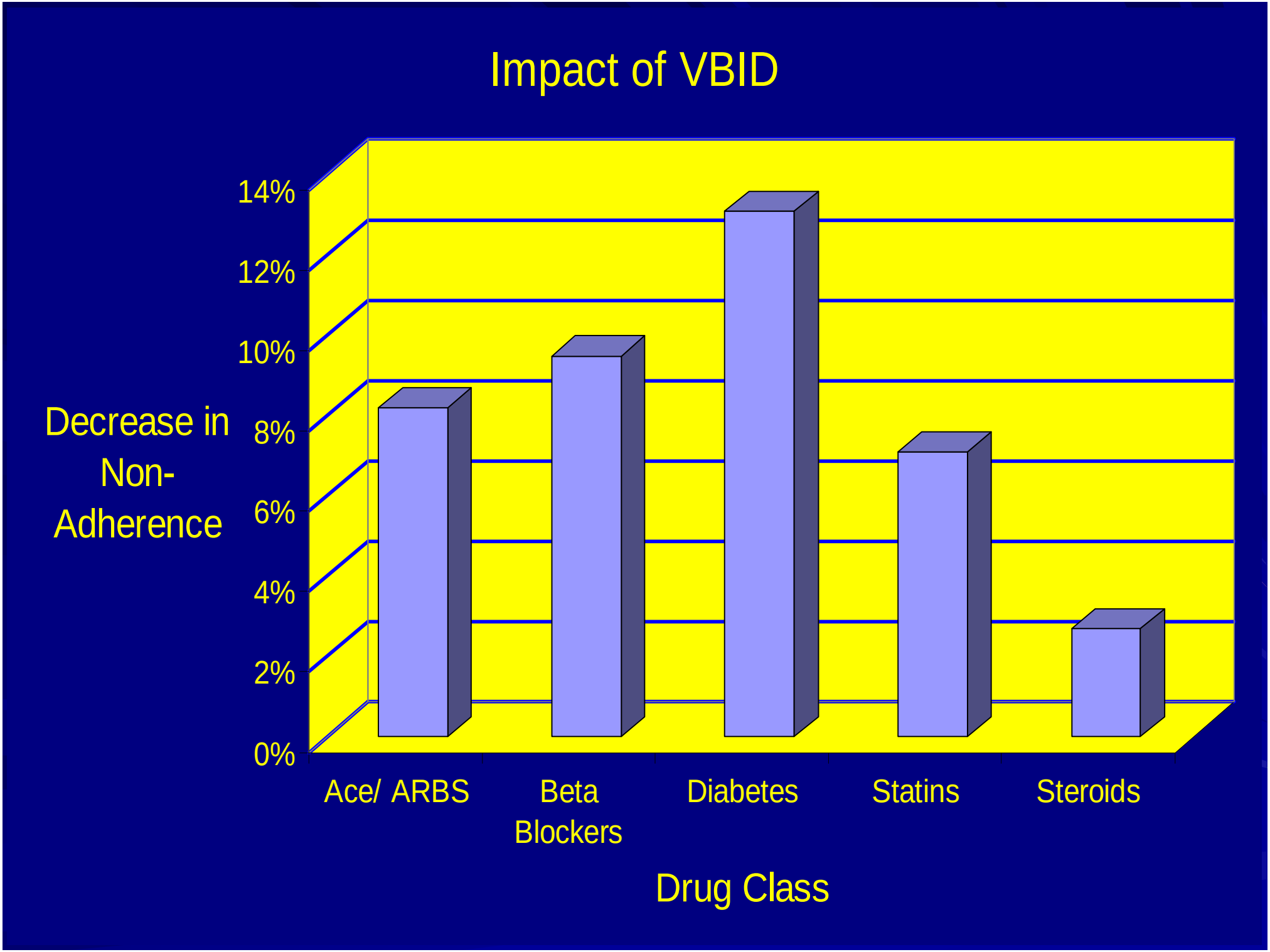
A nonprofit corporation and independent licensee of the Blue Cross and Blue Shield Association

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

# VBID Results: adherence

# Intervention

- A large employer lowered copays for selected medications in January 2005:
  - Ace/ARBs
  - Beta Blockers
  - Glucose control
  - Statins
  - Steroids
- Copay reductions:
  - Generic: $ 5.00 **è** $0
  - Preferred Brand: $25.00 **è** $12.50
  - Non-Preferred Brand: $45.00 **è** $22.50


Impact of VBID
Decrease in Non-Adherence
14%
12%
10%
8%
6%
4%
2%
0%
Ace/ ARBS
Beta Blockers
Diabetes
Statins
Steroids
Drug Class

# Financial effects

# Costs of VBID

- Greater use of high value services
- Greater employer share of spending for high value services that would have been used anyway
- Administrative costs
  - Depends on design

# Financing VBID

- Offsets
  - Lower costs due to fewer adverse events
  - Productivity gains
  - Offsets are greater (and costs lower) if target high risk patients
- Increase costs for other services
  - Low value
  - All others

# Perspective is key

- Societal
  - Ignore greater employer share of inframarginal use
- Firm
  - Treat greater employer share for inframarginal prescriptions as a cost

# Results from 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

Source: Mahoney AJMC 2005; Cranor et al 2003; Gruber and Chandra, 2007

# Financial effects of copay lowering VBID

- Econometric estimates very imprecise
- Simulation suggests
  - Break even from societal perspective is possible if adherence reduces spending by 17%
  - Break even from employer perspective is possible if adherence reduces spending by 48%

# Generalizability

- Could break even with less effectiveness if:
  - Add in productivity gains
  - Add in disability savings
  - Target more effectively
    - Personalized medicine
- Do not confine to areas where money can be saved
  - Expand to include area where value is high
- Even if copay lowering VBID does not save money, principles of VBID can provide more health for any budget
  - Improve value

# Details of design are key

- Spread costs of lower copays:
  - Across all services
  - Across selected clinical areas
  - Imaging?
  - Selected, low incremental value drugs?
- Better research will support better benefit design
  - Comparative effectiveness research
- Think about ‘principles of VBID’ not VBID
  - VBID is not a unique intervention

# VBID summary

- Increasing patient cost sharing saves money
- Consumers often do  not respond as we would like
- Implication
  - Charge more in some situations (when you want to change behavior)
    - This saves money
  - Lower financial barriers for high values services
    - This mitigates adverse health effects
- Combine with smarter provider payment

# Application to Cancer

- Waive 1st dollar cost sharing for cancer patients
- Keep copays low for appropriate screening (or any cancer prevention activities)
- Charge cancer patients for low value care
- Develop personalized medicine

# END