Value-Based Insurance Design
A “Clinically Sensitive” Approach to Preserve Quality of Care and Contain Cost
<table>
<thead>
<tr>
<th>Factor</th>
<th>Odds ratio (and 95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental</strong></td>
<td></td>
</tr>
<tr>
<td>Dim lighting</td>
<td>1.6 (0.8–2.5)</td>
</tr>
<tr>
<td>Warm room temperature</td>
<td>1.4 (0.9–1.6)</td>
</tr>
<tr>
<td>Comfortable seating</td>
<td>1.0 (0.7–1.3)</td>
</tr>
<tr>
<td><strong>Audiovisual</strong></td>
<td></td>
</tr>
<tr>
<td>Poor slides</td>
<td>1.8 (1.3–2.0)</td>
</tr>
<tr>
<td>Failure to speak into microphone</td>
<td>1.7 (1.3–2.1)</td>
</tr>
<tr>
<td><strong>Circadian</strong></td>
<td></td>
</tr>
<tr>
<td>Early morning</td>
<td>1.3 (0.9–1.8)</td>
</tr>
<tr>
<td>Post prandial</td>
<td>1.7 (0.9–2.3)</td>
</tr>
<tr>
<td><strong>Speaker-related</strong></td>
<td></td>
</tr>
<tr>
<td>Monotonous tone</td>
<td>6.8 (5.4–8.0)</td>
</tr>
<tr>
<td>Tweed jacket</td>
<td>2.1 (1.7–3.0)</td>
</tr>
<tr>
<td>Losing place in lecture</td>
<td>2.0 (1.5–2.6)</td>
</tr>
</tbody>
</table>

Note: CI = confidence interval.
“Before I came here I was confused about this subject. Having listened to your lecture, I am still confused. But on a higher level.”

Enrico Fermi
Projected Per Capita Health Expenditures: No End in Sight

Health care cost increases for employers were “moderate” in recent years, due for the most part to increasing cost sharing by the insured enrollee.

Focus on Medical Technology

Is Technology the “Culprit” Behind Cost Growth?

- The tradeoffs between access to medical innovation and the how to pay for it is a complex and extremely political issue.
Health Care Cost Growth
Driving Forces

- Access issues
  - Presence and type of health insurance
- Prices
- Utilization
  - New interventions
  - New indications for existing technologies
  - Marketing
PAIN RELIEVERS

ADDITIONAL FEE CHARGED FOR QUESTIONS ABOUT MEDICINE ADS SEEN ON TV
Dealing with the Health Care Cost Crisis
Interventions to Control Costs

- Denial
Dealing with the Health Care Cost Crisis
Interventions to Control Costs

- Denial
- Prior authorization
  - 1-800-NO-WAY
Dealing with the Health Care Cost Crisis
Interventions to Control Costs

- Denial
- Prior authorization
  - 1-800-NO-WAY
- Step Therapy
Dealing with the Health Care Cost Crisis

Interventions to Control Costs

- Denial
- Prior authorization
  - 1-800-NO-WAY
- Step Therapy
- Drive to Canada
I'm going to Canada for the cheap drugs.

Then

Now
Dealing with the Health Care Cost Crisis
Interventions to Control Costs

- Denial
- Prior authorization
  - 1-800-NO-WAY
- Drug discount cards
- Drive to Canada
- Disease Management
Benefit Design Trends: Disease Management

- Manage the most costly patients
- Improves outcomes
- May reduce costs - probably not
- Lack of reduction in copays for recommended services do not reflect investment in disease management
Dealing with the Health Care Cost Crisis
Interventions to Control Costs

- Denial
- Prior authorization
  - 1-800-NO-WAY
- Drug discount cards
- Drive to Canada
- Disease Management
- Cost Sharing
Benefit Design Trends: Cost Sharing Consumer Driven Health Plans

- Centerpiece of competitive market based reform proposals
- Charge consumers high out-of-pocket fees
  - Will likely reduce costs
  - No evidence whether CDHPs reduce cost growth
  - Likely will lead to worse clinical outcomes
- Assumption that consumer is informed
Benefit Design Trends: Cost Sharing
Tiered Formularies

Copay set on drug price, not value
- Generic drugs - lowest copay
- Preferred brand - middle
- Non-preferred brand - highest
“I can’t believe you had to spend nearly a million dollars in grant money to show that if you make people pay more for medical services that they will use less.”

Barbara Fendrick
(my mother)
Different Cost-Sharing Formulas for Prescription Drug Benefits, 2000-2003

Average co-pay:
- tier 1 - $6.63
- tier 2 - $13.94
- tier 3 - $28.32
A growing body of evidence demonstrates that cost shifting leads to decreases in essential and non-essential care.
Compliance with Statin Therapy Stratified by Mean Prescription Copayment

Co-pay amount was the most important predictor of drug discontinuation.

Restriction in Drug Use Due to Cost Leads to Adverse Health Outcomes

In a nationally representative sample of nearly 8000 adults, the individuals who restricted prescription drug use due to cost:

- were 76% more likely to report a significant decline in overall health
- were 50% more likely to report a non-fatal myocardial infarction or angina

Heisler M. Medical Care. 2004;42:626-634
A strategy to offset the undesirable decrease use of essential services due to cost shifting is warranted
Getting Services to People Who Need Them

Who Gets the Essential Care?

- Everybody
- Those who “fail” standard Rx
Getting Services to People Who Need Them
Who Gets the Essential Care?

- Everybody
- Those who “fail” standard Rx
- Those who demand it
Getting Services to People Who Need Them
Who Gets the Essential Care?

- Everybody
- Those who “fail” standard Rx
- Those who demand it

Spending on DTC advertising for drugs increased by 25% between 2002 and 2003 (from $2.5 to $3.2 billion)
WILLIAM H. HAHN JR.
1905 — 1980
I TOLD YOU I WAS SICK
Getting Services to People Who Need Them

Who Gets the Essential Care?

- Everybody
- Those who “fail” standard Rx
- Those who demand it
- Those who can afford it
Since utilization due to cost sharing leads to worse outcomes, is it appropriate to place the burden of weighing the benefits and costs of medical interventions on the patient?

If the patient is not the appropriate decision maker, the system should provide guidance and incentives to promote better decisions.
Getting Services to People Who Need Them
Who Gets the Essential Care?

- Everybody
- Those who “fail” standard Rx
- Those who demand it
- Those who can afford it
- Those who “need” it
Getting Services to People Who Need Them

Value Based Insurance Design

Heretofore known as the “Benefit-based” Co-pay

- In current system, patients’ access to services depend on ability to pay (even those with generous benefits)
- Such a system discriminates against those with limited incomes
- As a result, underutilization of effective therapies persists in several clinical areas
- Distribution is not directed at medical “need”
Number Needed to Treat to Prevent a Cardiac Event with Statins, by Prevention Category

No Difference in Statin Compliance Stratified by Prevention Category

Getting Services to People Who Need Them
Value Based Insurance Design
Heretofore known as the “Benefit-based” Co-pay

- Instead, base cost sharing on
  - likelihood of a service’s benefit as determined from the scientific evidence
  - NOT the acquisition price
- Such a system would provide a financial incentive to patients most likely to benefit from the use of a specific intervention

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.
The Asheville Project
University of Michigan researchers say a patient's payment for a drug should depend on how much he or she will benefit from the medication -- a move that would likely lower co-payments for many Americans.
From “One Size Fits All” Cost Sharing to “Clinically Sensitive” Benefit Design

Cost sharing set on value, not price

- Highly valued services - lowest copay
- Effective yet expensive - middle
- Unproven or marginal benefit - highest

Implementing Value Based Insurance Design
Clinical Examples

- Immunizations
- Diabetes Mellitus
  - Medicare full coverage ($0 cost share) of ACE inhibitors resulted in nearly one million life years gained and a net savings of $7.4 billion over the cohort lifetime

Rosen A. Annals Int Med. 2005;143:89.
A national pharmacists group and GlaxoSmithKline PLC are seeking employers in 10 cities around the U.S. for an experiment in diabetes treatment that aims to improve patient health while reducing health-care costs.

Participating employers would agree to waive co-payments on medicines that treat diabetes, to encourage their use. In doing so, the program would flout a trend toward shifting health-care costs to employees, in part through higher co-payments for medicines. Steep co-payments tend to restrain drug spending. But critics argue they also reduce patients' compliance with recommended treatment, leading eventually to higher spending on health-care services as workers' health declines.
Implementing Value Based Insurance Design
Other Clinical Examples

- Asthma
  - lower co-pay as disease severity increases
- Cancer screening
  - lower co-pay if family history, tumor markers etc.
- CHF, etc....
Implementing Value Based Insurance Design
The Devil is in the Details

- Clinical benefit of a specific intervention must be easily identified on an individual patient level
- Patients and clinicians must be willing participants (and not game the system)
- Enhanced when used with electronic medical record and/or disease management program
- Convincing key stakeholders of the “value”
Value Based Insurance Design
Likely Effects

- Will increase value of medical services per dollar spent
- Allows more efficient subsidization of low income patients
  - Not all care is subsidized, only “valued” care
- BBC may not save money in most instances
- More likely to slow rate of health care cost growth
Benefit-Based Copayments
A rational, outcomes-oriented approach
Getting Services to People Who Need Them

Conclusions

- Access to services should be driven by differences in benefit, risk of adverse events, and (but not exclusively) acquisition cost.
- Payers need to actively experiment with benefit designs to simultaneously maintain enrollee satisfaction and stem rising costs.
- VBID preserves use of valued services in atmosphere of increased cost shifting.
A system that provides a financial incentive to prioritize out-of-pocket expenditures based on the “value” of interventions, not price, is consistent with the basic goals of health care.

“If we don’t succeed, then we will fail.”

Dan Quayle