



SCHOOL OF PUBLIC HEALTH

CENTER FOR VALUE-BASED INSURANCE DESIGN

UNIVERSITY OF MICHIGAN

Changing the Health Care Cost Discussion from "How Much?" to "How Well?"

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Learning Objectives

- 1. Examine the relationship between cost-sharing and patient adherence.**
- 2. Explain the concept of “clinical nuance” which recognizes that: (1) medical services differ in the benefit provided; and (2) the clinical benefit derived from a specific service depends on the patient using it, as well as when and where the service is provided.**
- 3. Introduce Value-Based Insurance Design - a program where cost-sharing is based on an intervention’s clinical benefit - not cost - to prioritize patients’ out-of-pocket expenditures**
- 4. Review existing evidence on Value-Based Insurance Design programs.**
- 5. Overview of V-BID implementation in public and private payers**

Table 1: Risk factors for nodding off at lectures

Factor	Odds ratio (and 95% CI)
Environmental	
Dim lighting	1.6 (0.8–2.5)
Warm room temperature	1.4 (0.9–1.6)
Comfortable seating	1.0 (0.7–1.3)
Audiovisual	
Poor slides	1.8 (1.3–2.0)
Failure to speak into microphone	1.7 (1.3–2.1)
Circadian	
Early morning	1.3 (0.9–1.8)
Post prandial	1.7 (0.9–2.3)
Speaker-related	
Monotonous tone	6.8 (5.4–8.0)
Tweed jacket	2.1 (1.7–3.0)
Losing place in lecture	2.0 (1.5–2.6)

Note: CI = confidence interval.

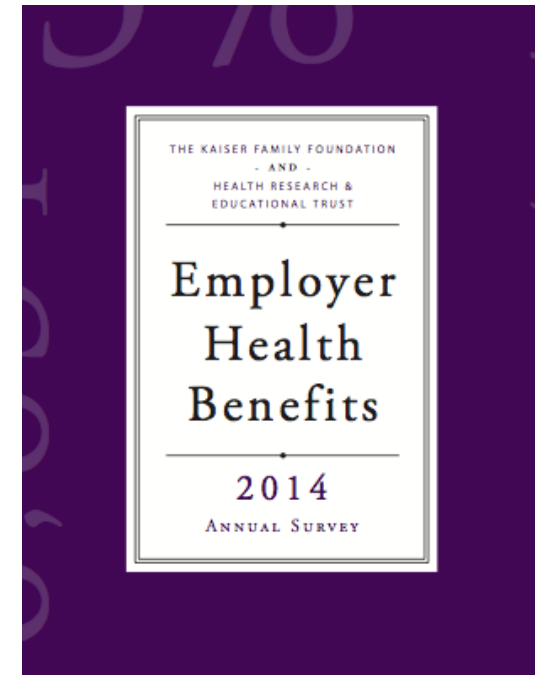
Translating Research into Policy:

Shifting the discussion from “How much” to “How well”

- **Innovations to prevent and treat disease have led to impressive reductions in morbidity and mortality**
- **Regardless of these advances, cost growth is the principle focus of health care reform discussions**
- **Despite unequivocal evidence of clinical benefit, substantial underutilization of high-value services persists across the entire spectrum of clinical care**
- **Attention should turn from *how much* to *how well* we spend our health care dollars**

Role of Consumer Cost-Sharing in Clinical Decisions

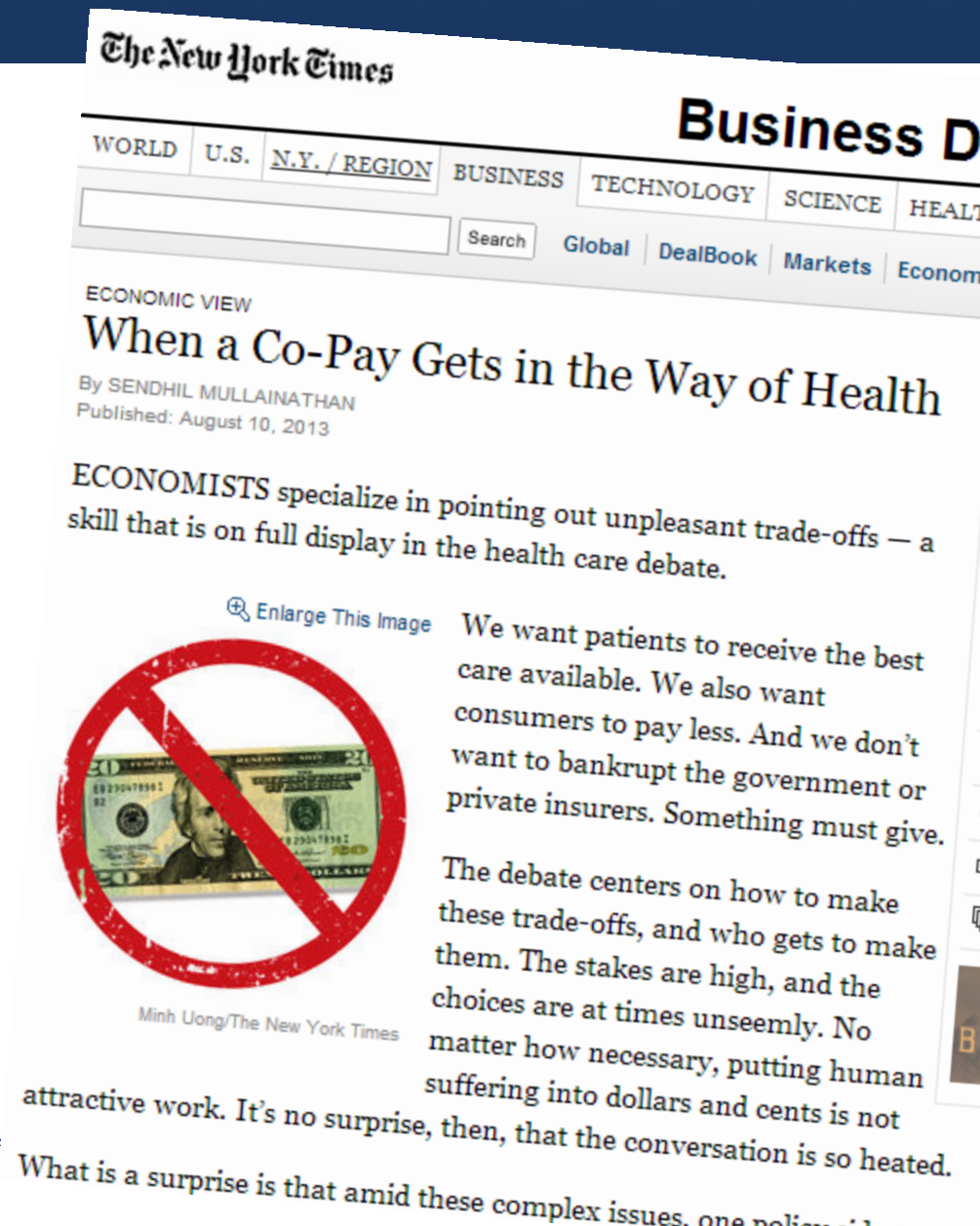
- For today's discussion, our focus is on costs paid **by the consumer**, not the employer or third party administrator
- Ideally consumer cost-sharing levels would be set to encourage the clinically appropriate use of health care services
- Instead, archaic “one-size-fits-all” cost-sharing fails to acknowledge the differences in clinical value among medical interventions
- Consumer cost-sharing is rising rapidly



Impact of Increases in Consumer Cost-Sharing on Health Care Utilization

A growing body of evidence concludes that increases in consumer cost-sharing leads to a reduction in the use of essential services, worsens health disparities, and in some cases leads to greater overall costs

Goldman D. *JAMA*. 2007;298(1):61–9. Trivedi A. *NEJM*. 2008;358:37–41. Chandra A. *NEJM*. 2010;362(4):320–8. Chernew M. *J Gen Intern Med* 23(8):1131–6.

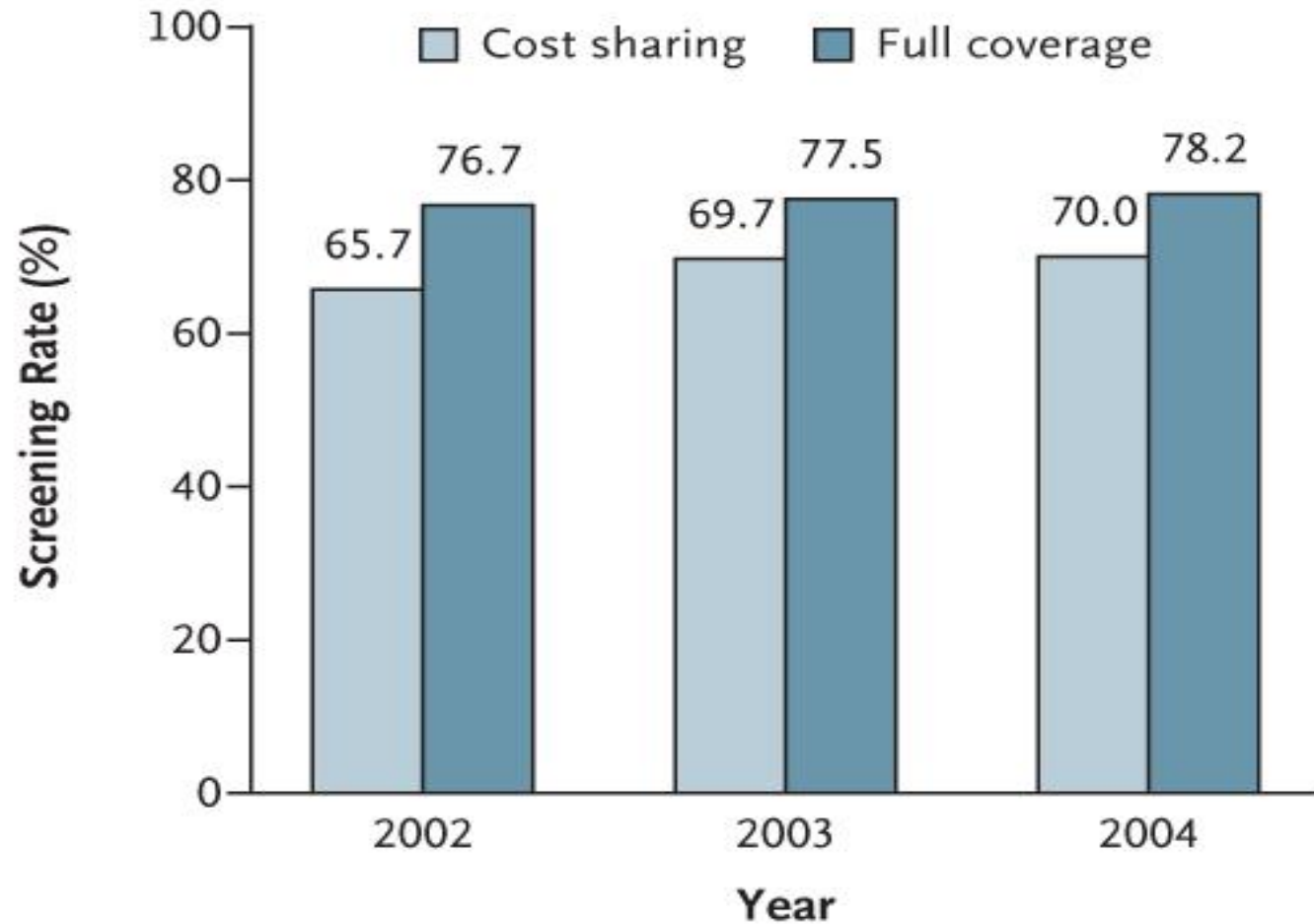


Inspiration

“I can’t believe you had to spend a million dollars to show that if you make people pay more for something, they will buy less of it.”

Barbara Fendrick (my mother)

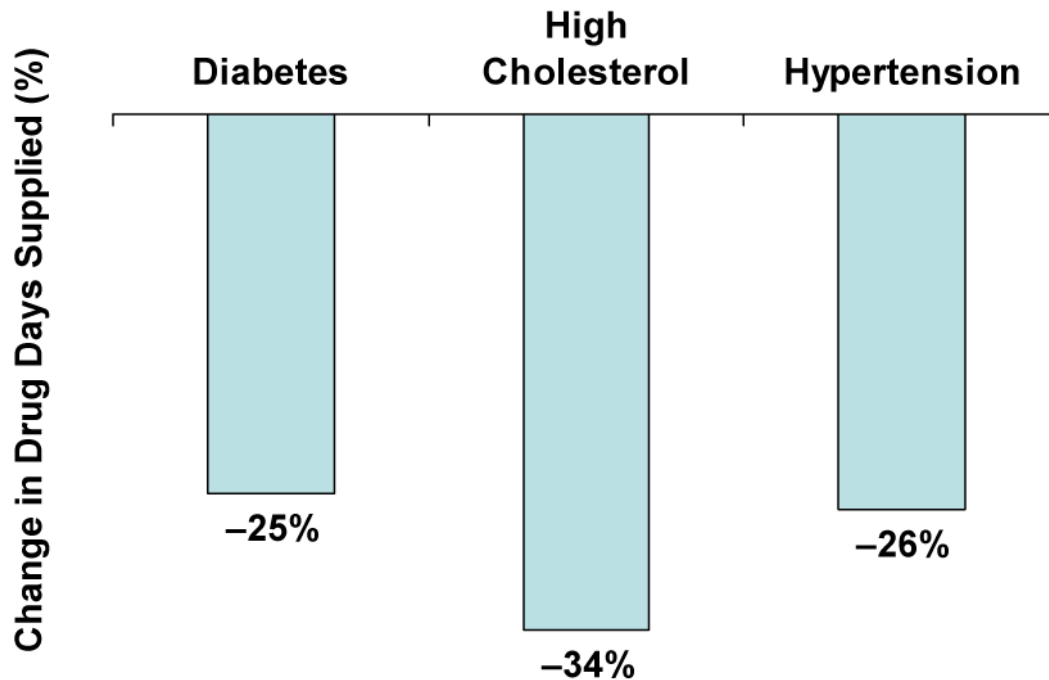
Cost-sharing Affects Mammography Use by Medicare Beneficiaries





High Copays Reduce Adherence to Appropriate Medication Use

Change in Days Supplied for Selected Drug Classes When Copays Were Doubled



- When copays were doubled, patients took less medication in important classes. These reductions in medication levels were profound
- Reductions in medications supplied were also noted for:
 - NSAIDs 45%
 - Antihistamines 44%
 - Antiulcerants 33%
 - Antiasthmatics 32%
 - Antidepressants 26%
- For patients taking medications for asthma, diabetes, and gastric disorders, there was a 17% increase in annual ER visits and a 10% increase in hospital stays

ER = emergency room.

Goldman DP et al. *JAMA*. 2004;291:2344-2350.

Medication Affordability After Medicare Part D Implementation

- Among elderly beneficiaries with four or more chronic conditions, the prevalence of cost-related non-adherence **increased** from 14% in 2009 to 17% in 2011, reversing previous downward trends
- The prevalence among the sickest elderly of forgoing basic needs to purchase medicines **decreased** from 9% in 2007 to 7% in 2009 but **rose** to 10% in 2011

Impact of Cost-Sharing on Health Care Disparities

Effects of Increased Patient Cost Sharing on Socioeconomic Disparities in Health Care

*Michael Chernew, PhD¹ Teresa B. Gibson, PhD² Kristina Yu-Isenberg, PhD, RPh³
Michael C. Sokol, MD, MS⁴ Allison B. Rosen, MD, ScD⁵, and A. Mark Fendrick, MD⁵*

¹Department of Health Care Policy, Harvard Medical School, Boston, MA, USA; ²Thomson Healthcare, Ann Arbor, MI, USA; ³Managed Markets Division, GlaxoSmithKline, Research Triangle Park, NC, USA; ⁴Managed Markets Division, GlaxoSmithKline, Montvale, NJ, USA; ⁵Departments of Internal Medicine and Health Management and Policy, Schools of Medicine and Public Health, University of Michigan, Ann Arbor, MI, USA.

- **Rising copayments worsen disparities and adversely affect health, particularly among economically vulnerable individuals and those with chronic conditions**

Effects of Increased Copayments for Ambulatory Visits for Medicare Beneficiaries

- **Copays increased:**
 - **\$7 for primary care visit**
 - **\$10 for specialty care visit**
 - **remained unchanged in controls**
- **In the year after copayment increases:**
 - **20 fewer annual outpatient visits per 100 enrollees**
 - **2 additional hospital admissions per 100 enrollees**
- **Total cost **higher** for those with increased copayments**

IBM to Drop Co-Pay for Primary-Care Visits

Article

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Text



By WILLIAM M. BULKELEY

In an unusual bid to cut health-care costs, International Business Machines Corp. plans to stop requiring \$20 co-payments by employees when they visit primary-care physicians.


The company said it believed the move would save costs by encouraging people to go to primary-care doctors faster, in order to get earlier diagnoses that could save on expensive visits to specialists and emergency rooms.

IBM said that the action applies to the 80% of its workers who are enrolled in plans in which the company self-insures—that is, programs in which it pays the health-care benefits, not insurers. The new policy doesn't cover IBM employees in health-maintenance organizations.

One of the nation's largest employers with 115,000 U.S. workers, IBM spends about \$1.3 billion a year on U.S. health care. Its benefit practices are closely watched in the human-resources community, and its actions are sometimes trend-setters.

Unable to Afford Surgery, Farmer Amputates His Own Feet

By AMY QIN MAY 14, 2014, 6:56 AM 1 Comments

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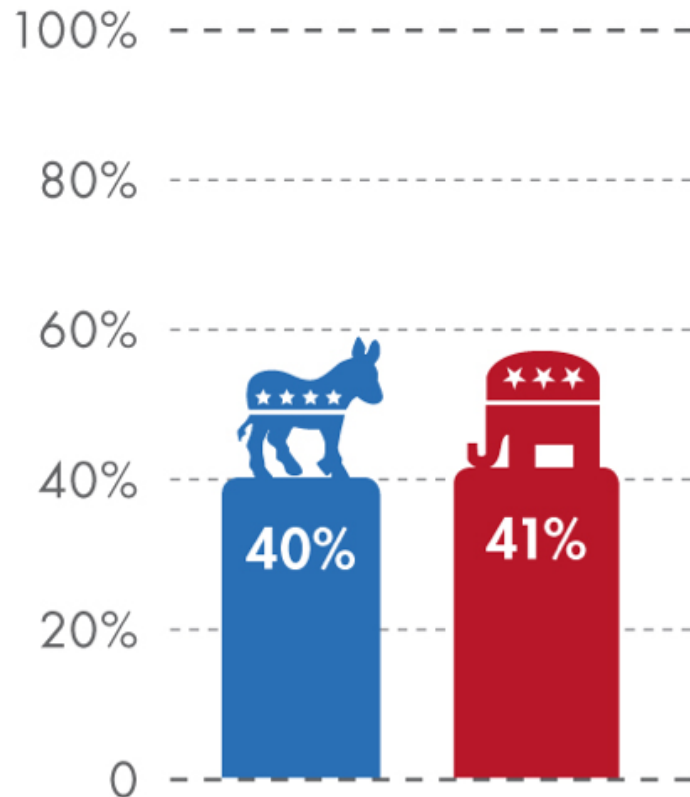
 MORE

BELLE
NOW PLAYING
GET TICKETS

For months, Liu Dunhe, a 44-year-old farmer in the southeastern province of Anhui, watched as what had begun as several seemingly innocuous blisters on his feet deteriorated into severe necrosis. By late April, his feet had become so rotten that he had already dug out several maggots from the dead, odorous flesh, according to a report in The Beijing News.

No longer able to withstand the torturous pain and unable to afford the out-of-pocket expenses for an operation, Mr. Liu decided that it was time for drastic measures: self-amputation.

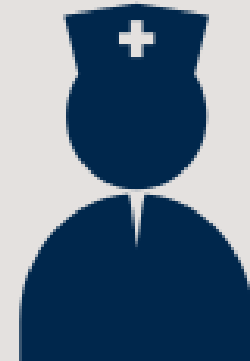
Foregoing Preventive Care Due to Cost: A Bipartisan Problem



40% of Democrats and
41% of Republicans
said cost is the number
one reason they have not
utilized preventive care

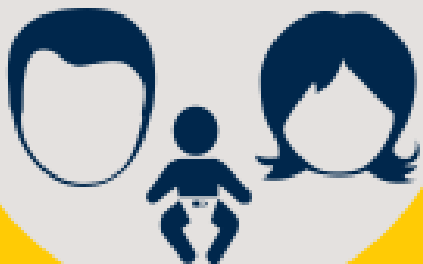
A New Approach: Clinical Nuance

1. Services differ in clinical benefit produced



2. Clinical benefits from a specific service depend on:

Who
receives it



Who
provides it



Where
it's provided



Implementing Clinical Nuance: Value-Based Insurance Design

- **Sets consumer cost-sharing level on clinical benefit – not acquisition price – of the service**
 - Reduce or eliminate financial barriers to high-value clinical services and providers
- **Successfully implemented by hundreds of public and private payers**



Evidence Supporting Value-Based Insurance Design: Improving Adherence Without Increasing Costs

- Evidence review
 - Improved adherence
 - Lower consumer out-of-pocket costs
 - No significant increase in total spending

EXHIBIT 1
Descriptions Of Value-Based Insurance Design (VBID) Policies For Prescription Drugs

Policy (year)	Study authors	Drug class targeted	Pre-VBID plan design	Copay description	Study patients	Outcomes
CVS Caremark (2007)	Chang et al. (Note 8 in text)	Antidiabetics	3 tiers	Copay reductions for tier 1 and tier 2	20,173 beneficiaries from 3 plans	Adherence
Marriott (2005)	Chernew et al. (Notes 6 and 9 in text)	Antidiabetics, ACE inhibitors/ARBs, beta-blockers, statins, steroids	3 tiers	Eliminated for tier 1, tier 2 reduced to \$12.50, tier 3 reduced to \$22.50	37,867 employees and dependents	Adherence
Pitney Bowes (2007)	Choudhry et al. (Notes 10 and 11 in text) Choudhry et al. (Notes 10 and 11 in text)	Statins Clopidogrel	3 tiers 3 tiers	Eliminated for all statins	2,051 beneficiaries with diabetes on statins 779 beneficiaries on clopidogrel	Adherence, cost
Novartis (2005)	Gibson et al. (Note 15 in text), Kelly et al. (Note 20 in text)	Antidiabetics, antihypertensives, bronchodilators	20% coinsurance for retail scripts, 10% coinsurance for mail-order scripts	10% coinsurance for retail scripts, 7.5% coinsurance for mail-order prescriptions	25,784 employee beneficiaries (Gibson et al.) 9,624 employee beneficiaries (Kelly et al.)	Adherence, payment, use Adherence, payment
Florida Health Care Coalition (2006)	Gibson et al. (Note 14 in text)	Antidiabetics	10-35% coinsurance 10-35% coinsurance	10% coinsurance	1,876 employee beneficiaries 328 employee beneficiaries	Adherence, payment Adherence, payment
Blue Cross Blue Shield of North Carolina (2008)	Maciejewski et al. (Note 16 in text), Farley et al. (Note 12 in text)	Antidiabetics, antihypertensives, cholesterol-lowering medications	3 tiers	10% coinsurance with disease management	747,400 beneficiaries of participating employers	Adherence, cost
State of Colorado (2006)	Nair et al. (Note 17 in text)	Antidiabetics	3 tiers	Eliminated for tier 1 for program participants, reduced for tiers 2 and 3 for all beneficiaries	589 state workers	Adherence, utilization
Blue Cross Blue	Rodin et al. (Note 18)	Antidiabetics	3 tiers	All drugs and testing supplies reduced to tier 1 Eliminated for tier 1,	4,654 beneficiaries	Adherence,

MI-FREEE: Better Quality Without Higher Costs

- Assessed impact of free access to preventive medications for Aetna members with history of MI
- Random assignment by plan sponsor
- “Enhanced prescription coverage improved medication adherence and rates of first major vascular events and decreased patient spending without increasing overall health costs.”

Choudhry NK, Avorn J, Glynn RJ, Antman EM, Schneeweiss S, Toscano M, et al. Full coverage for preventive medications after myocardial infarction. *N Engl J Med*. 2011 Dec 1;365(22):2088–97.



Evidence for Value-Based Insurance Design: Reducing Health Care Disparities

Full drug coverage:

- Reduced rates of a post-MI vascular event or revascularization among patients who self-identified as being non-white
- Reduced total health care spending by 70 percent among patients who self-identified as being non-white

DISPARITIES

By Niteesh K. Choudhry, Katsiaryna Bykov, William H. Shrank, Michele Toscano, Wayne S. R. R. Reisman, Troyen A. Brennan, and Jessica M. Franklin

Eliminating Medication Copayments Reduces Disparities In Cardiovascular Care

ABSTRACT Substantial racial and ethnic disparities in cardiovascular care persist in the United States. For example, African Americans and Hispanics with cardiovascular disease are 10–40 percent less likely than whites to receive secondary prevention therapies, such as aspirin and beta-blockers. Lowering copayments for these therapies improves outcomes among all patients who have had a myocardial infarction, but the impact of lower copayments on health disparities is unknown. Using self-reported race and ethnicity for participants in the Post-Myocardial Infarction Free Rx Event and Economic Evaluation (MI FREEE) trial, we found that rates of medication adherence were significantly lower and rates of adverse clinical outcomes were significantly higher for nonwhite patients than for white patients. Providing full drug coverage increased medication adherence in both groups. Among nonwhite patients, it also reduced the rates of major vascular events or revascularization by 35 percent and reduced total health care spending by 70 percent. Providing full coverage had no effect on clinical outcomes and costs for white patients. We conclude that lowering copayments for medications after myocardial infarctions may reduce racial and ethnic disparities for cardiovascular disease.

Emerging Best Practices in V-BID Implementation

A 2014 *Health Affairs* evaluation of 76 V-BID plans reported that programs that:

- were more generous
- targeted high-risk individuals
- offered wellness programs

had greater impact on adherence than plans without these features

WEB FIRST

By Niteesh K. Choudhry, Michael A. Fischer, Benjamin F. Smith, Gregory Brill, Charmaine Girdi, Olga S. Matlin, Troyen A. Brennan, Jerry Avorn, and William H. Shrank

Five Features Of Value-Based Insurance Design Plans Were Associated With Higher Rates Of Medication Adherence

ABSTRACT Value-based insurance design (VBID) plans selectively lower cost sharing to increase medication adherence. Existing plans have been structured in a variety of ways, and these variations could influence the effectiveness of VBID plans. We evaluated seventy-six plans introduced by a large pharmacy benefit manager during 2007–10. We found that after we adjusted for the other features and baseline trends, VBID plans that were more generous, targeted high-risk patients, offered wellness programs, did not offer disease management programs, and made the benefit available only for medication ordered by mail had a significantly greater impact on adherence than plans without these features. The effects were as large as 4–5 percentage points. These findings can provide guidance for the structure of future VBID plans.

Copayments, coinsurance, deductibles, and other benefit structures are widely used to contain health care spending by encouraging patients to consider the costs of health services before deciding to purchase them. Cost sharing helps address the overconsumption that may result from generous insurance coverage (a type of “moral hazard,” in economic terms).¹ However, it may also lead patients to reduce their use of high-value services.² Value-based insurance design (VBID) plans seek to avoid this problem by setting cost-sharing amounts in inverse relationship to the clinical benefit that an intervention offers.³

The peer-reviewed literature supports the ability of copay reductions to increase the use of essential medication and improve clinical outcomes without increasing overall health spending.^{4–6} As a result, VBID plans have been adopted by many employers and health plans throughout the United States.¹⁰ In addition, the Affordable Care Act calls for the creation of guidelines to facilitate the broader use of VBID plans.

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Study Data And Methods

SETTING AND PLAN CHARACTERISTICS We identified VBID plans introduced by a large pharmacy benefit manager, CVS Caremark, on behalf of fifty-nine employer-based plan sponsors between 2007 and 2010. We classified plans according to whether or not they had certain characteristics used to treat chronic disease. However, the plans differ in a number of important ways. Some plans target members who meet specific clinical criteria; others reduce copays for all members. Some plans eliminate cost sharing; others only reduce it. Some plans concurrently offer disease management and wellness programs; others do not.

We sought to understand the influence of these and other plan characteristics on how VBID plans affect medication adherence. Based on our results, we identify best practices for the future implementation of VBID plans.

Value Based Insurance Design

More than High-Value Prescription Drugs

- **Prevention/Screening**
- **Diagnostic tests/Monitoring**
- **Treatments**
- **Clinician visits**
- **High performing networks**
- **PCMH**
- **Hospitals**



HEALTH AND FITNESS

Northeast OH Healthy Living and Medical Consumer News

“Lowe's is offering employees incentives in the form of reduced out-of-pocket costs to come to the Cleveland Clinic for heart procedures.”

Harlan Spector, Health News, Insurance, Metro, Real-Time News »

Lowe's will bring its workers to Cleveland Clinic for heart surgery

By Harlan Spector, The Plain Dealer
February 17, 2010, 3:58AM



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Chuck Burton / Associated Press

Lowe's is offering employees nationwide incentives in the form of reduced out-

Putting Innovation into Action: Create Broad Multi-Stakeholder Support

- **HHS**
- **CBO**
- **SEIU**
- **MedPAC**
- **Brookings Institution**
- **The Commonwealth Fund**
- **NBCH**
- **PCPCC**
- **Partnership for Sustainable Health Care**
- **Families USA**
- **AHIP**
- **National Governor's Assoc.**
- **US Chamber of Commerce**
- **Bipartisan Policy Center**
- **Kaiser Family Foundation**
- **NBGH**
- **National Coalition on Health Care**
- **Urban Institute**
- **RWJF**
- **IOM**
- **PhRMA**
- **AARP**

Translating Research into Policy



Translating Research into Policy

- **V-BID included in the Patient Protection and Affordable Care Act**



ACA Sec 2713: Selected Preventive Services be Provided without Cost-Sharing

- **Receiving an A or B rating from the United States Preventive Services Taskforce (USPSTF)**
- **Immunizations recommended by the Advisory Committee on Immunization Practices (ACIP)**
- **Preventive care and screenings supported by the Health Resources and Services Administration (HRSA)**



Over 100 million Americans have received expanded coverage of preventive services

ACA Sec. 2713c Regulation: V-BID Definition

“Value-based insurance designs include the provision of information and incentives for consumers that promote access to and use of higher value providers, treatments, and services.”

Putting Innovation into Action: Translating Research into Policy

- Patient Protection and Affordable Care Act
- **Medicare**
- State Health Reform
- HSA-qualified HDHPs



HR 5183/S.2783: Bipartisan “V-BID for Better Care Act of 2014”

- **Bill directs HHS to establish a demonstration program to test V-BID for beneficiaries with chronic conditions**
- **CMS issues RFI on role of V-BID in Medicare**

HR 5183: The Value-Based Insurance Design for Better Care Act of 2014

(Original Signature of Member)

113TH CONGRESS
2D SESSION

H. R. _____

To establish a demonstration program requiring the utilization of Value-Based Insurance Design to demonstrate that reducing the copayments or coinsurance charged to Medicare beneficiaries for selected high-value prescription medications and clinical services can increase their utilization and ultimately improve clinical outcomes and lower health care expenditures.

IN THE HOUSE OF REPRESENTATIVES

Mrs. BLACK (for herself and Mr. BLUMENAUER) introduced the following bill; which was referred to the Committee on _____



Putting Innovation into Action: Translating Research into Policy

- Patient Protection and Affordable Care Act
- Medicare
- **State Health Reform**
- HSA-qualified HDHPs



Value-Based Insurance Design Growing Role in State Health Reform

- **State Employees Benefit Plans**
- **State Exchanges**
- **CO-OPs**
- **Medicaid**



Value-Based Insurance Design Growing Role in State Health Reform

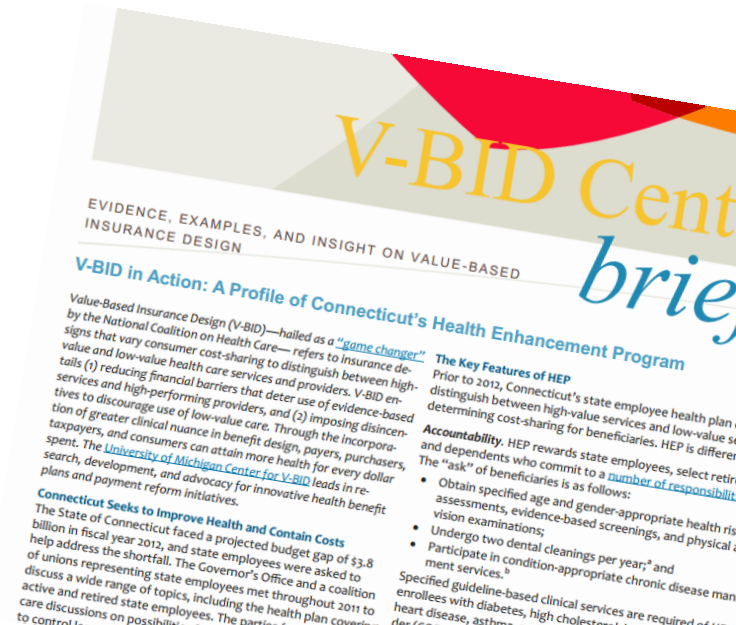
- **State Employees Benefit Plans**

- **Connecticut**
- **Oregon**
- **Virginia**
- **South Carolina**
- **Minnesota**
- **Maine**
- **New York**
- **North Carolina**



Implementing V-BID for State Employees: Connecticut State Employees Health Benefit Plan

- **Participating employees receive a reprieve from higher premiums if they commit to:**
 - Yearly physicals, age-appropriate screenings/preventive care, two free dental cleanings
 - If employees have one of five chronic conditions, they must participate in disease management programs (which include free office visits and lower drug co-pays)
- **Early results:**
 - 99% of employees enrolled and 99% compliant
 - Decrease in ER and specialty care
 - Increase in primary care visits
 - Increase in chronic disease medication adherence



CMS Rules Enable V-BID in Medicaid



Plans may vary cost-sharing for

- drugs, outpatient, inpatient, and emergency visits
- specific groups of individuals based on clinical factors
- an outpatient service according to where and by whom the service is provided

V-BID was prominently featured in Healthy Michigan Plan

V-BID Prominently Featured in Healthy Michigan Plan

- **Sec 105D(1)(e), plans may waive consumer copayments, “to promote greater access to services that prevent the progression and complications related to chronic diseases.”**
- **Sec 105D(1)(f), assigned to “design and implement a copay structure that encourages the use of high-value services, while discouraging low-value services.”**
- **Sec 105D(5), assigned to “implement a pharmaceutical benefit that utilizes copays at appropriate levels allowable by CMS to encourage the use of high-value, low-cost prescriptions.”**



Putting Innovation into Action: Translating Research into Policy

- Patient Protection and Affordable Care Act
- Medicare
- State Health Reform
- **High Deductible Health Plans**



HSA-qualified HDHPs: Too Much “Skin in the Game”?

- **More than 25% of employers offer HDHPs**
- **85% of enrollees in the individual marketplace purchased either silver or bronze HDHP plans**
- **Higher out-of-pocket costs hinder the use of evidence-based services (even when exempt from the deductible)**
- **HDHP enrollees with chronic diseases are more likely to go without care due to cost or experienced financial hardship due to medical bills**

Barriers to V-BID in HSA-qualified HDHPs

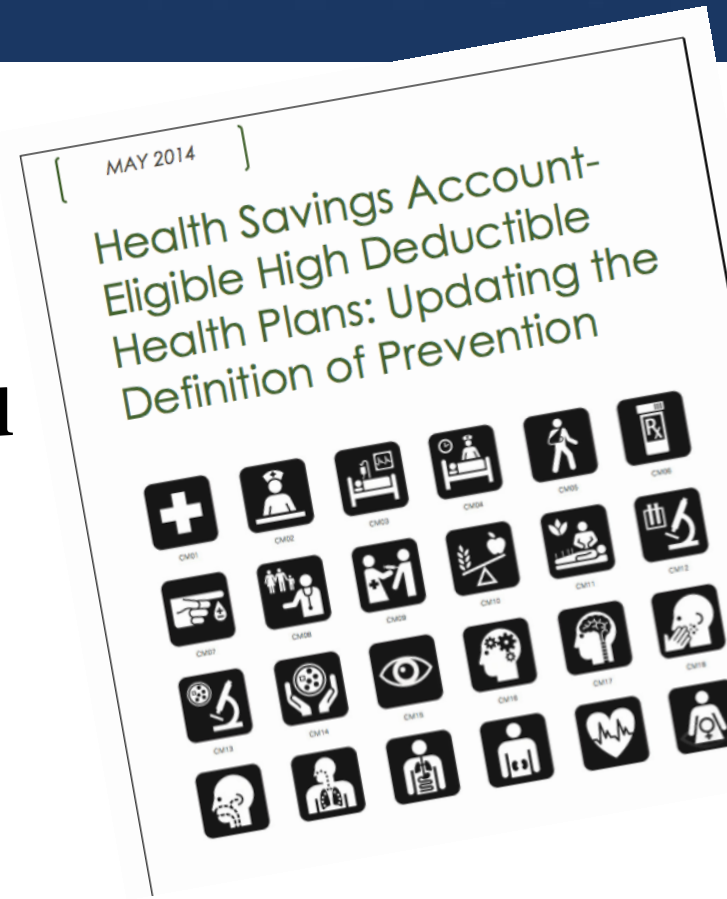
- IRS guidance specifically exclude services meant to treat **“an existing illness, injury or condition”** from the definition of preventive care
- Many well-established quality metrics require the entire deductible to be met before coverage begins
- 90% of employers support expanding deductible-exempt definition to include chronic disease care



V-BID HDHP Hybrid with “Smarter Deductibles”: High Value Health Plan

HVHP allows evidence-based, services that manage chronic disease to be deductible-exempt:

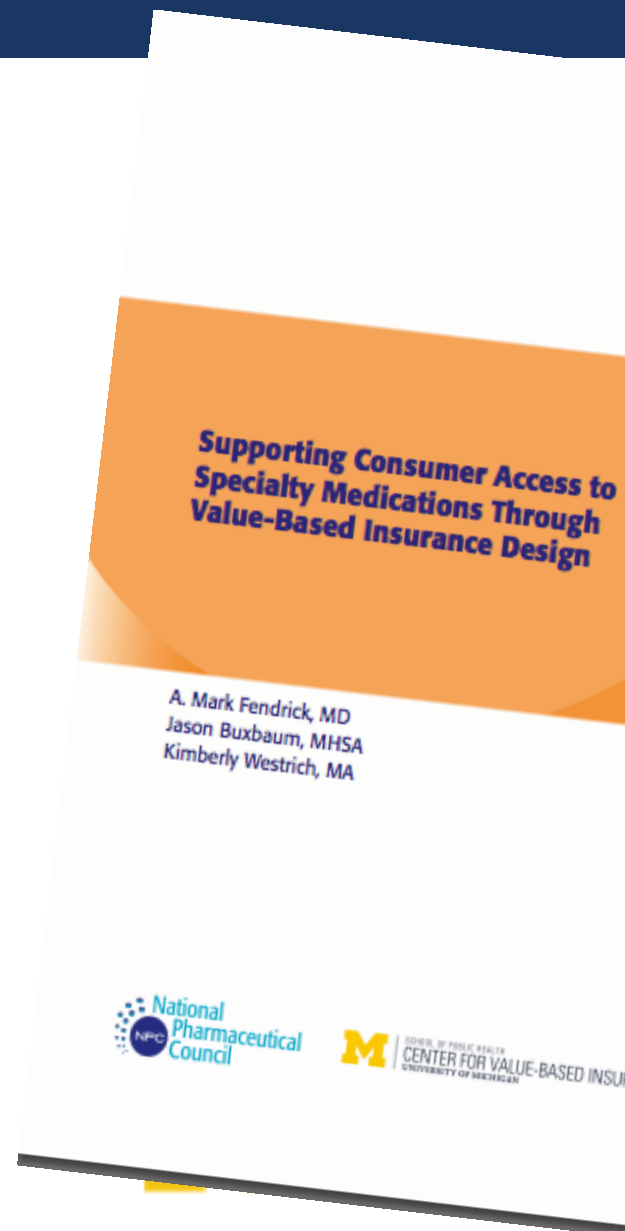
- **Lower premiums than PPOs and HMOs; slight premium increase over existing HDHPs**
- **>40 million likely enrollees**
- **Vehicle to avoid “Cadillac tax”**
- **Substantially lower aggregate healthcare expenditures on a population level**



Applying V-BID to Specialty Medications

- **Impose no more than modest cost-sharing on high-value services**
- **Reduce cost-sharing in accordance with patient- or disease-specific characteristics**
- **Relieve patients from high cost-sharing after failure on a different medication**
- **Use cost-sharing to encourage patients to select high-performing providers and settings**

Fendrick et al. Center for Value Based Insurance Design.
<http://bit.ly/1kMP2cq>



Using Clinical Nuance to Align Payer and Consumer Incentives

Many “supply side” initiatives are restructuring provider incentives:

- **Payment reform**
 - **Global budgets**
 - **Pay-for-performance**
 - **Bundled payments**
 - **Accountable care**
- **Medical homes**
- **Tiered networks**
- **Health information technology**



Using Clinical Nuance to Align Payer and Consumer Incentives

Unfortunately, “supply-side” initiatives have historically paid little attention to consumer decision-making or the “demand-side” of care-seeking behavior:

- **Benefit design**
- **Shared decision-making**
- **Literacy**



Using Clinical Nuance to Align Payer and Consumer Incentives: As Easy as Peanut Butter and Jelly

- **Adding clinical nuance to payment reform and consumer engagement initiatives can help improve quality of care, enhance patient experience, and contain cost growth by removing waste**



AJAC. 2014;2(3);10.

Improving Care and Bending the Cost Curve

- The ultimate test of health reform will be whether it improves health and addresses rising costs
- V-BID should be part of the solution to enhance the efficiency of health care spending

Mullainathan S. When a Co-Pay Gets in the Way of Health.
The New York Times. 2013 Aug 10.



Discussion

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