Appendix B-6. Presentation to the Green Mountain Care Board
December 11, 2014

Green Mountain Care: Lay of the Land for Covered Services and Level of Cost Sharing

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Special Counsel on HCR, AOA

December 11, 2014

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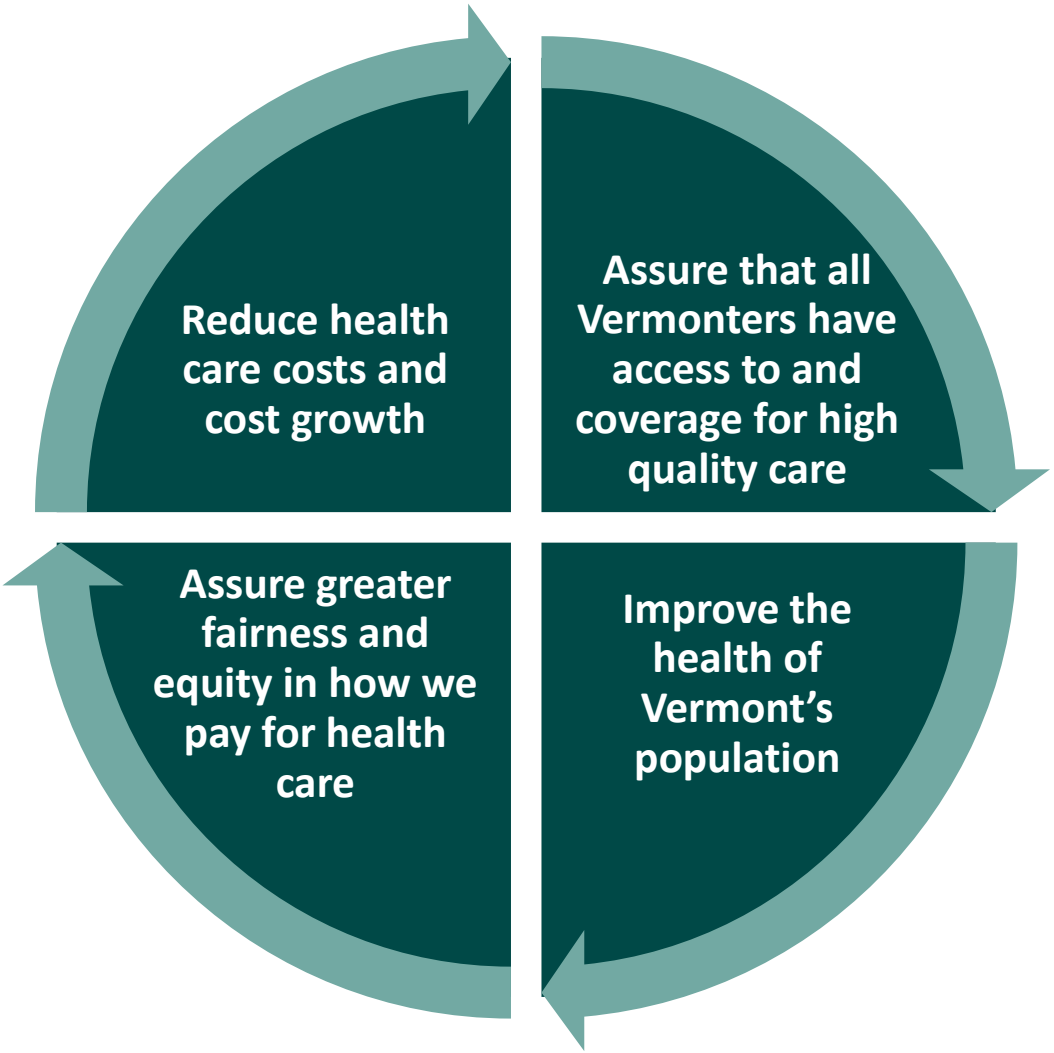
HEALTH CARE REFORM

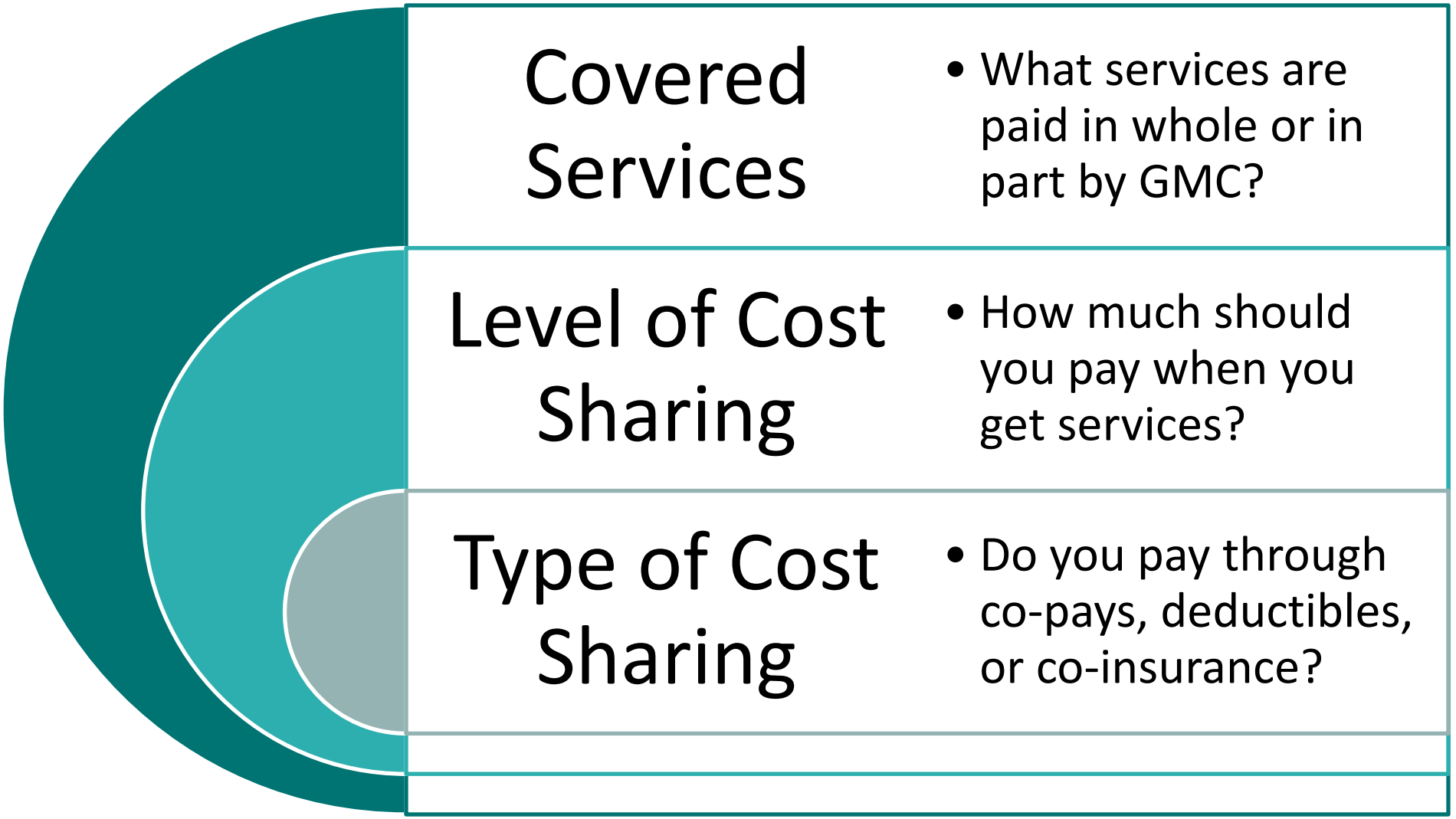
Discussion for Today

- Covered Services
  - Today's covered services
  - Overview of covered services in other states
  - Overview of covered services in other countries
- Level of Cost Sharing
  - Level of cost sharing in Vermont today
  - Overview of level of cost sharing in other countries
- Benefit design public input

Health Care Reform Goals: Why Reform?



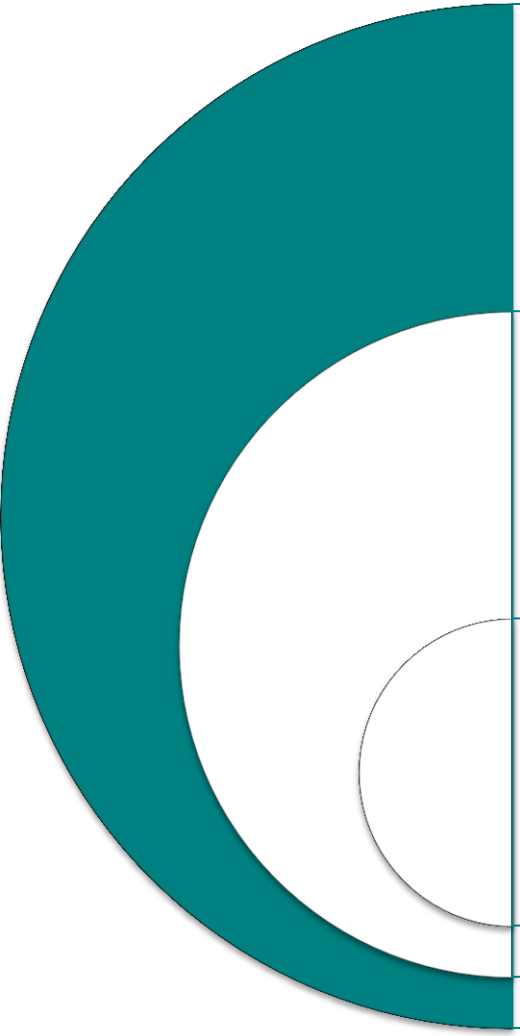
GMC Benefits



Design Considerations

- Federal and state requirements for benefits
- Equity
- Administrative cost & complexity
- Options fit together, easy to explain
- Individual out of pocket cost (average & max)
- Medical cost & utilization
- Change from current/expected
- Federal & state tax implications

GMC Benefits and Covered Services



Covered Services	• What services are paid in whole or in part by GMC?
Level of Cost Sharing	• How much should you pay when you get services?
Type of Cost Sharing	• Do you pay through co-pays, deductibles, or co-insurance?

Covered Services Today

	Essential Health Benefit	State Employee and Retirees		VEHI Education Employees and Retirees	
		SelectCare	Total Choice	300 Ded	VHP
Chiropractic	Limit 12 visits then prior approval required	Limit 60 visits per year (total visits for PT, OT, ST, Chiro)	Limit 60 visits per year (total visits for PT, OT, ST, Chiro)	Prior approval required after 12th visit	Prior approval required after 12th visit
Infertility	Not covered	Up to $50,000 lifetime max	Up to $50,000 lifetime max	Not covered	Not covered
Bariatric Surgery	Covered	Covered, medical necessity	Covered, medical necessity	With prior approval	With prior approval
Fertility Drugs	Covered	Covered	Covered	Covered	Covered
Routine Eye Exams	1/year for children	$100/2 years	$100/2 years	Not covered	1/year

Covered Services Today

State Mandates stay in place:

- Maternity coverage
- Outpatient contraceptive services, including sterilization
- Home health care
- Emergency room services
- Newborn coverage
- Autism spectrum disorders for children
- Chiropractic services
- Prosthetic devices
- Mammograms
- Anesthesia for dental procedures performed on certain covered persons
- Child Vaccine benefits
- Prostate screenings
- Colorectal cancer screening
- Diabetes treatment
- Mental health and substance abuse
- Clinical trials for cancer patients
- Chemotherapy treatment
- Orally administered anticancer medication
- Treatment of inherited metabolic diseases
- Craniofacial disorders
- Off-label use

GMCB's Legal Parameters

- Green Mountain Care must have all of the ACA's essential health benefits (EHBs)
- State law requires GMCB to consider adding the following services:
  - Adult dental
  - Adult vision
  - Hearing
  - Long Term Care
- Vermont will not receive any extra federal funding to cover these services

Covered Services State Comparison– Dental EHB

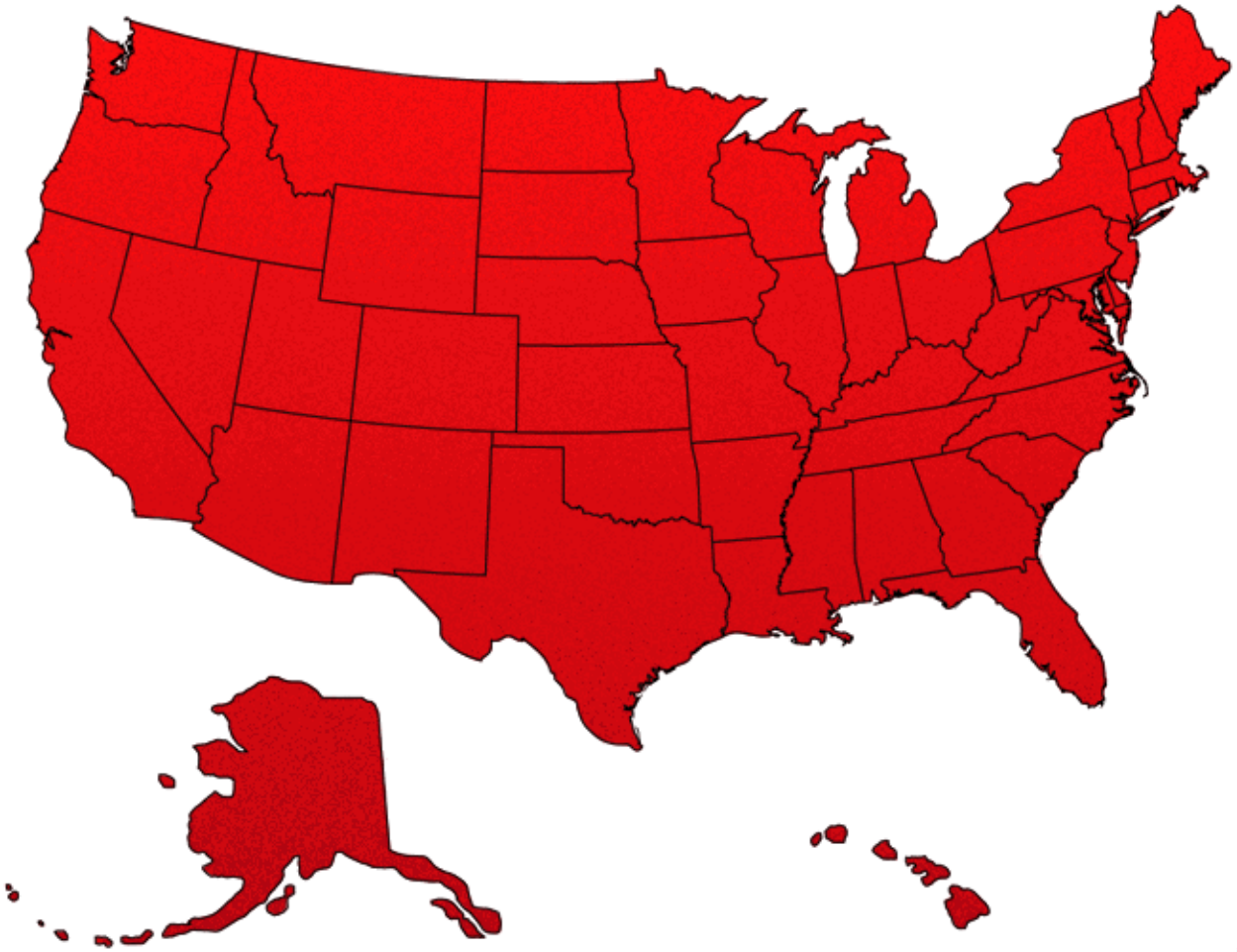
- At the last meeting, GMCB requested an overview of how adult dental is covered in other states
- We examined the essential health benefits package of each state as well as the Medicaid covered services to compare adult dental coverage

Covered Services State Comparison– Dental EHB

- All essential health benefits packages must include coverage of pediatric dental. Vermont covers pediatric dental up to age 21:
  - Prevention, evaluation and diagnosis, including radiographs when indicated
  - Periodic prophylaxis, including topical fluoride applied in a dentists office
  - Periodontal therapy
  - Treatment of injuries
  - Treatment of disease of bone and soft tissue
  - Oral surgery for tooth removal and abscess drainage
  - Treatment of anomalies
  - Endodontics (root canal therapy)
  - Restoration of decayed teeth
  - Replacement of missing teeth, including fixed and removable prosthetics (i.e. crowns, bridges, partial dentures and complete dentures)

Covered Services State Comparison– Dental EHB

Adult dental & health insurance: no states cover as EHB



Covered Services State Comparison– Dental EHB

Adult dental & health insurance:

- The U.S. Territories, except for Puerto Rico, covers:
  - 2 check-ups per year

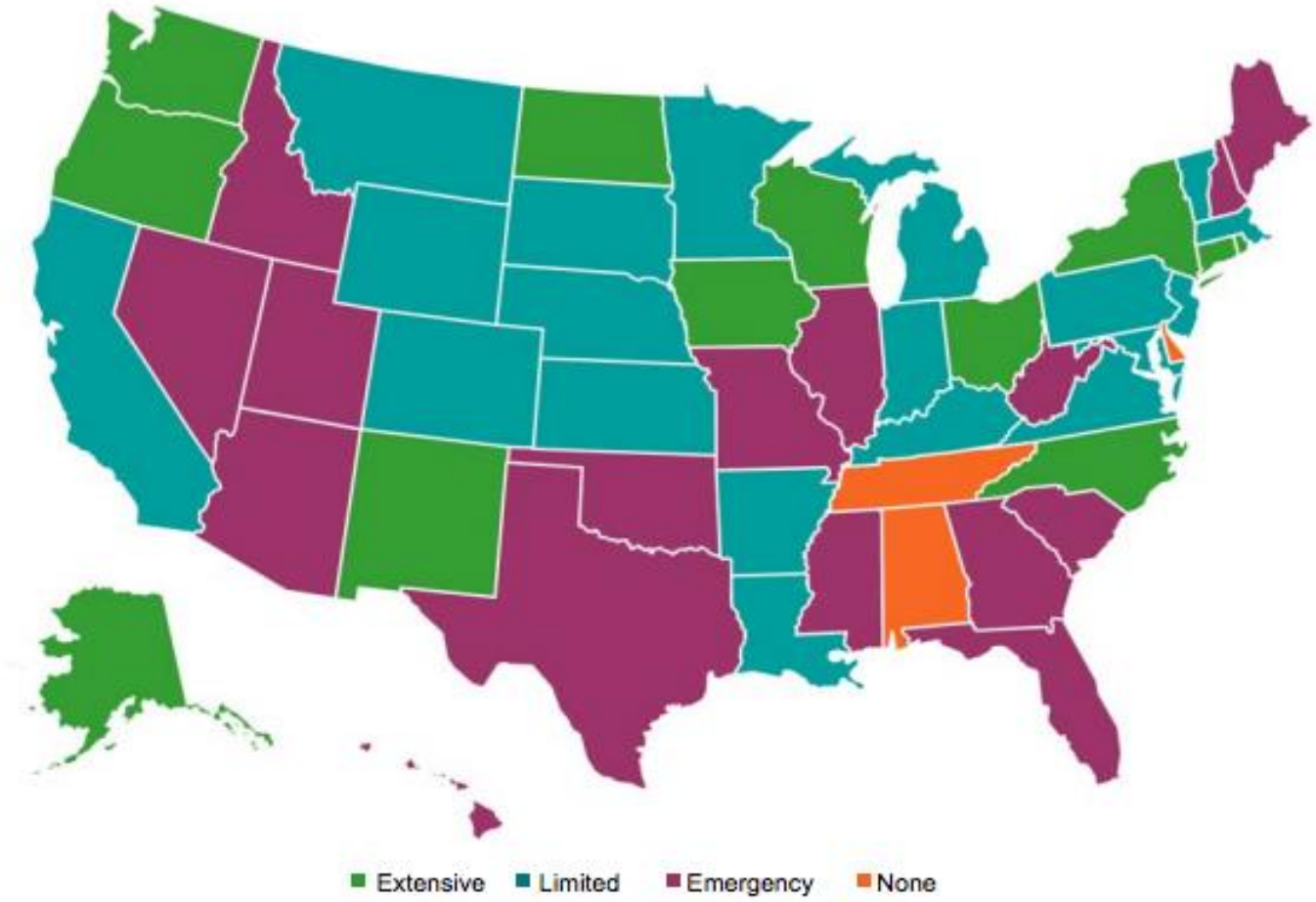
  NOTE: Feds chose federal health insurance as benchmark plan due to unique nature of territory markets
- Puerto Rico covers
  - 2 check-ups per year
  - X-rays once every three years

Covered Services State Comparison– Dental Medicaid

- Under Vermont Medicaid, adults with income up to 138% FPL receive dental under Medicaid
  - $510 per beneficiary per year
  - Beneficiaries pay $3.00 per visit for dental services
- Benefit primarily limited by access to providers
  - Source: Green Mountain Care Board: Vermont Dental Landscape Study, 2013.

Covered Services State Comparison– Dental Medicaid

- Adult Dental & Medicaid



Source: Yarbrough C, Vujicic M, Nasseh K., *More than 8 Million Adults Could Gain Dental Benefits through Medicaid Expansion.* Health Policy Resources Center Research Brief. American Dental Association. February 2014.

Covered Services State Comparison– Dental Medicaid

Benefit Level	Definition
None	No dental benefits.
Emergency	Relief of pain and infection. While many services might be available, care may only be delivered under defined emergency situations.
Limited	Includes benefits that have a per-person annual expenditure cap of $1,000 or less.
Extensive	Includes benefits that have a per-person annual expenditure cap of at least $1,000.

Covered Services International Comparison

- Health care systems in other countries generally cover:
  - Inpatient
  - Outpatient
  - Specialists
  - Clinical laboratory tests
  - Diagnostic imaging
  - Physical therapy
  - Pharmacy
- There is more variation in vision and dental coverage
- Comparisons of mental health coverage aren't readily available

Covered Services– International

	In-Patient	Out-patient	Specialist	Clinical	Imaging	Phys. Therapy	Pharmacy
Canada	✓	✓	✓	✓	✓	✗	✗
France	✓	✓	✓	✓	✓	✓	✓
Germany	✓	✓	✓	✓	✓	✓	✓
Japan	✓	✓	✓	✓	✓	✓	✓
Sweden	✓	✓	✓	✓	✓	✗	✓
Switz.	✓	✓	✓	✓	✓	✓	✓
U.K.	✓	✓	✓	✓	✓	✓	✓

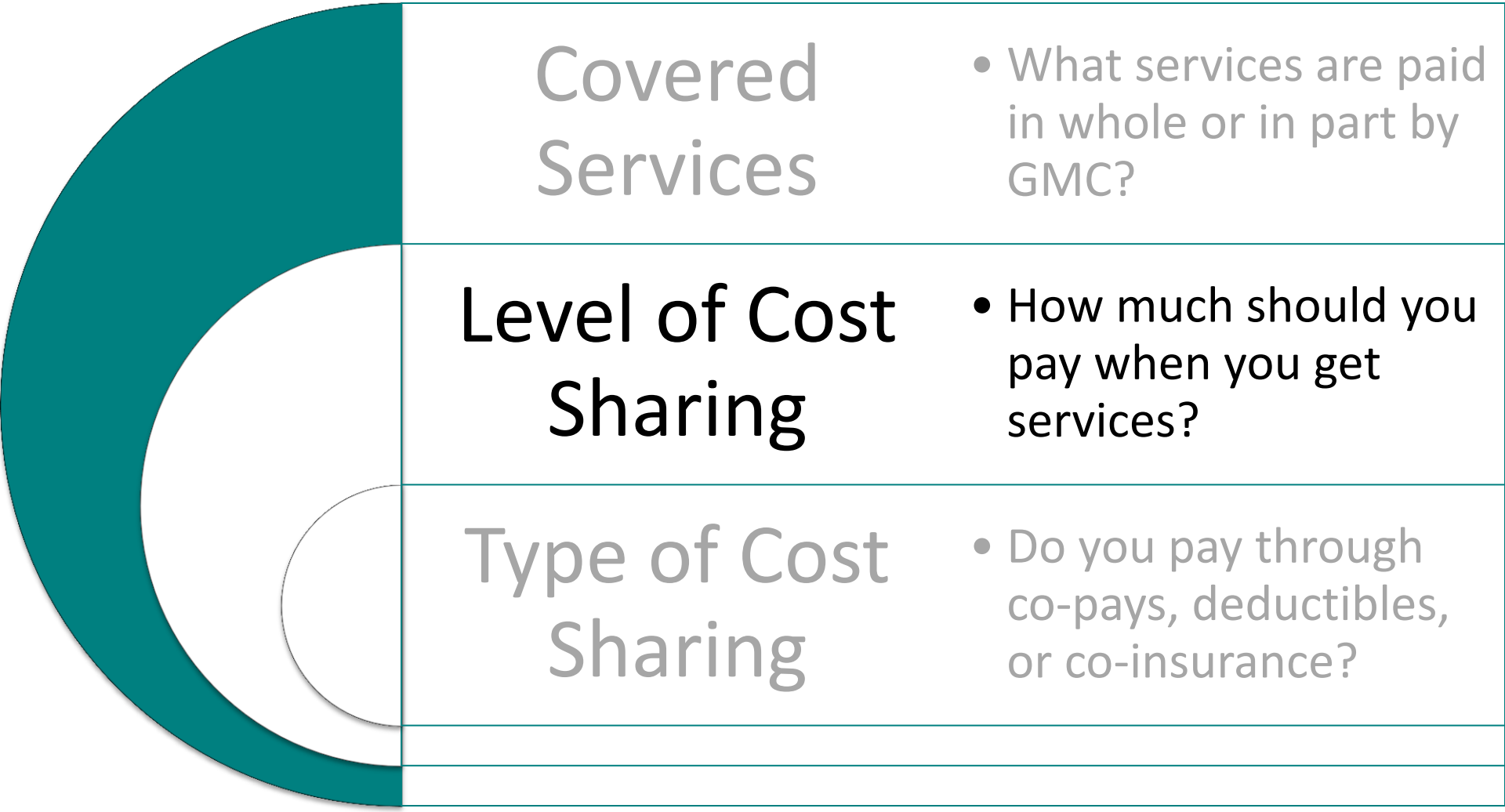
Source: Paris, V., M. Devaux and L. Wei (2010), "Health Systems Institutional Characteristics: A Survey of 29 OECD Countries", OECD Health Working Papers, No. 50, OECD Publishing. Data from 2007 or last available year, http://dx.doi.org/10.1787/5kmfxfq9qbnr-en

Covered Services– International

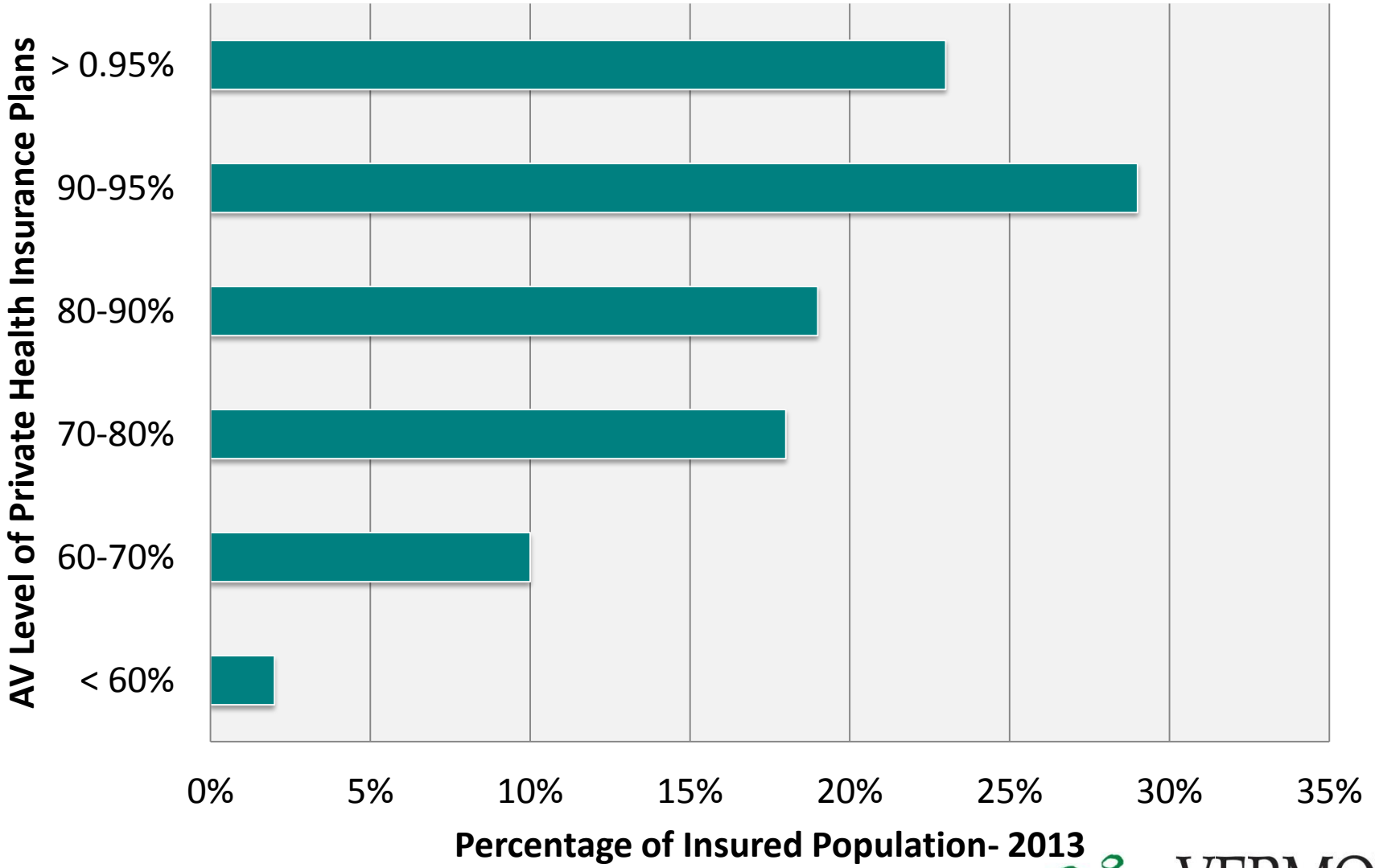
	Eyeglasses and/or contact lenses	Dental Care	Dental Prostheses
Canada	✗	✗	✗
France	½	½	½
Germany	½	✓	½
Japan	✗	✓	✓
Sweden	✗	½	½
Switzerland	½	✗	✗
United Kingdom	✗	✓	✓

Source: Paris, V., M. Devaux and L. Wei (2010), "Health Systems Institutional Characteristics: A Survey of 29 OECD Countries", OECD Health Working Papers, No. 50, OECD Publishing. Data from 2007 or last available year, http://dx.doi.org/10.1787/5kmfxfq9qbnr-en

GMC Benefits and Covered Services



Level of Cost Sharing Today– Vermont



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Excise Tax on “Cadillac” Plans

- In 2018, a 40% excise tax will be assessed on the cost of coverage for health plans that exceed a certain annual limit
  - $10,200 for individual coverage
  - $27,500 for couples and family coverage
  - Numbers are for 2018, will be indexed to inflation

Excise Tax on "Cadillac" Plans

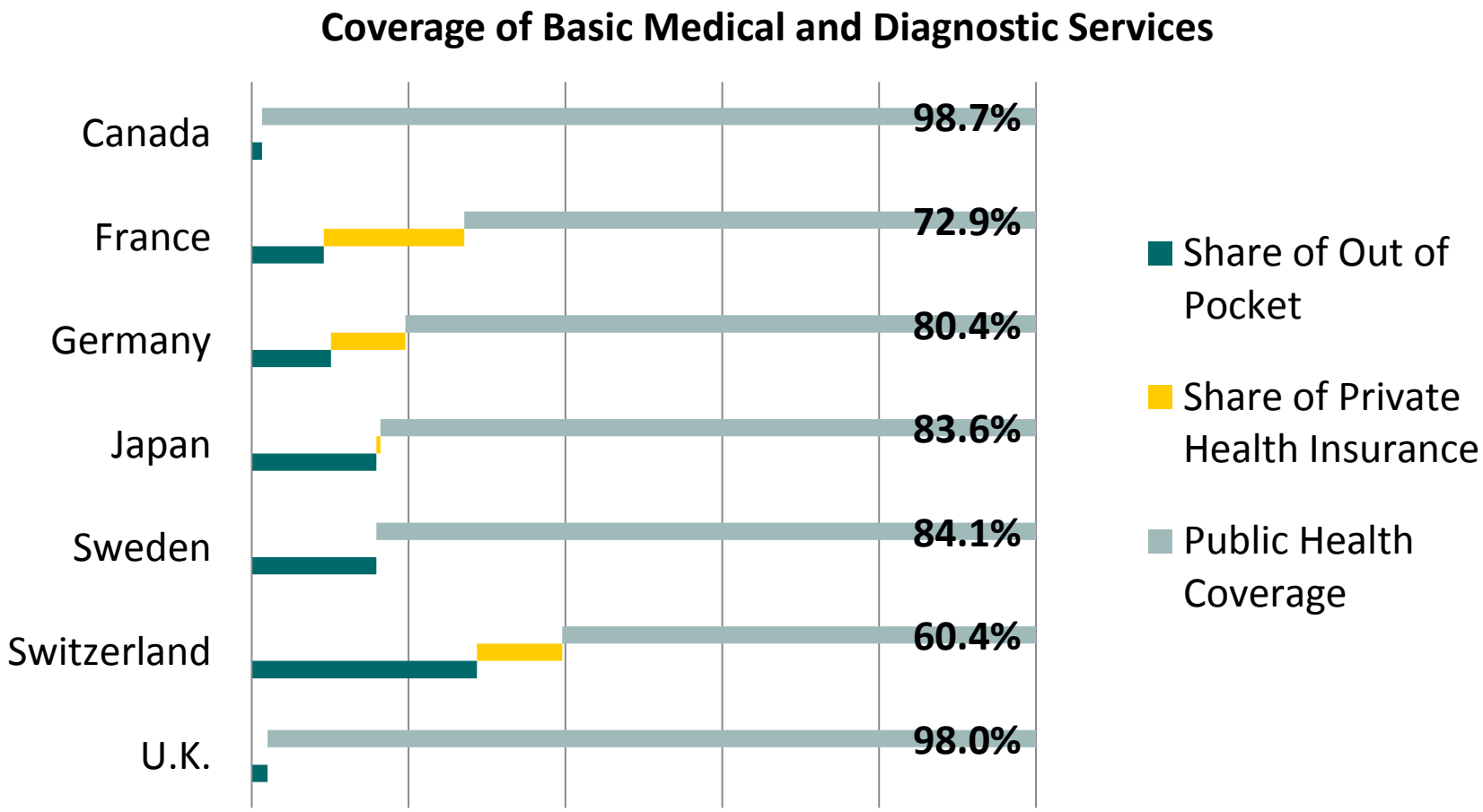
EXHIBIT 1

Employers' Responses to the Excise Tax, 2013

The International Foundation of Employee Benefit Plans asked 879 single-employer plans if they were taking action to avoid the 2018 excise tax.	
Yes	16.8%
No, but considering	40.0%
No, no plan to do so	13.5%
Not sure	9.6%
Not applicable, have no high-cost plans	20.0%
Employers that answered "yes," by size	
0–50	4.1%
51–499	13.1%
500–4,999	18.2%
5,000–9,999	18.5%
10,000+	29.4%

SOURCE International Foundation of Employee Benefit Plans, "2013 Employer-Sponsored Health Care: ACA's Impact: Survey Results," 2013.

Level of Cost Sharing– International



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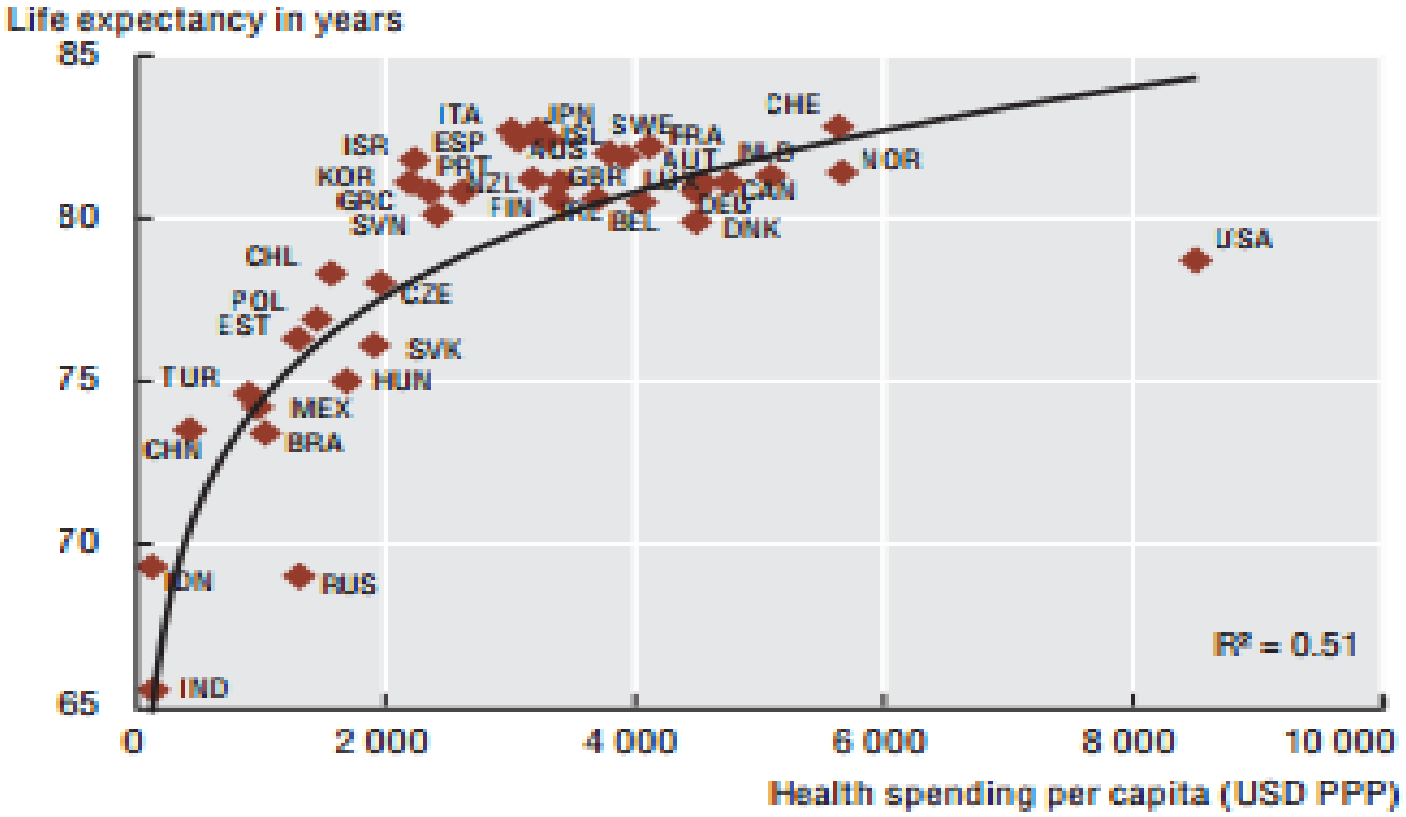
Spending and Health Outcomes

Life Expectancy at birth and health spending per capita, 2011 (or nearest year)



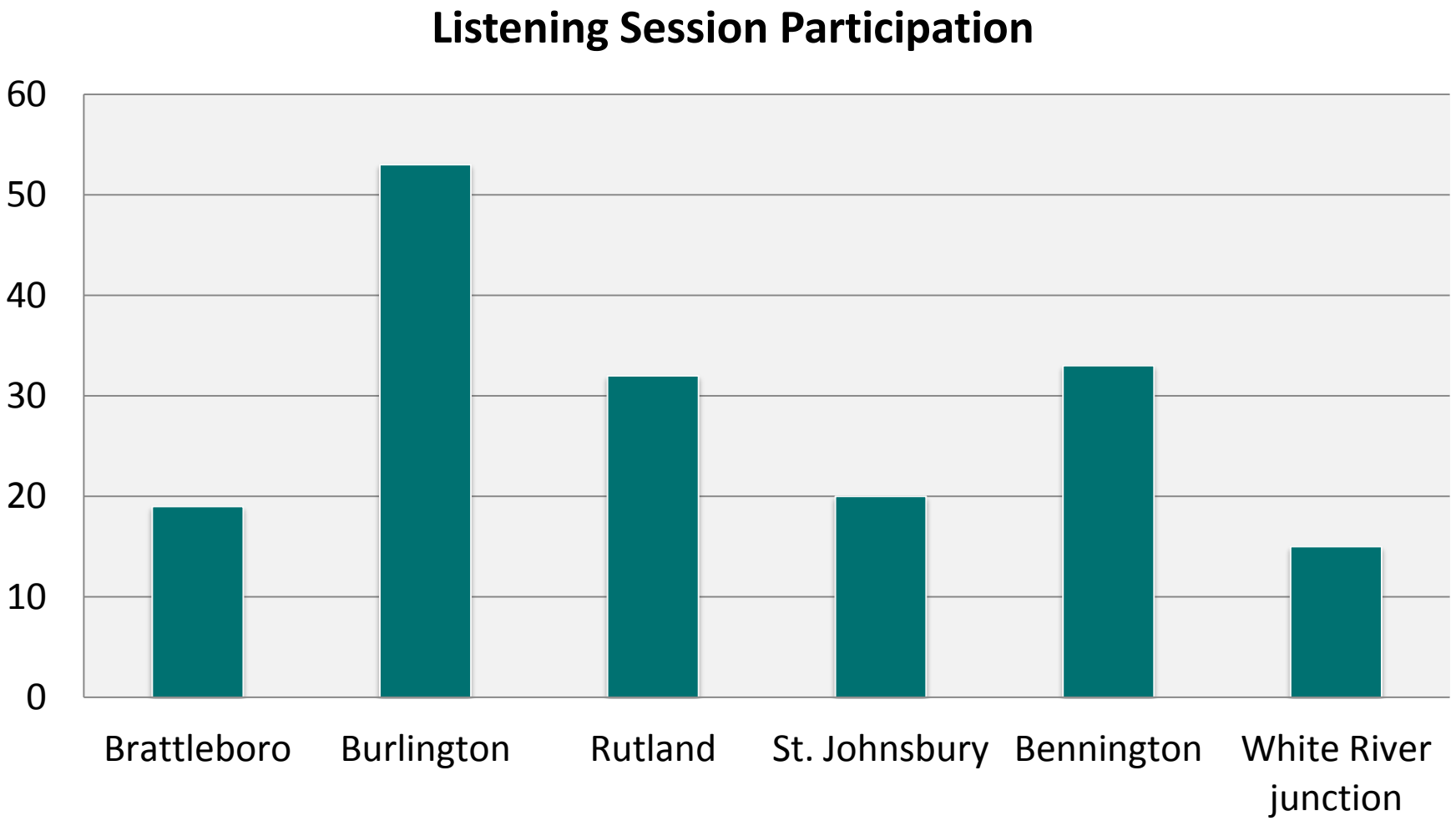
Source: OECD Health Statistics 2013, http://dx.doi.org/10.787/health-data-en; World Bank for non-OECD countries

PUBLIC INPUT

2012 Listening Sessions

- During the spring of 2012, AHS and AoA held a series of listening sessions around the state of Vermont to gather input on GMC's benefit design
  - April 25 – Brattleboro, Marlboro College Grad Center
  - May 2 – Burlington, City Hall Contois Auditorium
  - May 8 – Rutland Free Library, Fox Room
  - May 31 – Public Hearing with GMCB held at 11 VIT video-conferencing sites around the state
  - June 7 – St. Johnsbury, Catamount Arts
  - June 13- Bennington, Firehouse
  - June 20 – White River Junction, Hartford High School

2012 Listening Sessions



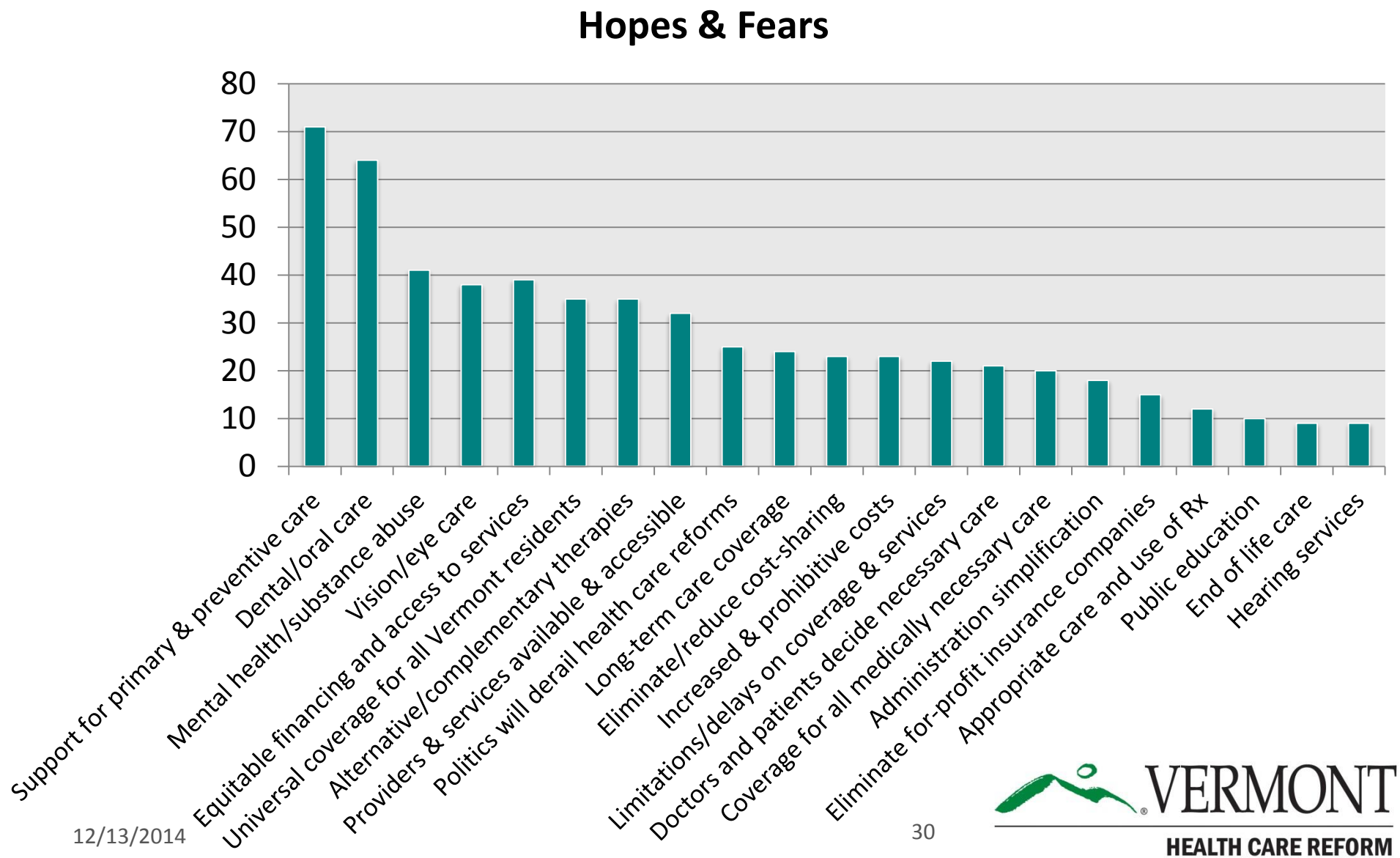
VERMONT HEALTH CARE REFORM

2012 Listening Sessions

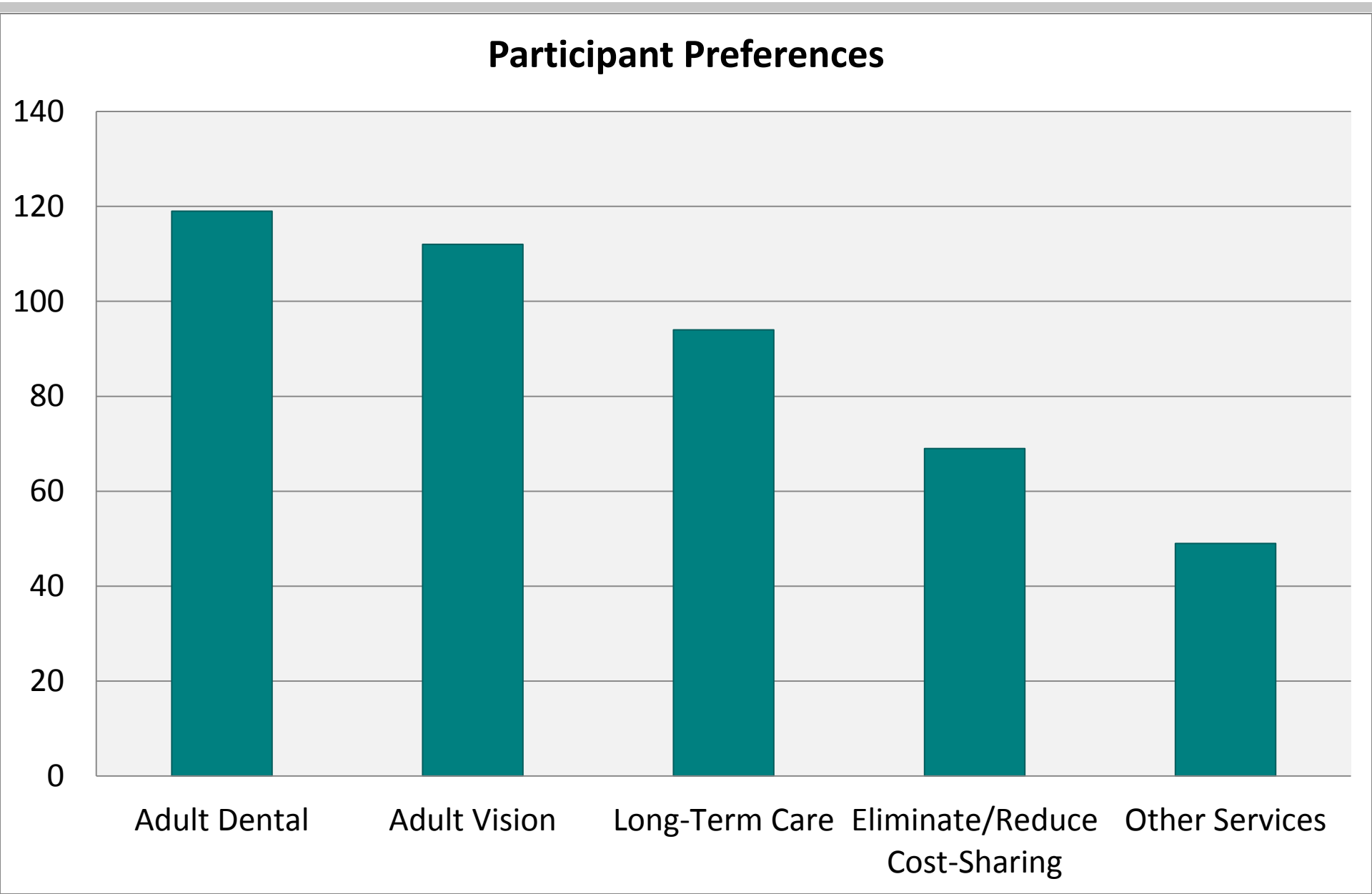
The listening sessions were divided into three components:

- Information- Health care reform implementation timeline and background information to frame discussion on benefit design.
- *Exercise #1* - Gathering open-ended feedback on hopes and fears from the public surrounding benefits and the single-payer system.
- *Exercise #2* - Setting priorities and examining the boundaries and limitations of a publicly financed system.

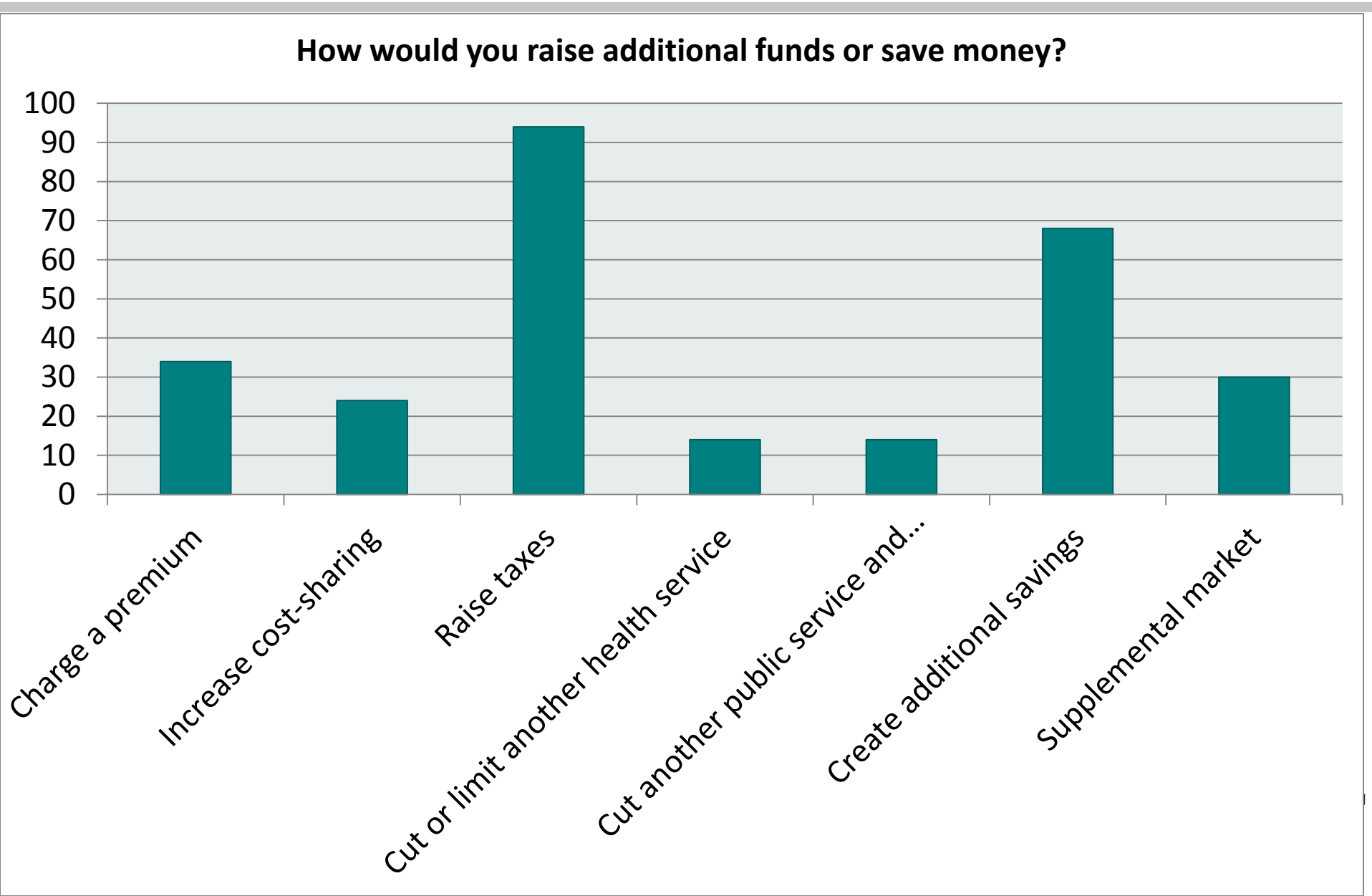
2012 Listening Sessions



2012 Listening Sessions



2012 Listening Sessions



Questions?

Appendix B-7. Presentation by Ellen Meara, Ph.D on Health Economics: Value Based Benefit Design

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Health Economics: Value-Based Benefits & Analytics

Vermont House Health Care Committee
Ellen Meara, PhD

MARCH 26, 2014

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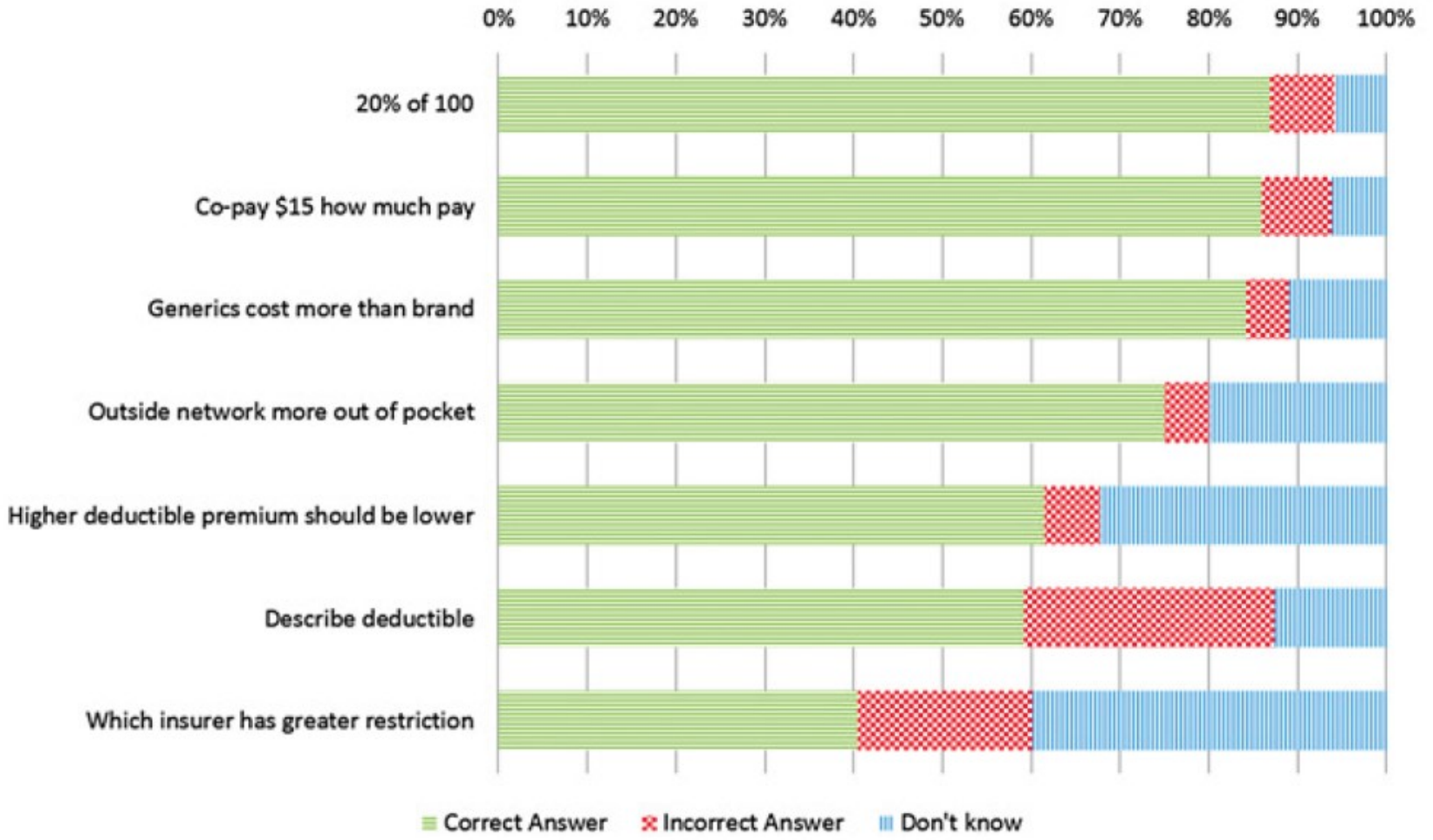
Context

Americans' (Lack of) Understanding of Health Insurance, 9/13



Source: Barcellos SH, Wuppermann AC, Carman KG, et al. Preparedness of Americans for the Affordable Care Act. *PNAS*. 2014.

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Goals

1. There is a tradeoff between insurance and costs
2. Cost-sharing lowers health care spending
3. Cost-sharing has unintended consequences

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Goals

1 **There is a tradeoff between insurance and costs**

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Tradeoff Between Insurance and Costs

Why do we want health insurance?	How is health insurance different?
Protection in case of (major) illness/injury	Not a one-time event like fires / accidents

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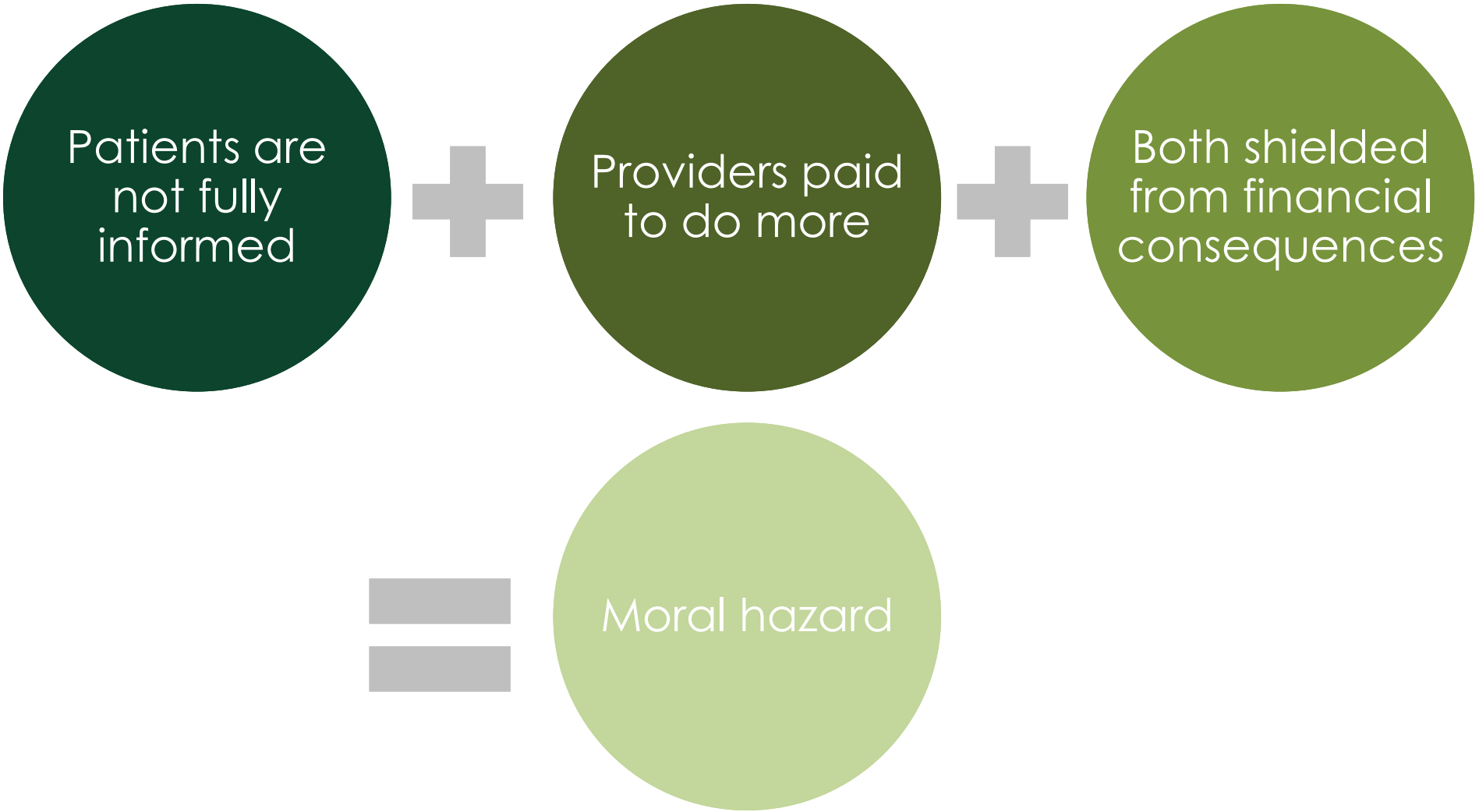
Tradeoff Between Insurance and Costs



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Goals

2 Cost-sharing lowers health care spending

3 Cost-sharing has unintended consequences

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Cost-Sharing Effects

How Has Cost-Sharing Been Used?

- **Deductible and Coinsurance**
- **Copayment**
- **Tiered Formularies**
- **Value-Based Insurance Design**
- **High Deductibles**

Cost-Sharing Effects

How Has Cost-Sharing Been Used?

Deductible and Coinsurance

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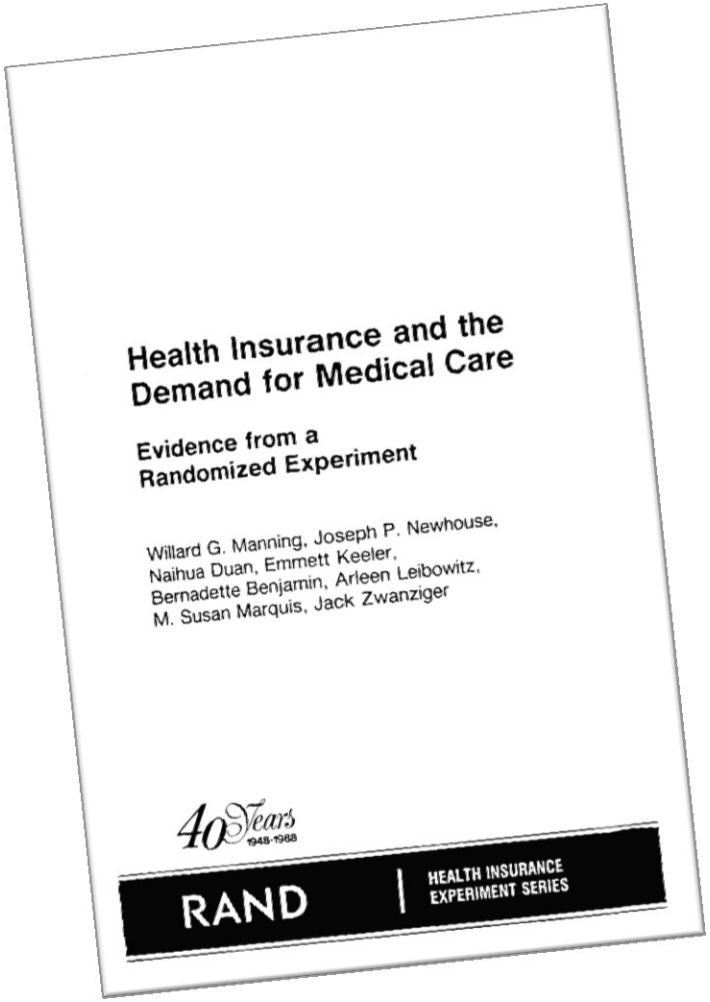
Cost-Sharing Effects: Deductible and Coinsurance



RAND Randomly Assigned 5,800 People

Plan (arm)	Coinsurance	Max Out-of-Pocket as % of Income	Deductible
Free Care	0%	NA	$0
25%	25%	5%	$0
50%	50%	10%	$0
95%	95%	15%	$0
Deductible	0%	NA	$150 – single $450 - family

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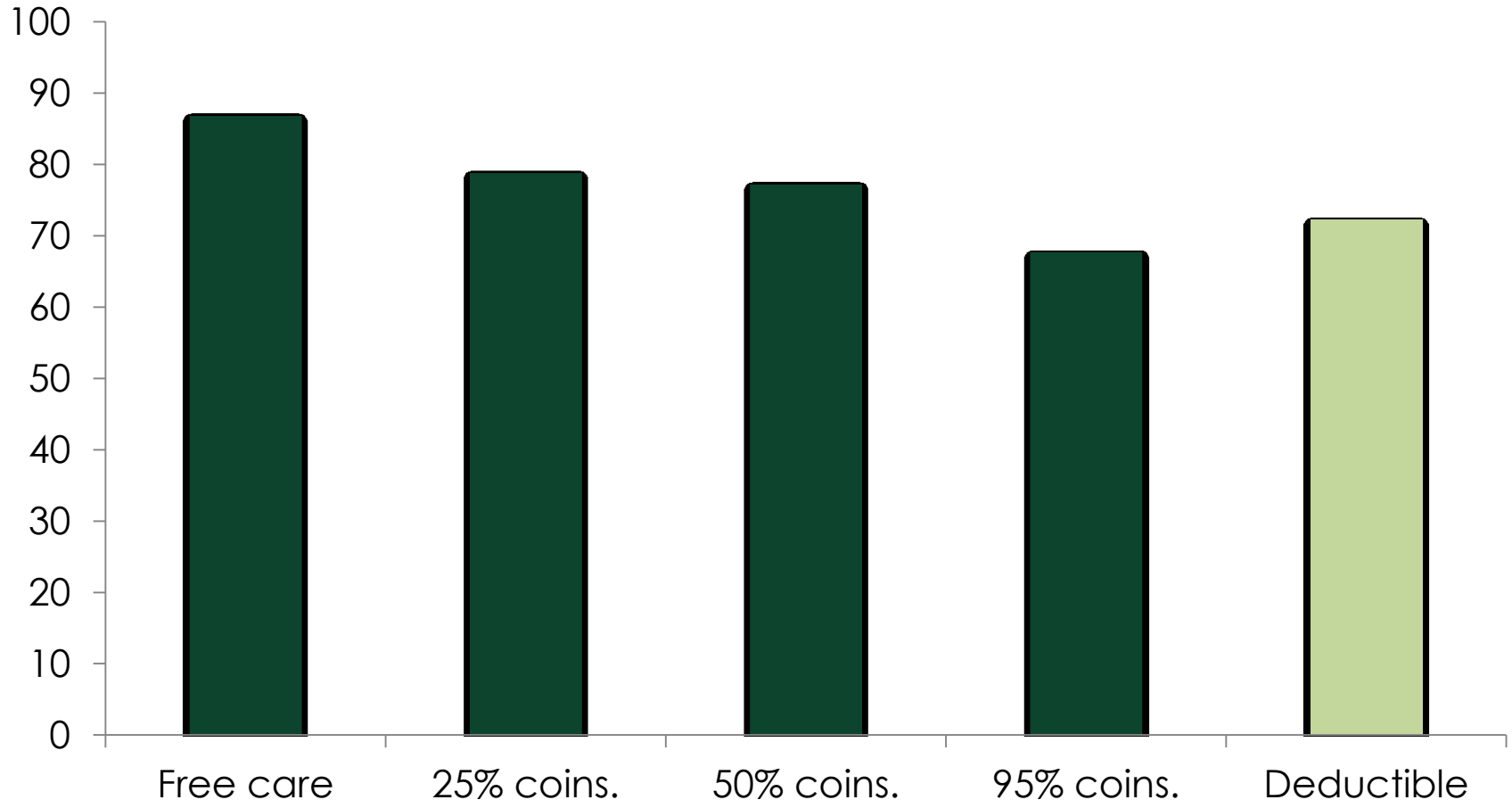
Cost-Sharing Effects: Deductible and Coinsurance

Percent of Beneficiaries Getting Any Medical Care



p-value<.0001 for difference across plans

Source: Manning et al. (1988). *Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment*.

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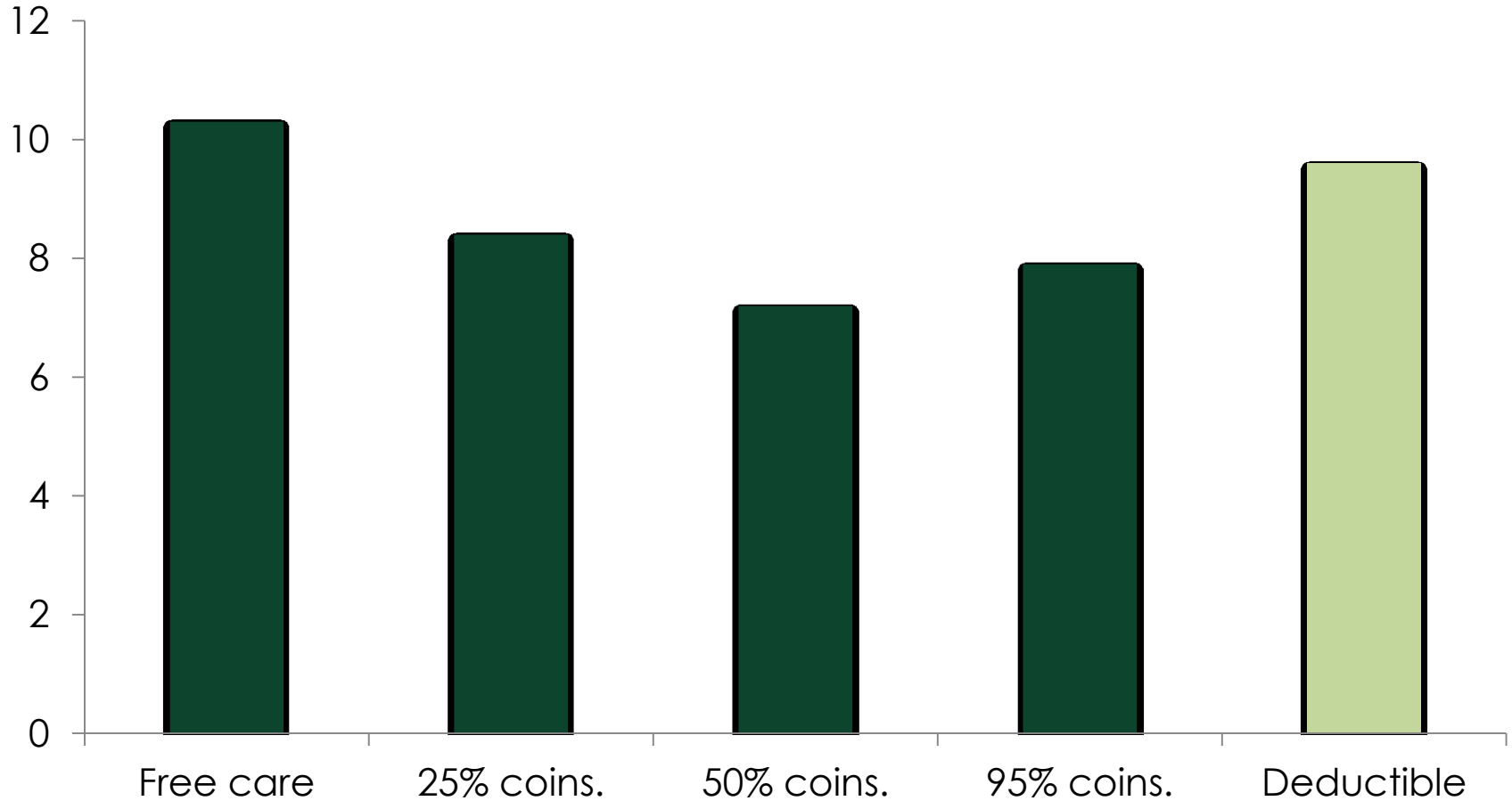
Cost-Sharing Effects: Deductible and Coinsurance

Percent of Beneficiaries with One or More Inpatient Admissions



p-value=.0006 for difference across plans

Source: Manning et al. (1988). *Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment*.

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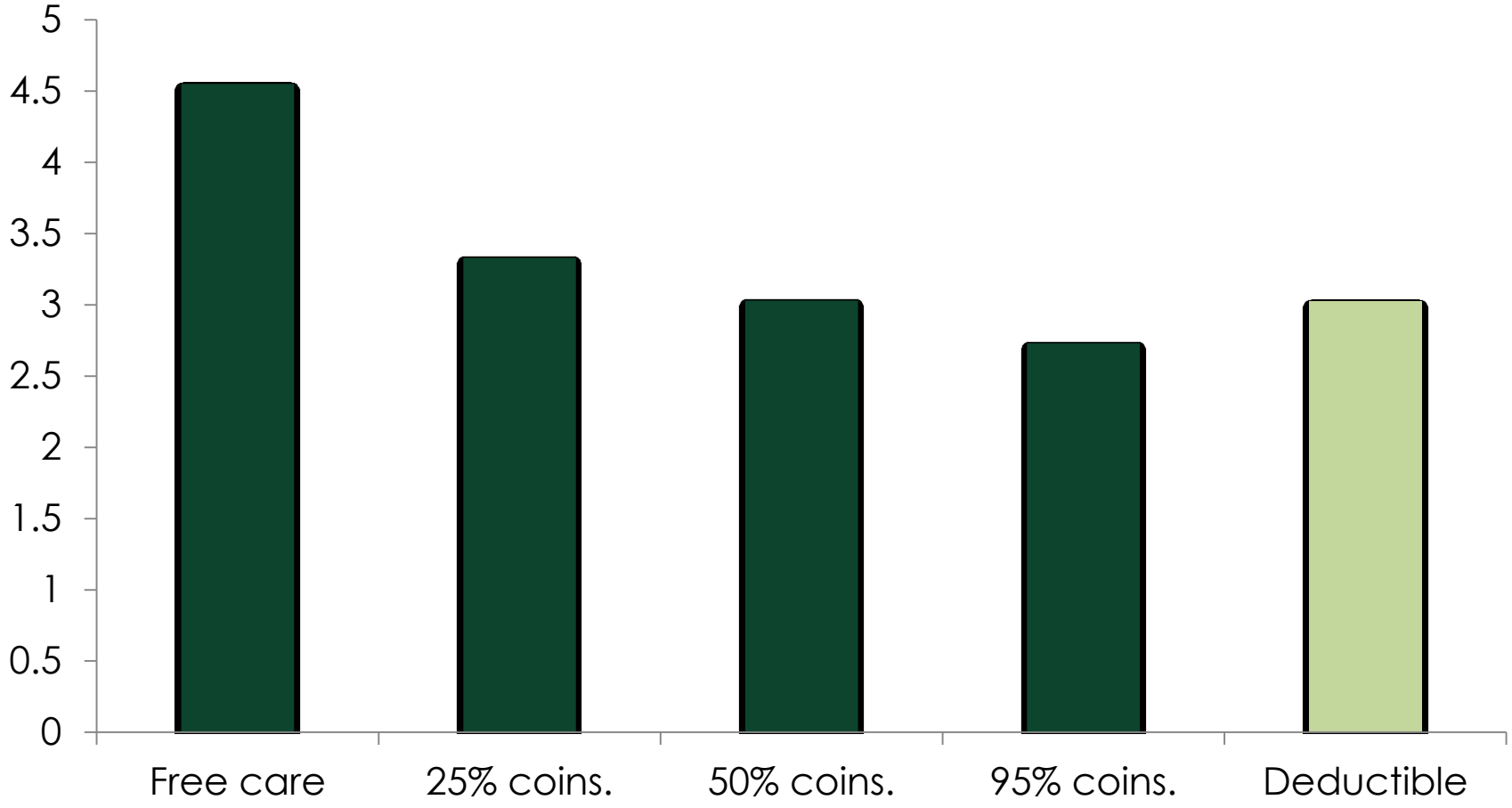
Cost-Sharing Effects: Deductible and Coinsurance

Annual Number of Face-to-Face Visits Per Beneficiary



p-value<.0001 for difference across plans

Source: Manning et al. (1988). *Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment*.

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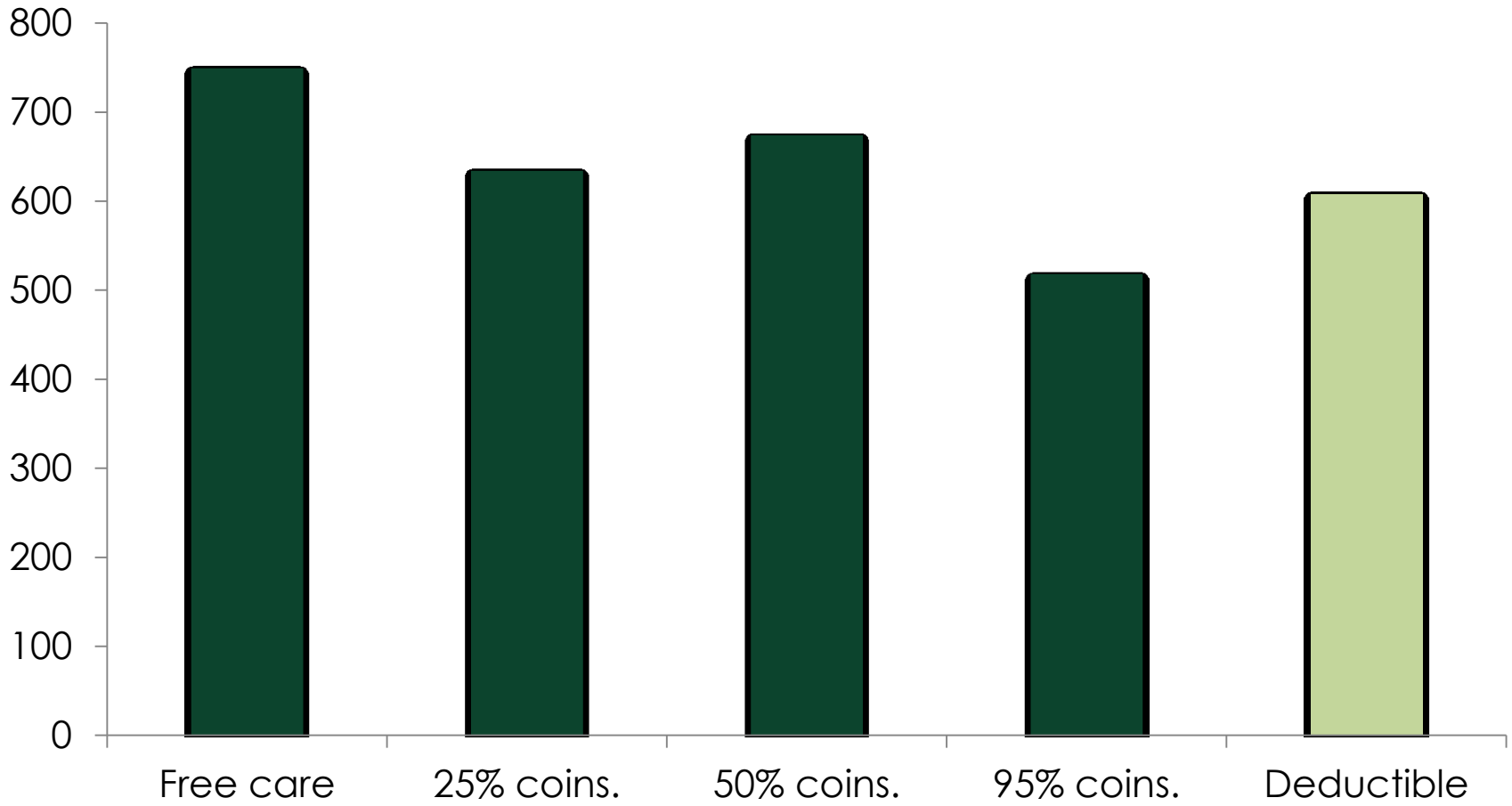
Cost-Sharing Effects: Deductible and Coinsurance

Total Annual Expenditures Per Beneficiary (1984 Dollars)



p-value=.003 for difference across plans

Source: Manning et al. (1988). *Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment*.

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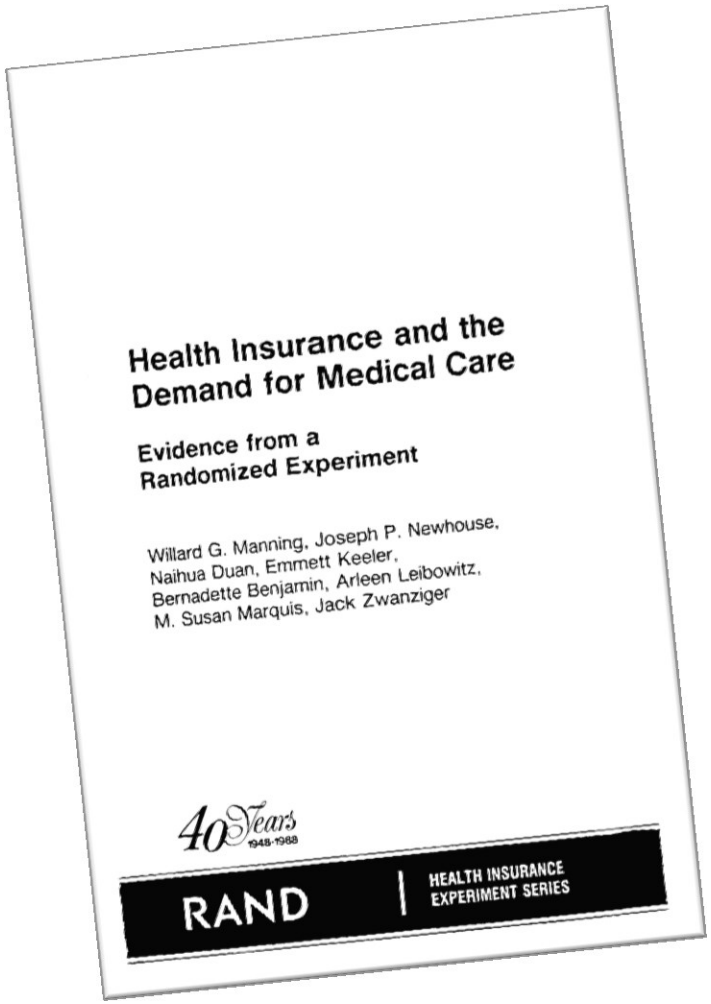
Cost-Sharing Effects: Deductible and Coinsurance



Utilization

Higher coinsurance **reduces effective and ineffective care** by same amount. A 10% rise in cost to patients led to 2% lower spending.

Outcomes

Higher coinsurance does not affect health outcomes for **healthy beneficiaries**.

Low-income groups at-risk of illness had adverse effects.

Cost-Sharing Effects

How Has Cost-Sharing Been Used?

Copayment

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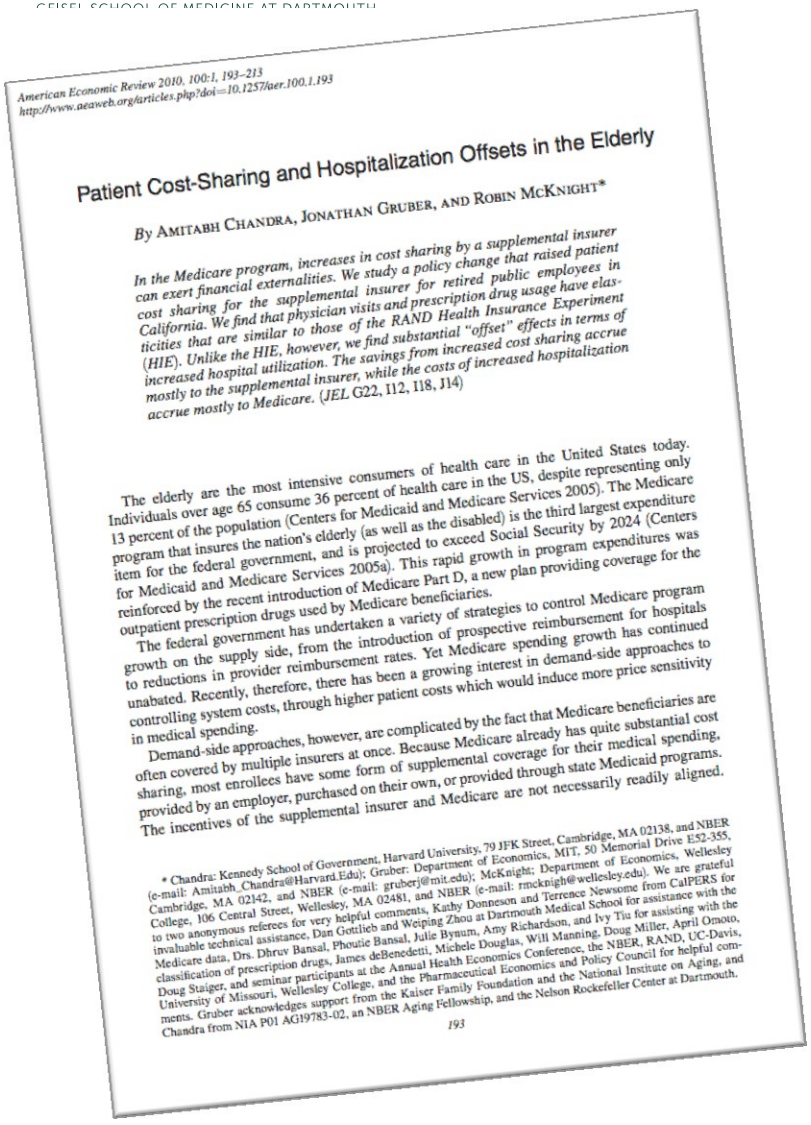
Cost-Sharing Effects: Copayment



American Economic Review 2010, 100:1, 193–213
http://www.aeaweb.org/articles.php?doi=10.1257/aer.100.1.193

Patient Cost-Sharing and Hospitalization Offsets in the Elderly

By Amitabh Chandra, Jonathan Gruber, and Robin McKnight*

In the Medicare program, increases in cost sharing by a supplemental insurer can exert financial externalities. We study a policy change that raised patient cost sharing for the supplemental insurer for retired public employees in California. We find that physician visits and prescription drug usage have elasticities that are similar to those of the RAND Health Insurance Experiment (HIE). Unlike the HIE, however, we find substantial "offset" effects in terms of increased hospital utilization. The savings from increased cost sharing accrue mostly to the supplemental insurer, while the costs of increased hospitalization accrue mostly to Medicare. (JEL G22, I12, I18, J14)

The elderly are the most intensive consumers of health care in the United States today. Individuals over age 65 consume 36 percent of health care in the US, despite representing only 13 percent of the population (Centers for Medicaid and Medicare Services 2005). The Medicare program that insures the nation's elderly (as well as the disabled) is the third largest expenditure item for the federal government, and is projected to exceed Social Security by 2024 (Centers for Medicaid and Medicare Services 2005a). This rapid growth in program expenditures was reinforced by the recent introduction of Medicare Part D, a new plan providing coverage for the outpatient prescription drugs used by Medicare beneficiaries.

The federal government has undertaken a variety of strategies to control Medicare program growth on the supply side, from the introduction of prospective reimbursement for hospitals to reductions in provider reimbursement rates. Yet Medicare spending growth has continued unabated. Recently, therefore, there has been a growing interest in demand-side approaches to controlling system costs, through higher patient costs which would induce more price sensitivity in medical spending.

Demand-side approaches, however, are complicated by the fact that Medicare beneficiaries are often covered by multiple insurers at once. Because Medicare already has quite substantial cost sharing, most enrollees have some form of supplemental coverage for their medical spending, provided by an employer, purchased on their own, or provided through state Medicaid programs. The incentives of the supplemental insurer and Medicare are not necessarily readily aligned.

* Chandra: Kennedy School of Government, Harvard University, 79 JFK Street, Cambridge, MA 02138, and NBER (e-mail: Amitabh_Chandra@Harvard.Edu); Gruber: Department of Economics, MIT, 50 Memorial Drive E52-355, Cambridge, MA 02142, and NBER (e-mail: gruberj@mit.edu); McKnight: Department of Economics, Wellesley College, 106 Central Street, Wellesley, MA 02481, and NBER (e-mail: rmcknigh@wellesley.edu). We are grateful to two anonymous referees for very helpful comments, Kathy Donneson and Terrence Newsome from CalPERS for invaluable technical assistance, Dan Gottlieb and Weiping Zhou at Dartmouth Medical School for assistance with the Medicare data, Drs. Dhruv Bansal, Phoutie Bansal, Julie Bynum, Amy Richardson, and Ivy Tiu for assisting with the classification of prescription drugs, James deBenedetti, Michele Douglas, Will Manning, Doug Miller, April Omoto, Doug Staiger, and seminar participants at the Annual Health Economics Conference, the NBER, RAND, UC-Davis, University of Missouri, Wellesley College, and the Pharmaceutical Economics and Policy Council for helpful comments. Gruber acknowledges support from the Kaiser Family Foundation and the National Institute on Aging, and Chandra from NIA P01 AG19783-02, an NBER Aging Fellowship, and the Nelson Rockefeller Center at Dartmouth.

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Utilization

10% rise in price leads to 1.5% **decline** in utilization.

Reductions occurred for acute, chronic, other drugs.

Outcomes

Hospitalizations went up (especially for sickest)

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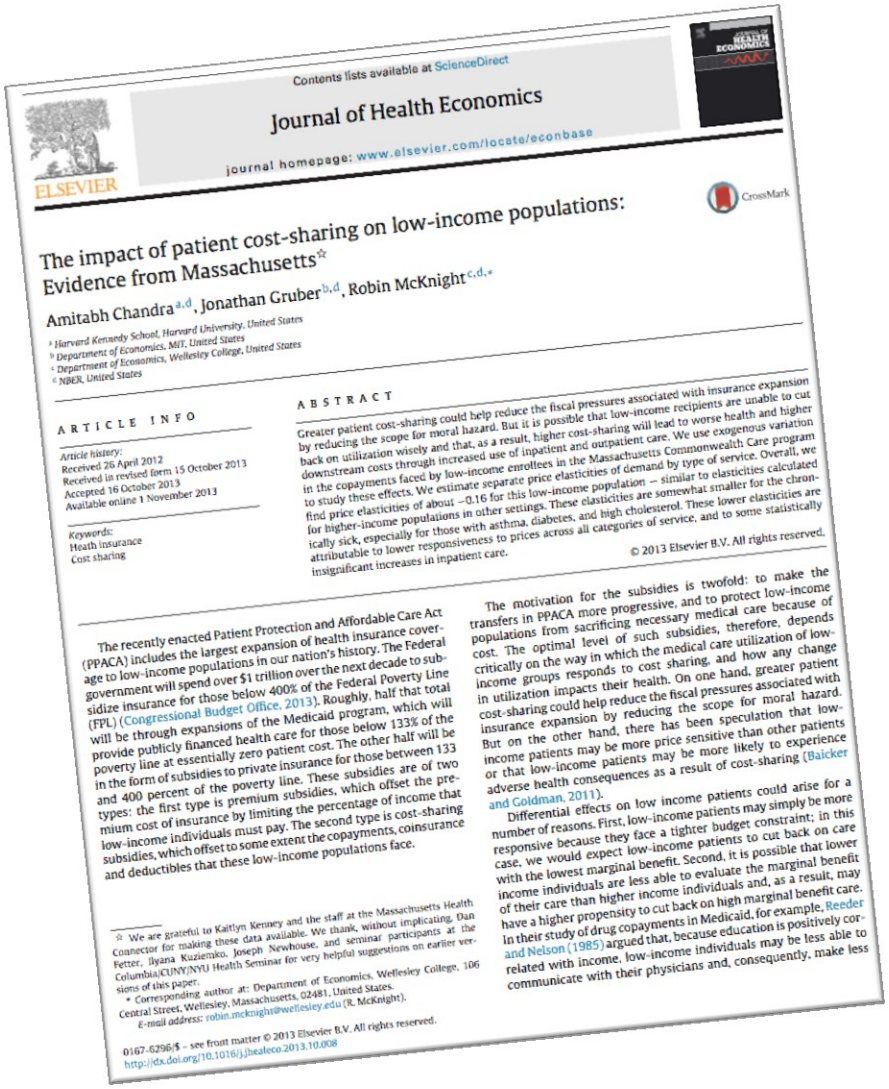
Cost-Sharing Effects: Copayment



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The impact of patient cost-sharing on low-income populations: Evidence from Massachusetts☆

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ABSTRACT

Greater patient cost-sharing could help reduce the fiscal pressures associated with insurance expansion by reducing the scope for moral hazard. But it is possible that low-income recipients are unable to cut back on utilization wisely and that, as a result, higher cost-sharing will lead to worse health and higher downstream costs through increased use of inpatient and outpatient care. We use exogenous variation in the copayments faced by low-income enrollees in the Massachusetts Commonwealth Care program to study these effects. We estimate separate price elasticities of demand by type of service. Overall, we find price elasticities of about −0.16 for this low-income population – similar to elasticities calculated for higher-income populations in other settings. These elasticities are somewhat smaller for the chronically sick, especially for those with asthma, diabetes, and high cholesterol. These lower elasticities are attributable to lower responsiveness to prices across all categories of service, and to some statistically insignificant increases in inpatient care.

The recently enacted Patient Protection and Affordable Care Act (PPACA) includes the largest expansion of health insurance coverage to low-income populations in our nation's history. The Federal government will spend over $1 trillion over the next decade to subsidize insurance for those below 400% of the Federal Poverty Line (FPL) (Congressional Budget Office, 2013). Roughly, half that total will be through expansions of the Medicaid program, which will provide publicly financed health care for those below 133% of the poverty line at essentially zero patient cost. The other half will be in the form of subsidies to private insurance for those between 133 and 400 percent of the poverty line. These subsidies are of two types: the first type is premium subsidies, which offset the premium cost of insurance by limiting the percentage of income that low-income individuals must pay. The second type is cost-sharing subsidies, which offset to some extent the copayments, coinsurance and deductibles that these low-income populations face.

The motivation for the subsidies is twofold: to make the transfers in PPACA more progressive, and to protect low-income populations from sacrificing necessary medical care because of cost. The optimal level of such subsidies, therefore, depends critically on the way in which the medical care utilization of low-income groups responds to cost sharing, and how any change in utilization impacts their health. On one hand, greater patient cost-sharing could help reduce the fiscal pressures associated with insurance expansion by reducing the scope for moral hazard. But on the other hand, there has been speculation that low-income patients may be more price sensitive than other patients or that low-income patients may be more likely to experience adverse health consequences as a result of cost-sharing (Baicker and Goldman, 2011).

Differential effects on low income patients could arise for a number of reasons. First, low-income patients may simply be more responsive because they face a tighter budget constraint; in this case, we would expect low-income patients to cut back on care with the lowest marginal benefit. Second, it is possible that lower income individuals are less able to evaluate the marginal benefit of their care than higher income individuals and, as a result, may have a higher propensity to cut back on high marginal benefit care. In their study of drug copayments in Medicaid, for example, Reeder and Nelson (1985) argued that, because education is positively correlated with income, low-income individuals may be less able to communicate with their physicians and, consequently, make less

☆ We are grateful to Kaitlyn Kenney and the staff at the Massachusetts Health Connector for making these data available. We thank, without implicating, Dan Fetter, Iyana Kuziemko, Joseph Newhouse, and seminar participants at the Columbia/CUNY/NYU Health Seminar for very helpful suggestions on earlier versions of this paper.

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Utilization

Higher copayments lead to decreased **utilization**.

Outcomes

Higher copayments **do not result** in a hospital offset.

Cost-Sharing Effects

How Has Cost-Sharing Been Used?

Tiered Formularies

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Cost-Sharing Effects: Tiered Formularies

The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

The Effect of Incentive-Based Formularies on Prescription-Drug Utilization and Spending

Haiden A. Huskamp, Ph.D., Patricia A. Deverka, M.D., Arnold M. Epstein, M.D., Robert S. Epstein, M.D., Kimberly A. McGuigan, Ph.D., and Richard G. Frank, Ph.D.

ABSTRACT

BACKGROUND
Many employers and health plans have adopted incentive-based formularies in an attempt to control prescription-drug costs.

METHODS
We used claims data to compare the utilization of and spending on drugs in two employer-sponsored health plans that implemented changes in formulary administration with those in comparison groups of enrollees covered by the same insurers. One plan simultaneously switched from a one-tier to a three-tier formulary and increased all enrollee copayments for medications. The second switched from a two-tier to a three-tier formulary, changing only the copayments for tier-3 drugs. We examined the utilization of angiotensin-converting–enzyme (ACE) inhibitors, proton-pump inhibitors, and 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitors (statins).

RESULTS
Enrollees covered by the employer that implemented more dramatic changes experienced slower growth than the comparison group in the probability of the use of a drug and a major shift in spending from the plan to the enrollee. Among the enrollees who were initially taking tier-3 statins, more enrollees in the intervention group than in the comparison group switched to tier-1 or tier-2 medications (49 percent vs. 17 percent, $P<0.001$) or stopped taking statins entirely (21 percent vs. 11 percent, $P=0.04$). Patterns were similar for ACE inhibitors and proton-pump inhibitors. The enrollees covered by the employer that implemented more moderate changes were more likely than the comparison enrollees to switch to tier-1 or tier-2 medications but not to stop taking a given class of medications altogether.

CONCLUSIONS
Different changes in formulary administration may have dramatically different effects on utilization and spending and may in some instances lead enrollees to discontinue therapy. The associated changes in copayments can substantially alter out-of-pocket spending by enrollees, the continuation of the use of medications, and possibly the quality of care.

From the Department of Health Care Policy, Harvard Medical School (H.A.H., R.G.F.); the Department of Health Policy and Management, Harvard School of Public Health (A.M.E.); and the Section on Health Services and Policy Research, Department of Medicine, Brigham and Women's Hospital (A.M.E.) — all in Boston; and Medco Health Solutions, Franklin Lakes, N.J. (P.A.D., R.S.E., K.A.M.). Address reprint requests to Dr. Huskamp at the Department of Health Care Policy, Harvard Medical School, 180 Longwood Ave., Boston, MA 02115, or at huskamp@hcp.med.harvard.edu.

N Engl J Med 2003;349:2224-32.

Utilization

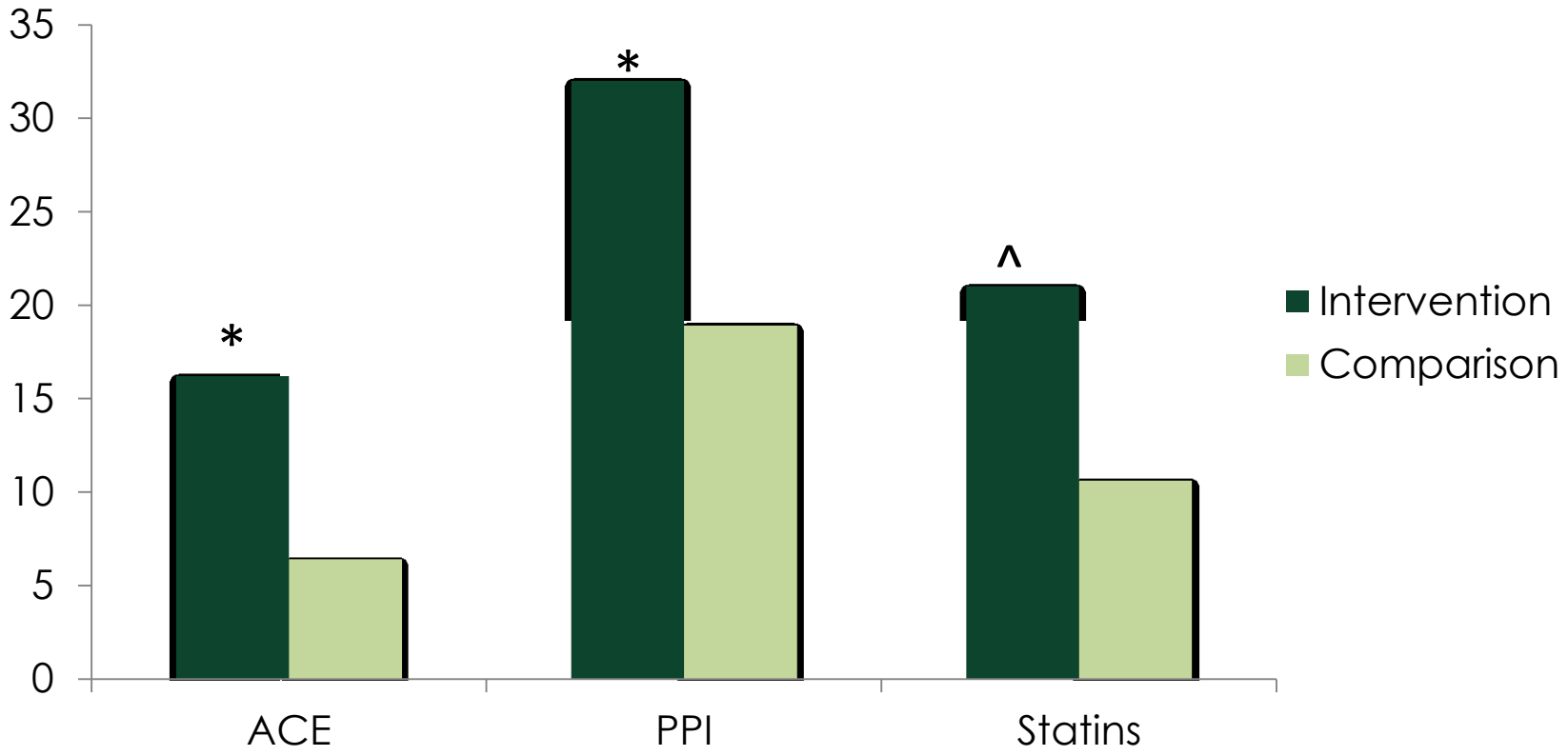
Drug spending **declined**, regardless of drug class.

Outcomes

Some patients **stopped** altogether.

Cost-Sharing Effects: Tiered Formularies

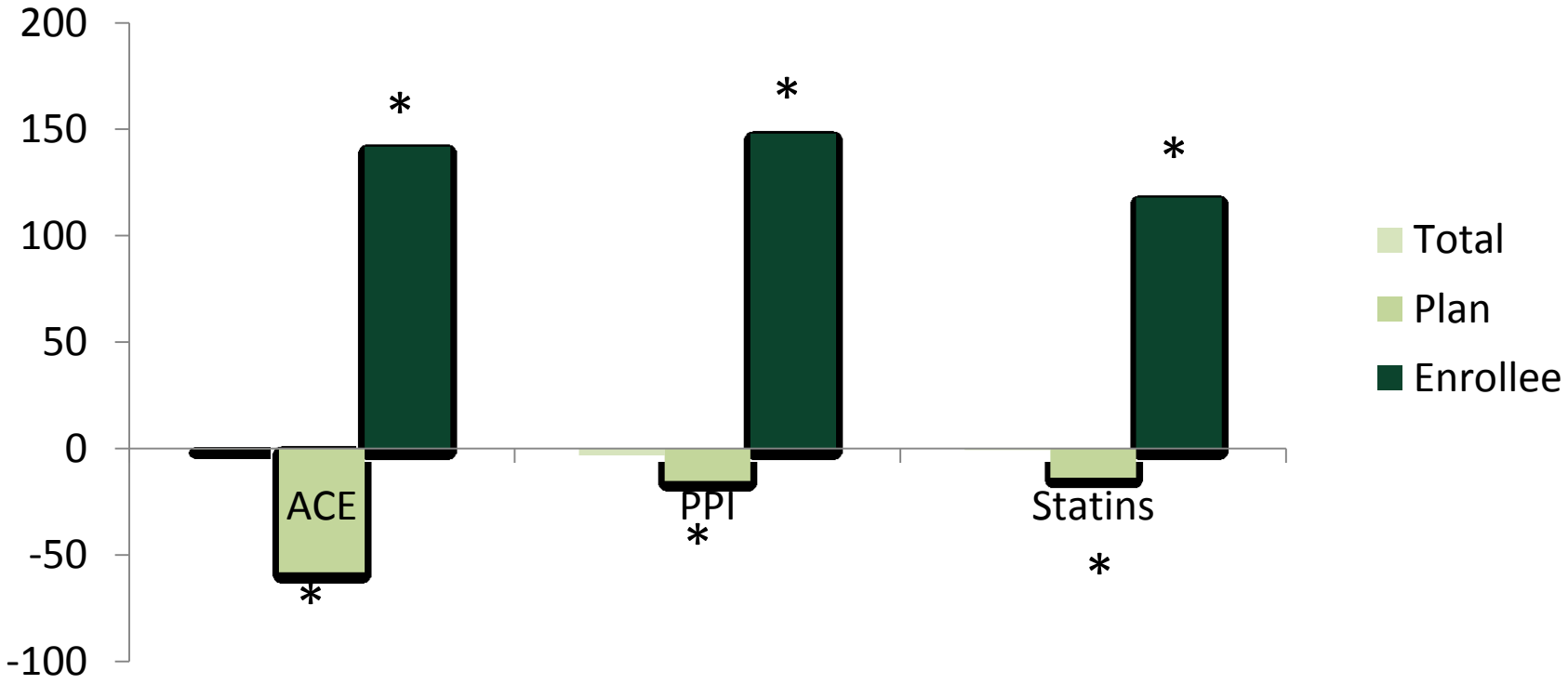
Percent Discontinuing Use in Drug Class



* P <.0001 for difference between intervention & comparison groups
^ P =.04 for difference between intervention & comparison

Cost-Sharing Effects: Tiered Formularies

Percentage Point Change In Spending, Intervention – Control Group



*P <.0001 for difference between intervention & comparison groups

Cost-Sharing Effects

How Has Cost-Sharing Been Used?

Value-Based Insurance Design

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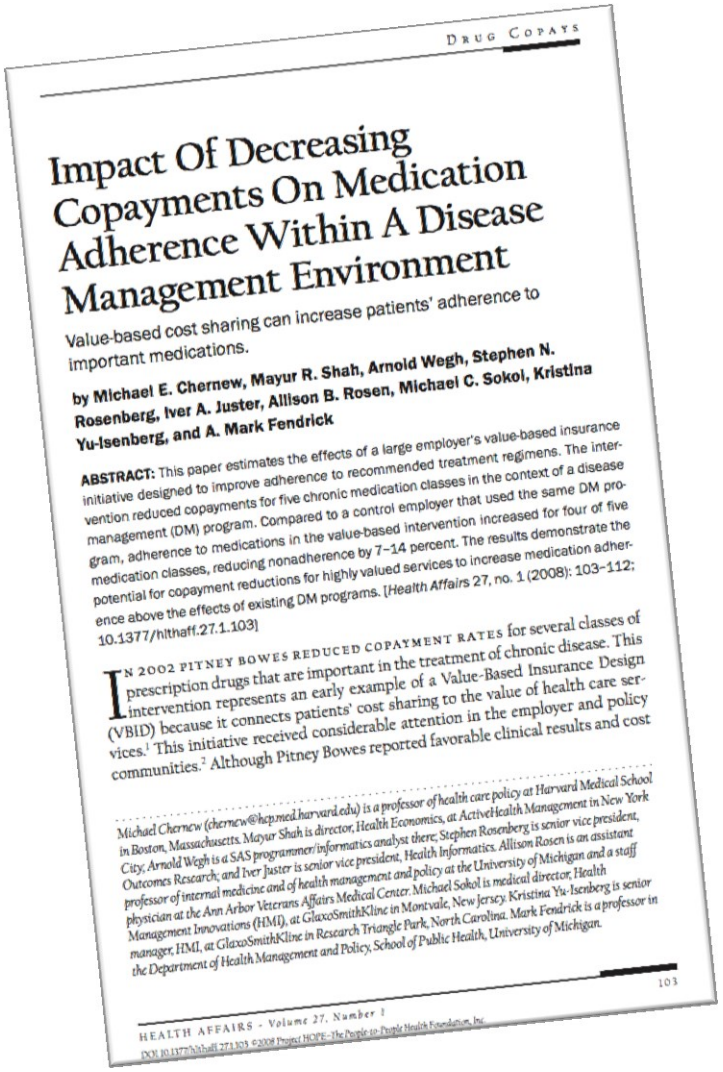
Cost-Sharing Effects: Value-Based Insurance Design



DRUG COPAYS

Impact Of Decreasing Copayments On Medication Adherence Within A Disease Management Environment

Value-based cost sharing can increase patients' adherence to important medications.

by Michael E. Chernew, Mayur R. Shah, Arnold Wegh, Stephen N. Rosenberg, Iver A. Juster, Allison B. Rosen, Michael C. Sokol, Kristina Yu-Isenberg, and A. Mark Fendrick

ABSTRACT: This paper estimates the effects of a large employer's value-based insurance initiative designed to improve adherence to recommended treatment regimens. The intervention reduced copayments for five chronic medication classes in the context of a disease management (DM) program. Compared to a control employer that used the same DM program, adherence to medications in the value-based intervention increased for four of five medication classes, reducing nonadherence by 7–14 percent. The results demonstrate the potential for copayment reductions for highly valued services to increase medication adherence above the effects of existing DM programs. [*Health Affairs* 27, no. 1 (2008): 103–112; 10.1377/hlthaff.27.1.103]

IN 2002 PITNEY BOWES REDUCED COPAYMENT RATES for several classes of prescription drugs that are important in the treatment of chronic disease. This intervention represents an early example of a Value-Based Insurance Design (VBID) because it connects patients' cost sharing to the value of health care services.[1] This initiative received considerable attention in the employer and policy communities.[2] Although Pitney Bowes reported favorable clinical results and cost

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DOI 10.1377/hlthaff.27.1.103

Utilization

10% drop in price leads **to 1-4% rise** in Rx use

Cost-Sharing Effects

How Has Cost-Sharing Been Used?

High Deductibles

Cost-Sharing Effects: High Deductibles

POLICY

Healthcare Spending and Preventive Care in High-Deductible and Consumer-Directed Health Plans

Melinda Beeuwkes Buntin, PhD; Amelia M. Haviland, PhD; Roland McDevitt, PhD; and Neeraj Sood, PhD

Objective: To investigate the effects of high-deductible health plans (HDHPs) and consumer-directed health plans (CDHPs) on healthcare spending and on the use of recommended preventive care.

Study Design: Retrospective study.

Methods: We analyzed claims and enrollment data for 808,707 households from 53 large US employers, 28 of which offered HDHPs or CDHPs. We estimated the effects of HDHP or CDHP enrollment on healthcare cost growth between 2004 and 2005 using a difference-in-difference method that compared cost growth for families who were enrolled in HDHPs or CDHPs for the first time in 2005 with cost growth for families who were not offered HDHPs or CDHPs. Control families were weighted using propensity score weights to match the treatment families. Using similar methods, we examined the effects of HDHP or CDHP enrollment on the use of preventive care and the effects of HDHP or CDHP offering by employers on the mean cost growth.

Results: Families enrolling in HDHPs or CDHPs for the first time spent 14% less than similar families enrolled in conventional plans. Families in firms offering an HDHP or a CDHP spent less than those in other firms. Significant savings for enrollees were realized only for plans with deductibles of at least $1000, and savings decreased with generous employer contributions to healthcare accounts. Enrollment in HDHPs or CDHPs was also associated with moderate reductions in the use of preventive care.

Conclusions: The HDHPs or CDHPs with at least a $1000 deductible significantly reduced healthcare spending, but they also reduced the use of preventive care in the first year. This merits additional study because of concerns about enrollee health.

(Am J Manag Care. 2011;17(3):222-230)

For author information and disclosures, see end of text.

Curbing increases in healthcare costs is a top priority for policy makers and for employers. Many believe that high-deductible health plans (HDHPs), also known as consumer-directed health plans (CDHPs), when coupled with personal savings accounts, might be one way to hold down costs. These plans, intended to make patients more cost conscious, are becoming increasingly popular, and healthcare reform may foster further growth in enrollment. As of 2009, 20% of Americans with employer coverage were enrolled in a plan with a deductible high enough to be eligible for a health savings account. Among those purchasing coverage directly, 47% had a deductible at least this high.[1] A survey of large employers at the beginning of 2010 found that more than 54% offered at least 1 CDHP option, and another 7% were planning in 2011 to adopt one.[2] Growth is expected from 2 sources, mainly, CDHPs with low premiums offered through health insurance exchanges and more CDHP offerings in the employer market because of taxes placed on generous "Cadillac" plans.

Despite growing enrollment, little is known about the effects of HDHPs or CDHPs on healthcare costs and on the use of necessary care. Even less is known about the influence of specific HDHP or CDHP provisions, including deductible levels and account offerings.[3] Both questions are of key importance for those who are newly insured through exchanges and for those who are selecting plans in the employer or individual market. Part of the problem is the lack of good pre-post data for persons enrolling in diverse HDHP or CDHP and conventional plans. Most evidence is limited to studies with data from a single carrier, a single employer, or a single year; therefore, the findings may not apply outside of those settings. A review of these studies concluded that moving consumers from traditional plans to high-deductible plans could result in significant savings; however, coupling these plans with funded personal accounts could reduce this effect.[4] More recent work suggests that some CDHP plan designs might lead to higher spending over time, to discontinuation of chronic disease medications by patients, and to decreased use of office visits, hospitalizations, and emergency department care.[5,6] Other peer-reviewed studies[8-11] have found instances in which CDHP enrollment has no discernible effect on the use of preventive care. Reviewing a set of industry studies, the American

In this article
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eAppendices 1 to 5

Utilization

Reduction in utilization overall, even for free preventive care

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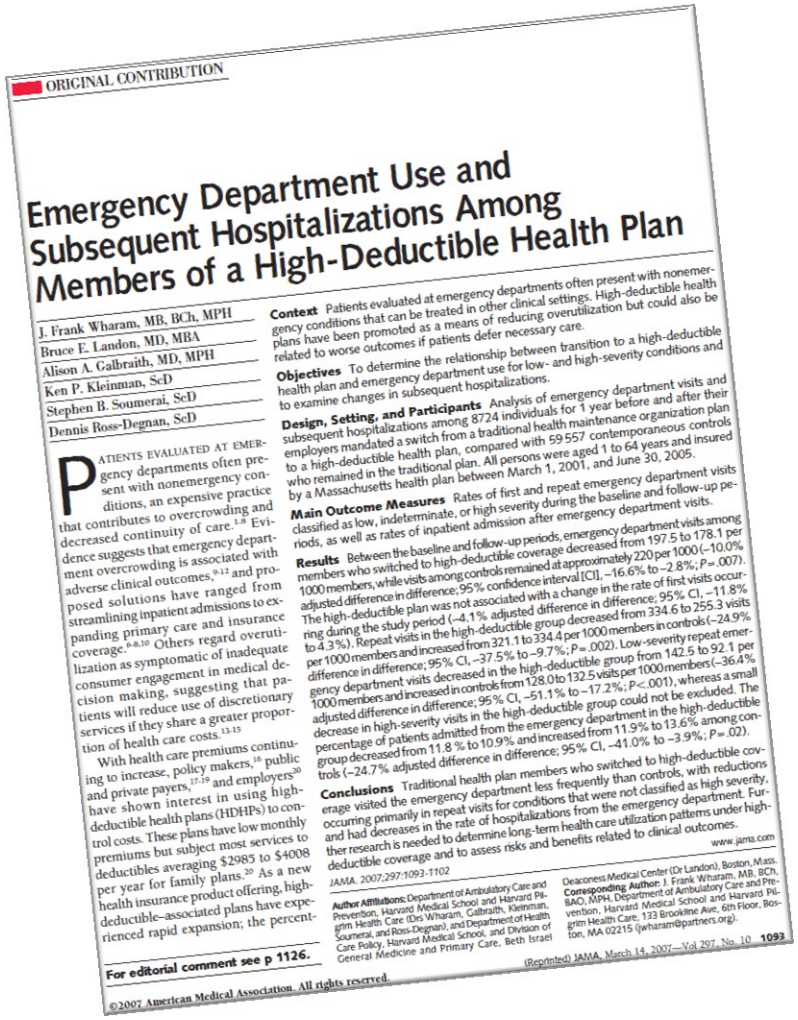
Cost-Sharing Effects: High Deductibles



ORIGINAL CONTRIBUTION

Emergency Department Use and Subsequent Hospitalizations Among Members of a High-Deductible Health Plan

J. Frank Wharam, MB, BCh, MPH
Bruce E. Landon, MD, MBA
Alison A. Galbraith, MD, MPH
Ken P. Kleinman, ScD
Stephen B. Soumerai, ScD
Dennis Ross-Degnan, ScD

Context Patients evaluated at emergency departments often present with nonemergency conditions that can be treated in other clinical settings. High-deductible health plans have been promoted as a means of reducing overutilization but could also be related to worse outcomes if patients defer necessary care.

Objectives To determine the relationship between transition to a high-deductible health plan and emergency department use for low- and high-severity conditions and to examine changes in subsequent hospitalizations.

Design, Setting, and Participants Analysis of emergency department visits and subsequent hospitalizations among 8724 individuals for 1 year before and after their employers mandated a switch from a traditional health maintenance organization plan to a high-deductible health plan, compared with 59 557 contemporaneous controls who remained in the traditional plan. All persons were aged 1 to 64 years and insured by a Massachusetts health plan between March 1, 2001, and June 30, 2005.

Main Outcome Measures Rates of first and repeat emergency department visits classified as low, indeterminate, or high severity during the baseline and follow-up periods, as well as rates of inpatient admission after emergency department visits.

Results Between the baseline and follow-up periods, emergency department visits among members who switched to high-deductible coverage decreased from 197.5 to 178.1 per 1000 members, while visits among controls remained at approximately 220 per 1000 (−10.0% adjusted difference in difference; 95% confidence interval [CI], −16.6% to −2.8%; $P = .007$). The high-deductible plan was not associated with a change in the rate of first visits occurring during the study period (−4.1% adjusted difference in difference; 95% CI, −11.8% to 4.3%). Repeat visits in the high-deductible group decreased from 334.6 to 255.3 visits per 1000 members and increased from 321.1 to 334.4 per 1000 members in controls (−24.9% difference in difference; 95% CI, −37.5% to −9.7%; $P = .002$). Low-severity repeat emergency department visits decreased in the high-deductible group from 142.5 to 92.1 per 1000 members and increased in controls from 128.0 to 132.5 visits per 1000 members (−36.4% adjusted difference in difference; 95% CI, −51.1% to −17.2%; $P < .001$), whereas a small decrease in high-severity visits in the high-deductible group could not be excluded. The percentage of patients admitted from the emergency department in the high-deductible group decreased from 11.8 % to 10.9% and increased from 11.9% to 13.6% among controls (−24.7% adjusted difference in difference; 95% CI, −41.0% to −3.9%; $P = .02$).

Conclusions Traditional health plan members who switched to high-deductible coverage visited the emergency department less frequently than controls, with reductions occurring primarily in repeat visits for conditions that were not classified as high severity, and had decreases in the rate of hospitalizations from the emergency department. Further research is needed to determine long-term health care utilization patterns under high-deductible coverage and to assess risks and benefits related to clinical outcomes.

www.jama.com
JAMA. 2007;297:1093-1102

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For editorial comment see p 1126.

Utilization

Reduction in Emergency Room use even for severe emergencies

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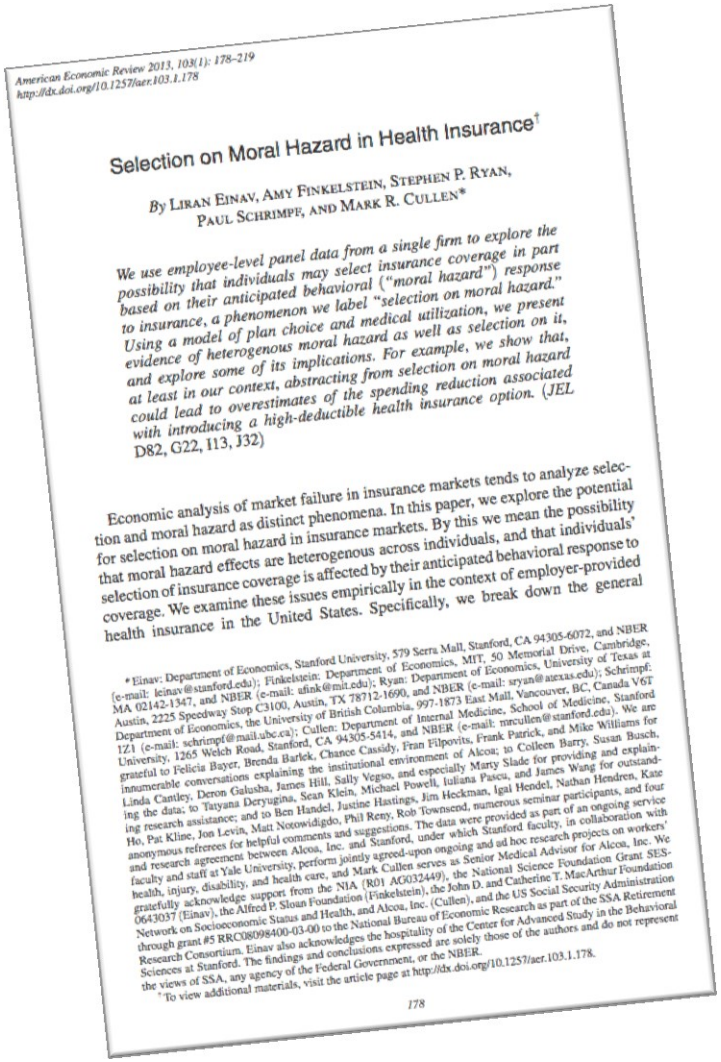
Cost-Sharing Effects: High Deductibles



American Economic Review 2013, 103(1): 178–219
http://dx.doi.org/10.1257/aer.103.1.178

Selection on Moral Hazard in Health Insurance†

By Liran Einav, Amy Finkelstein, Stephen P. Ryan, Paul Schrimpf, and Mark R. Cullen*

We use employee-level panel data from a single firm to explore the possibility that individuals may select insurance coverage in part based on their anticipated behavioral ("moral hazard") response to insurance, a phenomenon we label "selection on moral hazard." Using a model of plan choice and medical utilization, we present evidence of heterogenous moral hazard as well as selection on it, and explore some of its implications. For example, we show that, at least in our context, abstracting from selection on moral hazard could lead to overestimates of the spending reduction associated with introducing a high-deductible health insurance option. (JEL D82, G22, I13, J32)

Economic analysis of market failure in insurance markets tends to analyze selection and moral hazard as distinct phenomena. In this paper, we explore the potential for selection on moral hazard in insurance markets. By this we mean the possibility that moral hazard effects are heterogenous across individuals, and that individuals' selection of insurance coverage is affected by their anticipated behavioral response to coverage. We examine these issues empirically in the context of employer-provided health insurance in the United States. Specifically, we break down the general

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† To view additional materials, visit the article page at http://dx.doi.org/10.1257/aer.103.1.178.

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Outcomes

Distorts timing of care

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Cost-Sharing Effects

Type of cost sharing	Utilization fell as price rose?	Adverse events vs. better health care?
Deductible Coinsurance Copay	Yes – indiscriminately by service & population	Perhaps for low income, sickest patients
Tiered formularies	Yes – all drugs	Some evidence in asthma patients over age 5
Value-based design	Yes -	Increased medication compliance
High deductibles	Yes – even for "exempt" services	Not studied

Things to keep in mind

Estimated effects of cost-sharing are remarkably consistent across settings:

- Every 10% rise in price causes fall in use/spending that is 4% or less (most are around 2.0%)

Health effects hard to demonstrate

- Average, healthy patient not affected
- Adverse events possible for sicker, poorer patients

Cost-Sharing Effects

Will cost-sharing contain medical spending?

- YES, by about 20% if cost-sharing doubles

Will cost-sharing contribute to Act 48 goals of high-quality care & sustainable costs?

- Not nearly as likely for sickest, most vulnerable Vermonters
- Should be exercised strategically

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Goals

1. There is a tradeoff between insurance and costs
2. Cost-sharing lowers health care spending
3. Cost-sharing has unintended consequences

Aron-Dine A, Einav L, Finkelstein A. The RAND Health Insurance Experiment, Three Decades Later. *The journal of economic perspectives : a journal of the American Economic Association.* 2013;27(1):197-222.

Baicker K, Goldman D. Patient cost-sharing and healthcare spending growth. *The journal of economic perspectives : a journal of the American Economic Association.* Spring 2011;25(2):47-68.

Barcellos SH, Wuppermann AC, Carman KG, et al. Preparedness of Americans for the Affordable Care Act. *PNAS.* 2014.

Buntin MB, Haviland A, McDevitt R, Sood N. Healthcare Spending and Preventive Care in High-Deductible and Consumer-Directed Health Plans. *American Journal of Managed Care.* 2011;17(3):222-230.

Chandra A, Gruber J, McKnight R. Patient Cost-Sharing and Hospitalization Offsets in the Elderly. *The American economic review.* Mar 1 2010;100(1):193-213.

Chandra A, Gruber J, McKnight R. The impact of patient cost-sharing on low-income populations: evidence from Massachusetts. *Journal of health economics.* Jan 2014;33:57-66.

Chernew ME, Shah MR, Wegh A, et al. Impact of decreasing copayments on medication adherence within a disease management environment. *Health Aff (Millwood).* Jan-Feb 2008;27(1):103-112.

Goldman DP, Joyce GF, Zheng Y. Prescription drug cost sharing: associations with medication and medical utilization and spending and health. *JAMA : the journal of the American Medical Association.* Jul 4 2007;298(1):61-69.

Huskamp HA, Deverka PA, Epstein AM, Epstein RS, McGuigan KA, Frank RG. The effect of incentive-based formularies on prescription-drug utilization and spending. *The New England journal of medicine.* Dec 4 2003;349(23):2224-2232.

Joyce GF, Escarce JJ, Solomon MD, Goldman DP. Employer drug benefit plans and spending on prescription drugs. *JAMA : the journal of the American Medical Association.* Oct 9 2002;288(14):1733-1739.

Karaca-Mandic P, Jena AB, Joyce GF, Goldman DP. Out-of-pocket medication costs and use of medications and health care services among children with asthma. *JAMA : the journal of the American Medical Association.* Mar 28 2012;307(12):1284-1291.

Kozhimannil KB, Law MR, Blauer-Peterson C, Zhang F, Wharam JF. The impact of high-deductible health plans on men and women: an analysis of emergency department care. *Medical care.* Aug 2013;51(8):639-645.

Manning WG, Newhouse JP, Duan N, et al. *Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment.* Santa Monica, CA1988.

Wharam JF, Landon BE, Galbraith AA, Kleinman KP, Soumerai SB, Ross-Degnan D. Emergency department use and subsequent hospitalizations among members of a high-deductible health plan. *JAMA : the journal of the American Medical Association.* Mar 14 2007;297(10):1093-1102.

Wharam JF, Landon BE, Zhang F, Soumerai SB, Ross-Degnan D. High-deductible insurance: two-year emergency department and hospital use. *The American journal of managed care.* Oct 2011;17(10):e410-418.

Wharam JF, Zhang F, Landon BE, Soumerai SB, Ross-Degnan D. Low-socioeconomic-status enrollees in high-deductible plans reduced high-severity emergency care. *Health Aff (Millwood).* Aug 2013;32(8):1398-1406.

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Health Economics: Value-Based Benefits & Analytics

Vermont House Health Care Committee
Ellen Meara, PhD

MARCH 26, 2014

Appendix B-8. Department of Human Resources Benefit Summary SELECTCARE 2014

The SelectCare POS Plan

Summary of Benefits for the Employees and Retirees of the State of Vermont

What Does "POS" Mean?

- The "SelectCare POS Plan" is a "Point-of-Service" (POS) plan. In this plan, you decide whether or not to use a network doctor or hospital at the **"point of service"**, meaning, each time you use a medical service. When you use a network provider, the plan is similar to an HMO, with no annual deductible and small copay per visit.

It's Your Choice

- You get access to quality care at the lowest out-of-pocket costs available under your plan by having your care coordinated through your Primary Care Physician and by seeing network providers. You also get the **freedom to choose** providers who aren't part of the network. Your copays are lowest when you see participating providers, but you're still covered for visits to non-network providers at a higher cost share.

Important Medical Plan Features

- You may choose a Primary Care Physician (PCP) – your personal doctor -- to coordinate your care. As your needs change, you may change your Primary Care Physician for any reason.
- **Preventive care services** for every covered family member and paid at 100%.
- See a participating OB/GYN – **no referral** required.
- **Emergency and urgent care are covered** wherever you go, worldwide, **24 hours a day**.

Drug Plan

- The program is administered by Express Scripts, Inc. The annual deductible is $25 per covered person per year. The plan covers 90% of the cost of generic drugs, 80% of the cost of preferred brand drugs and 60% of the cost for non-preferred brand drugs. For the 2014 Plan Year, the maximum out-of-pocket cost per individual per year is $775 (which includes the deductible). **40% copay drugs do not contribute to the maximum out of pocket limit.** At the local pharmacy, you show you drug plan card and pay your copay; the State is automatically billed for the balance of the cost. The drug plan also features a mail order option, with the convenience of direct home delivery for long-term maintenance drugs.

BENEFIT HIGHLIGHTS	IN-NETWORK	OUT-OF-NETWORK
Primary Care Physician (PCP) Office Visit such as:	**YOUR COST IS THE COPAY – WITH NO ANNUAL MEDICAL DEDUCTIBLE.**	**THE PLAN PAYS 70% AFTER THE ANNUAL MEDICAL DEDUCTIBLE.**
Preventive Care/Well Care:		
Periodic Physical Exams (Children and Adults)	Paid at 100%	70%
Routine Immunizations and Injections	Paid at 100%.	70%
Adult/Child Medical Care for Illness or Injury	$20 Copay per office visit	70%
Procedures performed in a Physician's Office	$20 Copay	70%
Routine Mammograms	Paid at 100%	Paid at 100%
Specialist Office Visits such as:		
Consultations and Referral Physician Services	$20 Copay per office visit	70%
Well Care (Includes Pap Test and PSAs)	Paid at 100%	70%
Procedures performed in Physician's office	$20 Copay per office visit	70%
Inpatient Hospital Services:		
Semi-Private Room and Board	$250 Copay per admission	70%
Physician Services		
Diagnostic/Therapeutic Lab and X-ray		***All inpatient hospital admissions require Precertification. Call the toll-free number on your ID Card.***
Drugs and Medication		
Operating and Recovery Room		
Radiation Therapy and Chemotherapy		
Anesthesia and Inhalation Therapy		
Inpatient Surgeon's Charges	Paid at 100%.	70%
Second Surgical Opinion	$20 Copay per office visit.	70%
Outpatient Facility Services including:		
Operating Room, Recovery Room, Procedure Room and Treatment Room including:	Paid at 100%.	70%
Physician Services		
Diagnostic/Therapeutic Lab and X-rays		
Anesthesia and Inhalation Therapy		
Outpatient Preadmission Testing		
Office Visit	Paid at 100%.	70%
Outpatient Facility	Paid at 100%.	70%
Laboratory and Radiology Services such as:		
MRIs, MRAs, CAT Scans and PET Scans	Paid at 100%.	70%
Other Laboratory and Radiology Services		
Short-Term Rehabilitative Therapy including Physical, Speech, Occupational and Chiropractic Therapies.	$20 Copay per office visit – **Maximum of 60 visits per year in aggregate.***	70% **Maximum of 60 visits per year in aggregate.***
Prescription Drugs		
For both Retail and Mail Order Drugs Combined:		
Annual Deductible (Separate from your medical deductible)	$25 per individual/$75 per family	Not Covered
Plan Pays	90% for generic drugs, 80% for preferred brand drugs, and 60% for non-preferred brand drugs	
Your 2013 Annual Maximum Copay, excluding deductible	$750 per person	
2013 Maximum Out-Of-Pocket expense per year	$775 per person ($750 maximum copays plus $25 annual deductible.) , then the plan pays 100% for the rest of the calendar year	
Emergency and Urgent Care Services at:		
Physician's Office	$20 Copay	If true emergency, benefits are the same as the in-network benefits. If not a true emergency, benefits are paid at 70%.
Emergency Room, Urgent Care or Outpatient Facility	$50 Copay per visit, (waived if admitted)	
Ambulance	Paid at 100%.	
Maternity Care Services		
Initial Office Visit to Confirm Pregnancy	$20 Copay	70%
All other office visits	Paid at 100%.	70%
Delivery		
Hospital Charges	$250 Copay per admission	70%
Physician Charges	Paid at 100%.	70%
Inpatient Services at Other Health Care Facilities including: Skilled Nursing, Rehabilitation and Sub-Acute Facilities	Paid at 100%.**60 days maximum per calendar year**	70%. **Precertification applies. 60 days maximum per calendar year**
Home Health Services	Paid at 100%.	70% ; **40 visits per calendar yr.**
Family Planning Services		
Office Visits (tests, counseling)	$20 Copay	70%
X-ray/lab if billed by separate facility	Paid at 100%.	70%
Vasectomy/Tubal Ligation (excludes reversals)		70% **Precertification applies**
Inpatient Facility	$250 per admission	70%
Outpatient Facility	Paid at 100%.	70%
Surgery in Physician's Office	$20 Copay	
Infertility Treatment – Up to $50,000/lifetime		
Office Visits (tests, counseling)	$20 Copay	Covered in-network only
X-ray/lab if billed by separate facility	Paid at 100%.	
Treatment/Surgery (includes In-vitro Fertilization, Artificial Insemination, GIFT and ZIFT) done at an inpatient or outpatient facility or physician's office.	Paid at 100%.	Covered in-network only

BENEFIT HIGHLIGHTS	IN-NETWORK	OUT-OF-NETWORK
Mental Health and Substance Abuse Precertification Required		
Inpatient Mental Health	100%	70%
Inpatient Substance Abuse	100%	70%
Inpatient Substance Abuse Detoxification	100%	70%
Inpatient Substance Abuse Rehab Facility	100%	70%
Outpatient Mental Health	100%	70%
Marital/Family Counseling	100%	Not Covered
Outpatient Substance Abuse	100%	70%
Durable Medical Equipment	Paid at 100%.	70% **$700 Calendar year maximum**
External Prosthetic Appliances	Paid at 100%.	70% **$1,000 Calendar year maximum**
Vision Care	$100 every two calendar years, no deductible or coinsurance, routine exams and lenses.	
OTHER BENEFIT INFORMATION		
Annual Deductible Individual Family	None None	$500 $1,000
Annual Out-of-Pocket (OOP) Maximum Individual Family	None None	$2,000 plus deductible $6,000 plus deductible
Coinsurance	None	The plan pays 70% of eligible charges after the annual deductible is met. You pay 30% of the charges after the annual deductible is met.
Precertification (Inpatient, Outpatient, and MRI's)	Handled by your physician	Member must obtain approval
Lifetime Maximum	Unlimited	Unlimited

* Out-of-network treatment maximums are reduced by in-network services used.

If you use an In-NetworkProvider (In-Network Services):

- All services must be provided by or referred by your Primary Care Physician (PCP) in order to be covered except for: emergency services, routine care provided by a participating OB/GYN, and mental health and substance abuse services..

If you use a Out-of-Network Provider (Out-of-Network Services):

- All out-of-network hospital admissions, outpatient surgeries and MRI's must be precertified by the member. Precertification **is not required** for emergency admissions. To precertify, call the telephone number on the back of your ID card.
- Benefits which are not covered out-of-network are: Organ Transplants, Infertility Treatment and Prescription Drugs.
- Once the out-of-pocket maximum for Out-of-Network services is reached, the plan pays 100% of eligible charges for the remainder of the calendar year.

Appendix B-9. Scenarios Illustrating Benefit Designs

State of Vermont **APPENDIX B-9. SCENARIOS**

Estimated Out of Pocket Costs For illustrative purposes only

Based on Plan Designs as of December 16, 2014

Scenario	Copay 93.5% (State Adj)	Deductible 87.0% (Catamount Adj)	Deductible Subsidy 93.5%	HDHP 80%
Pregnancy	$872	$1,705	$695	$2,100
Mental Health	$620	$900	$520	$1,445
COPD	$1,122	$2,140	$850	$2,100
Multiple Sclerosis	$2,155	$1,713	$850	$2,100
Family of Four	$515	$984	$544	$2,790

Illustrative purposes only. Based on estimated provider payment rates and a set number, type and order of services.

State of Vermont
Estimated Out of Pocket Costs - Pregnancy Scenario
Based on Plan Designs as of December 16, 2014

APPENDIX B-9. SCENARIOS
For illustrative purposes only

Scenario:
27 year old female on Single insurance. Pregnant. ER visit/delivery/surgery due to Ectopic pregnancy.

Pregnancy Services	# Units	Allowed Cost per Service	Allowed Costs	Copay 93.5% (State Adj)	Deductible 87.0% (Catamount Adj)	Deductible Subsidy 93.5%	HDHP 80%
OB/GYN exams	8	$98	$781	$280	$160	$160	$620
Ambulance	1	$1,081	$1,081	$0	$616	$296	$15
Drug - preferred brand	3	$237	$710	$217	$105	$45	$710
ER services	1	$5,220	$5,220	$75	$1,044	$1,044	$75
Surgery	1	$16,820	$16,820	$0	$3,364	$3,364	$1,550
Hospitalization	1	$5,406	$5,406	$300	$1,081	$1,081	$250
Total Potential Member Costs			$30,018	$872	$6,370	$5,990	$3,220
Total Potential Member Costs - Medical			$29,308	$655	$6,265	$5,945	$2,510
Total Potential Member Costs - Drug			$710	$217	$105	$45	$710
Maximum Out of Pocket - Combined			N/A	N/A	N/A	N/A	$2,100
Maximum Out of Pocket - Medical			$5,000	$1,600	$650	N/A	
Maximum Out of Pocket - Drug			$1,300	$1,250	$200	N/A	
Total Paid by Member			**$872**	**$1,705**	**$695**	**$2,100**	

Illustrative purposes only. Based on estimated provider payment rates and a set number, type and order of services.

State of Vermont
Estimated Out of Pocket Costs - Mental Health Scenario
Based on Plan Designs as of December 16, 2014

APPENDIX B-9. SCENARIOS
For illustrative purposes only

Scenario:
35 year old male with bipolar disease. Lithium maintenance meds. PCP visits twice per year for testing. Also sees psychiatrist 18 times per year.

Mental Health Services	# Units	Allowed Cost per Service	Allowed Costs	Copay 93.5% (State Adj)	Deductible 87.0% (Catamount Adj)	Deductible Subsidy 93.5%	HDHP 80%
PCP visit	2	$102	$204	$50	$20	$20	$107
Drugs - maintenance (generic)	12	$46	$557	$120	$120	$60	$101
Lab tests	1	$901	$901	$0	$580	$260	$901
Psychiatrist visits	18	$240	$4,325	$450	$180	$180	$335

Total Potential Member Costs	$5,987	$620	$900	$520	$1,445
Total Potential Member Costs - Medical	$5,430	$500	$780	$460	$1,344
Total Potential Member Costs - Drug	$557	$120	$120	$60	$101

Maximum Out of Pocket - Combined	N/A	N/A	N/A	$2,100
Maximum Out of Pocket - Medical	$5,000	$1,600	$650	N/A
Maximum Out of Pocket - Drug	$1,300	$1,250	$200	N/A

Total Paid by Member	**$620**	**$900**	**$520**	**$1,445**

Illustrative purposes only. Based on estimated provider payment rates and a set number, type and order of services.

State of Vermont
Estimated Out of Pocket Costs - COPD Scenario
Based on Plan Designs as of December 16, 2014

APPENDIX B-9. SCENARIOS
For illustrative purposes only

COPD Services	# Units	Allowed Cost per Service	Allowed Costs	Copay 93.5% (State Adj)	Deductible 87.0% (Catamount Adj)	Deductible Subsidy 93.5%	HDHP 80%
PCP	2	$108	$216	$50	$20	$20	$113
Hospitalized twice	2	$7,208	$14,417	$600	$3,283	$2,963	$1,800
Drugs (generic)	12	$23	$278	$120	$120	$60	$96
Drugs (brand)	12	$122	$1,460	$352	$420	$180	$393
Home oxygen and equipment	1	$3,364	$3,364	$0	$673	$673	$917
Total Potential Member Costs			$19,735	$1,122	$4,516	$3,896	$3,320
Total Potential Member Costs - Medical			$17,997	$650	$3,976	$3,656	$2,830
Total Potential Member Costs - Drug			$1,738	$472	$540	$240	$490
Maximum Out of Pocket - Combined			N/A	N/A	N/A	$2,100	
Maximum Out of Pocket - Medical			$5,000	$1,600	$650	N/A	
Maximum Out of Pocket - Drug			$1,300	$1,250	$200	N/A	
Total Paid by Member			**$1,122**	**$2,140**	**$850**	**$2,100**	

Illustrative purposes only. Based on estimated provider payment rates and a set number, type and order of services.

State of Vermont
Estimated Out of Pocket Costs - Multiple Sclerosis Scenario
Based on Plan Designs as of December 16, 2014

APPENDIX B-9. SCENARIOS
For illustrative purposes only

Multiple Sclerosis Services	# Units	Allowed Cost per Service	Allowed Costs	Copay 93.5% (State Adj)	Deductible 87.0% (Catamount Adj)	Deductible Subsidy 93.5%	HDHP 80%
PCP visits	6	$96	$577	$150	$60	$60	$121
Neurologist	3	$360	$1,081	$105	$60	$60	$390
Rehab visits	24	$60	$1,442	$600	$673	$368	$405
Durable medical equipment	1	$6,007	$6,007	$0	$260	$240	$15
Drugs - Specialty	12	$1,201	$14,417	$5,812	$660	$360	$1,263
Total Potential Member Costs			$23,524	$6,667	$1,713	$1,089	$2,195
Total Potential Member Costs - Medical			$9,107	$855	$1,053	$729	$932
Total Potential Member Costs - Drug			$14,417	$5,812	$660	$360	$1,263
Maximum Out of Pocket - Combined			N/A	N/A	N/A	$2,100	
Maximum Out of Pocket - Medical			$5,000	$1,600	$650	N/A	
Maximum Out of Pocket - Drug			$1,300	$1,250	$200	N/A	
Total Paid by Member			**$2,155**	**$1,713**	**$850**	**$2,100**	

Illustrative purposes only. Based on estimated provider payment rates and a set number, type and order of services.

State of Vermont
Estimated Out of Pocket Costs - Family of Four Scenario
Based on Plan Designs as of December 16, 2014

APPENDIX B-9. SCENARIOS
For illustrative purposes only

Scenario:
Family of four. One child with diabetes. Dad with cholesterol and high blood pressure meds. Mother to receive colonoscopy. Other child breaks arm in ski accident.

Family of Four Services	# Units	Allowed Cost per Service	Allowed Costs	Copay 93.5% (State Adj)	Deductible 87.0% (Catamount Adj)	Deductible Subsidy 93.5%	HDHP 80%
PCP visits	8	$100	$961	$200	$80	$80	$389
Drug - Diabetes (generic)	12	$173	$2,072	$120	$120	$60	$1,066
Drug - Cholesterol, BP (generic)	12	$95	$1,141	$120	$120	$60	$60
ER services	1	$1,322	$1,322	$75	$664	$344	$1,275
Colonoscopy (preventive)	1	$5,166	$5,166	$0	$0	$0	$0
Total Potential Family Costs			$10,662	$515	$984	$544	$2,790
Total Potential Family Costs - Medical			$7,449	$275	$744	$424	$1,664
Total Potential Family Costs - Drug			$3,214	$240	$240	$120	$1,126
Maximum Out of Pocket - Combined			N/A	N/A	N/A	$4,200	
Maximum Out of Pocket - Medical			$10,000	$3,200	$1,300	N/A	
Maximum Out of Pocket - Drug			$2,600	$2,500	$400	N/A	
Total Paid by Family			**$515**	**$984**	**$544**	**$2,790**	

Illustrative purposes only. Based on estimated provider payment rates and a set number, type and order of services.

Appendix B-10. GMC Secondary: Adding an Out of Pocket Limit to Medicare

Appendix B-10

Calculation of Medicare FFS AV at Various MOOP levels

		Catamount Subsidy (93.5%) = $650 (medical only)		Catamount (87%) = $1,600 (medical only)		HDHP 80% = $2,100 (includes Rx)							State 93.5% = $5,000 (medical only)				
MOOP	**$250**	**$500**	**$1,000**	**$1,250**	**$1,800**	**$2,100**	**$2,400**	**$2,500**	**$3,000**	**$3,600**	**$4,000**	**$4,800**	**$5,100**	**$5,750**	**$6,600**	**$6,750**	**$999,999,999**
Results with LDS Dual/Non Dual Mix																	
Allowed PMPM - 2012	$770	$770	$770	$770	$770	$770	$770	$770	$770	$770	$770	$770	$770	$770	$770	$770	$770
Allowed PMPM - 2017	$888	$888	$888	$888	$888	$888	$888	$888	$888	$888	$888	$888	$888	$888	$888	$888	$888
Implied Annual Trend	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
Cost Share PMPM	$17	$32	$52	$60	$74	$79	$84	$86	$92	$99	$102	$108	$110	$113	$117	$118	$132
Impact of MOOP	$115	$101	$80	$72	$59	$53	$48	$47	$40	$34	$30	$24	$22	$19	$15	$15	$0
Paid PMPM	$870	$856	$835	$828	$814	$808	$803	$802	$795	$789	$785	$779	$778	$774	$771	$770	$755
Resulting AV w/MOOP	**98.0%**	**96.4%**	**94.1%**	**93.2%**	**91.7%**	**91.1%**	**90.5%**	**90.3%**	**89.6%**	**88.9%**	**88.5%**	**87.8%**	**87.6%**	**87.2%**	**86.8%**	**86.8%**	**85.1%**
Medicare FFS AV (no MOOP)	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**	**85.1%**

For discussion and illustrative purposes only. Uses Medicare limited data set to estimate the impact of various maximum out of pocket levels on the Medicare FFS population. Parts A and B only.