Value-Based Benefit Design:

AN EMPLOYER AND HEALTH PLAN PERSPECTIVE | JULY 2012

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NORTHEAST BUSINESS GROUP ON HEALTH

Introduction

Value-based benefit design (VBBD) has emerged as a promising strategy to improve clinical outcomes and enhance overall health care value while ultimately lowering costs. The innovative concept reduces the cost to employees of receiving the evidence-based treatments most beneficial to treating and managing their conditions while deterring them from choosing expensive, less effective therapies. It also appeals to employers' goals of influencing system-wide care delivery as well as improving the health of a broad, diverse base of individuals. Employers, one of the nation's largest purchasers of health care, consistently demonstrate interest in VBBD. Yet VBBD growth has been slow and employer uptake has been surprisingly low.

To explore why VBBD has not grown as robustly as anticipated despite employers' professed interest in the concept, as well as evidence suggesting that it can improve outcomes and value, Northeast Business Group on Health's (NEBGH) Solutions and Innovations Center (SIC) convened a targeted, multistakeholder roundtable consisting of employers, health plans, employee benefit consultants, and academic researchers with VBBD expertise. Conducted in March 2012, the roundtable sought to explore stakeholders' perspectives on VBBD, investigate the obstacles to its adoption, and conceive solutions to promote the strategy's growth and development.

In addition to presenting a VBBD overview, this report highlights key themes and issues shared at the roundtable. It also suggests activities aimed at gaining a deeper and more textured understanding of high-priority opportunities related to VBBD.

Background & Context

The question of how to achieve value in the nation's health care system is foremost in today's health policy debate. Stakeholders across the country are actively developing and implementing innovative solutions aimed at restraining spending growth, enhancing care quality, and maximizing clinical benefit. In recent years, the concept known as "value-based benefit design" has been recognized as an opportunity for employers to improve the health of their employees, which in turn enhances the overall value of the health benefits they offer.

Value-based benefit design principles are based on the notion of maximizing health outcomes using limited dollars. Its goals are to align consumers' out-of-pocket costs with the value of health services they receive and to discourage the use of low-value treatments. To achieve this, VBBD employs differential cost-sharing to encourage the utilization of evidence-based and therefore high-value health care services. Ideally, relatively high co-payments would discourage consumers from utilizing low-value services. However, fine-tuning is necessary in restructuring benefits: A large body of evidence shows that in response to broadly imposed high cost-sharing requirements, consumers decrease utilization of both high- and low-value services and thus may experience adverse outcomes.[1, 2, 3] But by judiciously assigning higher and lower cost-sharing to certain services, VBBD shifts incentives so consumers are encouraged to access specific high-value services that they need and are deterred from using those of less value to them. This means making it less expensive for consumers to access appropriate care and more expensive to seek care of little benefit to them. The objective is to use cost and overall value to guide consumer and employer decisions.

In sum, there is not a one-size-fits-all VBBD strategy. Different treatment options produce different levels of value for different consumers. This "clinical nuance" is critical in structuring a successful VBBD program. For example, it would be ineffective and perhaps even wasteful to make it less expensive for a consumer with diabetes to access treatments that are specifically beneficial to a consumer with asthma. Generally, the more clinically beneficial a service is, the lower the cost-sharing would be. Indeed, it has been shown that properly aligned financial incentives encourage the use of high-value services while constraining the consumption of low-value therapies.[4, 5, 6, 7]

FOR EMPLOYERS, VBBD REPRESENTS MULTIPLE OPPORTUNITIES TO:

- Achieve cost savings
- Restructure health benefits to focus on value
- Shift the health care debate away from one that is purely cost-driven and to refocus it on clinical value of health services
- Improve adherence to evidence-based services

DESPITE STRONG EMPLOYER INTEREST, VBBD USE HAS STALLED

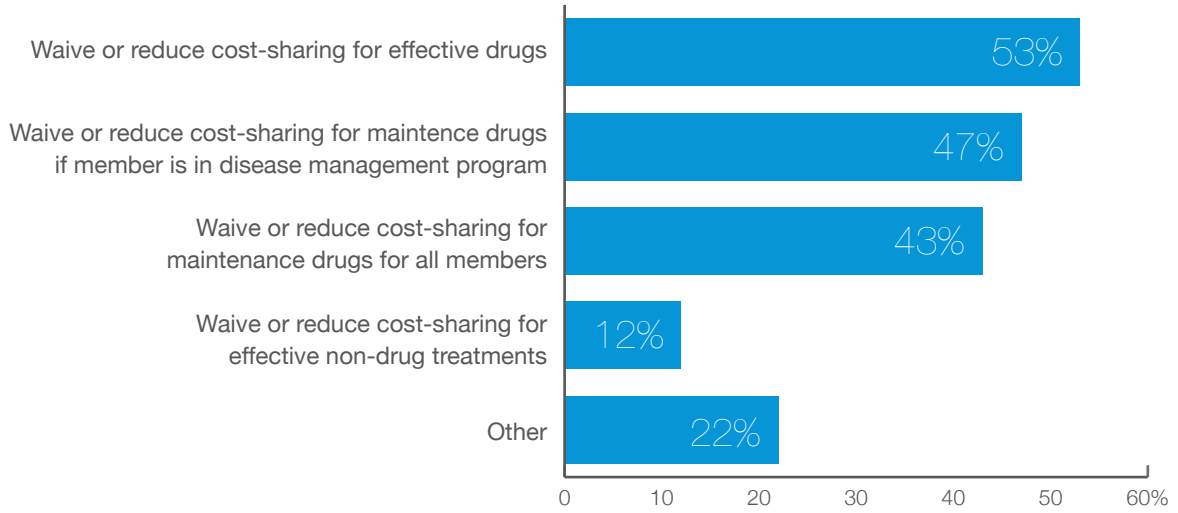
According to a Mercer survey, while fewer than 20 percent of large employers had installed a VBBD program in 2008, 81 percent of employers with 10,000 or more beneficiaries were interested in implementing a VBBD program in the future.[13] But three years later, only 14 percent of employers in the Northeast with 500+ lives were actively using a VBBD program.[14] And among national employers with 500+ lives, only 17 percent were operating a VBBD program. Other data reveal similar trends. Only 23 percent of employers were offering a VBBD program in 2011, according to a recent Aon Hewitt survey.[15] The same survey shows that only 55 percent of employers were considering VBBD as part of their long-term health benefits strategy, a 26 percentage point decline from 2008 data. While employers are clearly hopeful that VBBD will be an effective tool for managing health care costs and outcomes, they appear cautious.

Most VBBD activity among employers involves modifying cost-sharing for prescription drugs. A Mercer survey shows that the three most commonly deployed VBBD strategies are to waive or reduce cost-sharing for a) effective drugs (53 percent), b) maintenance drugs if the member is in a disease management program (47 percent), or c) maintenance drugs for all members (43 percent). Only 12 percent of employers waive or reduce cost-sharing for effective non-drug treatments (Figure 1).[16]

VBBD AS A PUBLIC POLICY MEASURE

Value-based benefit design was thrust into the national spotlight when policymakers included its principles in the Patient Protection and Affordable Care Act (ACA), the federal health reform law enacted in 2010. For the first time ever, the federal government explicitly required health plans to use VBBD: Section 2713 of the law requires health plans to cover certain preventive services without imposing cost-sharing obligations onto consumers. The concept was also featured prominently in the U.S. Department of Health & Human Services' (HHS) National Quality Strategy, an ACA-mandated federal framework promoting quality health care.[8] It was also a key recommendation in the Institute of Medicine's 2011 Essential Health Benefits report, where VBBD was cited as one of three "general approaches" for assessing coverage decisions and was noted as a technique "instrumental in addressing cost and quality of services and care delivered."[9] Elsewhere, VBBD was highlighted in the 2010 and 2011 Medicare Payment Advisory Commission's (MedPac) annual reports to Congress as a promising policy for steering Medicare beneficiaries toward high-value care.[10,11] Other levels of government have also indicated strong interest in VBBD programs. Some states, for instance, are considering incorporating VBBD strategies into their ACA-compliant health benefit exchanges.[12]

Figure 1: Specific VBBD Strategies Used by Employers in 2011



Source: Mercer's National Survey of Employer-Sponsored Health Plans 2011

Evidence from VBBD programs indicates promise and progress

Despite the uncertainty, results reported by private sector employers at the forefront of VBBD implementation are encouraging and suggest that the approach can be effective at achieving an array of clinical, quality, and cost goals. Pitney Bowes (PB), a Connecticut-based documents and mail management company and NEBGH member, has been a leader in this space. One of their VBBD initiatives lowered prescription drug co-pays for employees with diabetes as well as those with asthma. Median medical costs for employees with diabetes fell 12 percent and 15 percent for those with asthma. In another VBBD effort, PB targeted employees with heart disease or those who were at-risk for the condition. By reducing co-pays for statins, drugs that lower cholesterol levels, and clopidrogel, which helps to prevent dangerous blood clots, PB realized a 26 percent decline in emergency room visits as well as a reduction in overall health care costs. Adherence to these drugs increased by 2.8 percent.[17]

Another large but unnamed employer lowered cost-sharing for its employees with diabetes. Some were enrolled in a disease management (DM) program, and others were not. Participation in both VBBD and DM resulted in sustained improvement of diabetes medication adherence (6.5 percent over three years). In addition, improved adherence to diabetes guidelines resulted in $1.33 saved for every dollar spent during a three-year follow-up period.[18] A pioneering public employer VBBD initiative led by the Asheville Project, a health education program spearheaded by the City of Asheville, North Carolina, also enjoyed success. Waiving co-pays for members with diabetes led to improved glucose control and reduced mean health care spending. The intervention resulted in savings of between $1,200 and $1,827 per employee per year.[19]

Recently, more public employers are showing interest in using VBBD. These programs enjoy the benefits of large and diverse populations in addition to all-important political support. The State of Connecticut worked with the state employees' labor union to implement a comprehensive VBBD program in late 2011. Co-pays for

prescription drugs will be waived for employees with diabetes and other chronic conditions. Eligible employees who participate in the program will pay lower premiums and deductibles if they commit to receiving certain high-value services such as an annual physical. For the VBBD program's first year, more than 95 percent of eligible state employees chose to enroll.[20] The State of Oregon waived certain co-pays for state employees with diabetes. This approach led to improved glucose control and reduced mean health care spending.[21] Following a similar track, the City of Springfield, Oregon, also saw favorable results. Among employees enrolled in the VBBD plan, cholesterol levels dropped, sick leave declined, and glycemic control improved. In February 2012, the New Jersey legislature introduced a bill that would create a three-year VBBD pilot program aimed at addressing state employees' chronic conditions, including diabetes, hypertension, asthma, and high cholesterol.[22] As of June 2012, the bill (A1214/S1623) remains stalled in committee.

Further evidence supporting VBBD's effectiveness has emerged recently. A 2011 article published in the *New England Journal of Medicine* demonstrated that VBBD for post-myocardial infarction patients improves clinical outcomes while slowing spending. Among patients in the study's intervention group, adherence rates were four to six percent higher, rates of vascular events or revascularization were significantly reduced, and out-of-pocket spending for both prescription drugs and non-drug medical services declined.[23] A VBBD intervention undertaken by the Mayo Clinic's self-funded health plan found that increasing cost-sharing for specialty provider visits resulted in fewer encounters. Substantial decreases in the use of diagnostic testing and outpatient procedures were also achieved. The study authors noted that "implementing relatively low levels of cost-sharing can lead to a long-term decrease in utilization."[24]

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Highlights of the Roundtable

STAKEHOLDERS ASSESS VBBD'S PROMISE, NOTE CHALLENGES & BARRIERS

Toward a comprehensive, integrated approach

A recurring theme among all the stakeholders is that when it comes to VBBD, the devil is truly in the details. Because VBBD programs don't encompass an employer's entire health benefits strategy, a number of decisions have to be made based on many considerations: How will the VBBD program be structured and what is the extent of its reach? How does it integrate with an employer's other health benefit programs? What are the program's cost, quality, policy, and clinical outcome goals? Which clinical conditions should be included? Which segment(s) of the population will be targeted? How will incentives be structured? Is the program permanent or merely a pilot? How is success defined?

It's clear that success won't come in prepackaged solutions. Different populations with varying health needs require different program elements and goals. Tailoring these to best fit the needs and resources of an employer and its employees is fundamental.

Employers are eager to install – and health plans would like to offer – VBBD programs that are targeted, yet at the same time more comprehensive and integrated. In fact, participants felt strongly that VBBD's greatest potential will be realized when it is applied beyond modifying cost-sharing for prescription drugs. This means, for instance, targeting clinical conditions beyond the ones most frequently addressed now, such as diabetes and asthma; engaging a broader segment of the employee population; and expanding the program to incorporate wellness initiatives, broad delivery system reforms, disease management, and robust data analytics, among other features. Employers noted that they would be more apt to consider implementing a VBBD program if it showed promise in impacting the health care system more broadly.

Stakeholders suggested that VBBD should ultimately encourage consumers to use high-value providers, leverage disease management programs, and choose a healthy lifestyle.

Return on investment: A missing puzzle piece hinders VBBD adoption

Employers stressed that while VBBD, as a concept, is intriguing, their lack of confidence in projecting an accurate return on investment (ROI) is a major obstacle to implementation. However, as a VBBD program is designed, scrutiny of its ROI must be part of its evaluation, employers agreed. In that examination, the program's long- and short-term ROI should be discernible and include productivity and other nonclinical elements important to employers.

While some employers have achieved improved outcomes with VBBD, the evidence base that exists in the literature is not directly applicable to every employer because these programs are tailored for specific population segments, conditions, and financial/incentive arrangements. This lack of generalizability dampens employer and health plan confidence in VBBD's potential for reducing costs and achieving improved outcomes. Indeed, many employers and health plans regard installing a VBBD program as a leap of faith.

Another red flag for employers and health plans is the likely long-term horizon for ROI in a VBBD program. There is a strong possibility that health care costs during the program's first years may actually rise because of increased utilization of services that were previously more difficult to access. Typically, cost reductions are not realized until a program's later years when it becomes apparent that VBBD-based interventions are reducing the use of expensive low-value services. This long-term horizon diminishes VBBD's selling power to the C-suite, especially in a tight economy where every dollar matters, as well as in firms with high employee turnover rates. Senior management may be reluctant to install a VBBD program if another company, perhaps a competitor, would reap the benefits.

Data challenges

For an employer to establish an ROI for a VBBD program and to operate it effectively, having the right data is essential. For example, to improve medication adherence, an employer depends on proper data from its pharmacy benefit manager (PBM). Data received from the PBM and other vendors must be user-friendly, informative, segmented by population type, and actionable. But while some employers don't receive enough data, others are overwhelmed by the sheer amount of data received, creating "analysis paralysis." The data vendors provide must be made more meaningful, possibly through new and improved tools and methods.

Employee communication & engagement: Spelling out the details

Because employees are largely unfamiliar with VBBD, health benefit-related employee communication and engagement are especially important in rolling out and maintaining a successful program. Employers emphasize the need to give employees information that helps them get the most value from participating in a VBBD program.

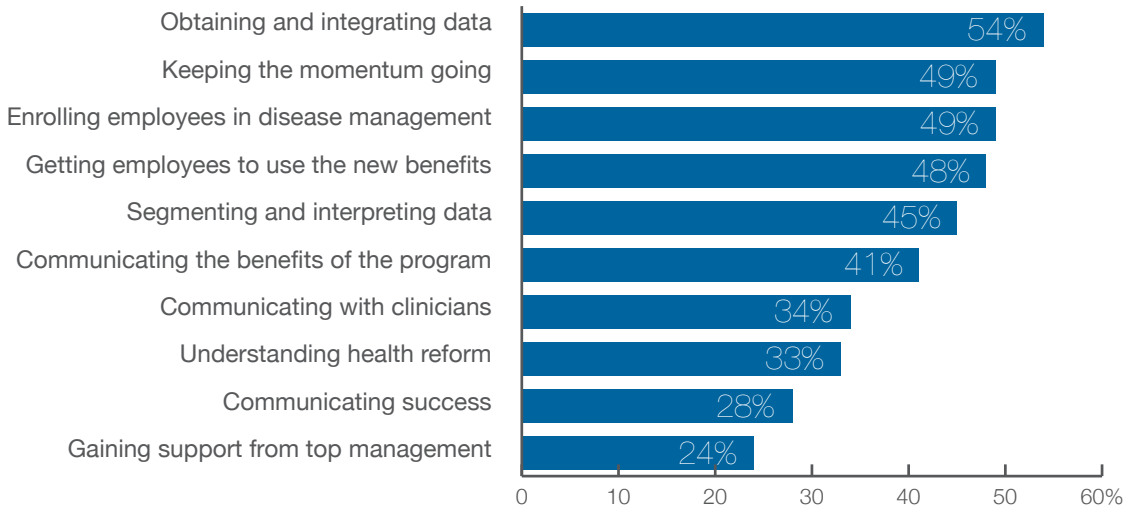
The better educated about VBBD they are, the more effective their benefits arrangement will be. Health plans and other partner organizations also play a major role in developing and disseminating information that assists employees by explaining the VBBD concept generally, the nuances of their particular VBBD program, and how it benefits them clinically and financially. Employers and health plans alike believe that a tenet of VBBD is empowering all critical participants involved – from employees to their providers and employer – with information they can use to be informed and active participants in the health care system.

However, stakeholders agree that difficulties in reaching and truly engaging employees present an obstacle to VBBD programs' growth. Employees do not always recognize that they are unhealthy or need specific therapies, so voluntary VBBD programs often struggle with reaching and enrolling the entire pool of potential participants. In addition, VBBD programs implemented in multiple worksites require special coordination and communication efforts and more targeted outreach. Two other important issues add to these difficulties: First, employees understandably hesitate to divulge personal health information lest it be used against them in a discriminatory manner. Second, employees generally distrust health plans and tend to reject outreach efforts. These roadblocks arise in many other employer-sponsored health benefit areas. Identifying solutions would contribute to the development of not only VBBD programs, but other employer-based health and wellness initiatives.

Legal complexities

Complying with an array of complex statutes and regulations presents a major challenge to implementing a VBBD program. While employers suggest working closely with ERISA counsel to ensure compliance from the outset, they said they often feel hamstrung by rules governing how they can alter features of their VBBD program. Regulations are murky with respect to practices that could be construed as discriminatory. What's more, there seem to be inconsistencies: Certain employers are allowed program features that are not allowed for other employers. Predictable and consistent legal strictures, as well as the development and dissemination of related best practices, would help overcome these barriers.

Figure 2: Top Ten VBBD Challenges



Source: Value-Based Design 2010 Survey Report, Center for Health Value Innovation, St. Louis, February 2011

Future Directions & Opportunities

WHAT EMPLOYERS AND HEALTH PLANS NEED TO MOVE FORWARD WITH VBBD PROGRAMS

Information to build a business case

To spur more serious consideration of VBBD, employers need additional information on the results and program design elements of successful current and past VBBD programs. While employers and health plans cautiously embrace VBBD as a promising concept, they hesitate to advance it within their firms and to their clients because the evidence base, while growing, is as yet uncertain. What's needed is information that will assist benefit managers to build a compelling business case for VBBD. Arming employers with information about successful efforts will give them a better sense of whether ROI and other clinical and cost data could apply to their particular circumstances. Also key to bolstering employer interest and efforts is data on how VBBD impacts productivity and employee engagement, since employers envision VBBD as a strategy to enhance benefits beyond simply reducing direct medical costs. Dissemination of lessons learned by employers working within the complex array of laws and regulations associated with establishing and maintaining a VBBD program is also crucial. Numerous stakeholders noted, furthermore, that the role of behavioral economics in VBBD is an area of considerable employer interest and deserves further exploration.

Expanding VBBD's reach, test environments

Employers and health plans believe a clear opportunity exists to deploy VBBD programs beyond proverbial health care silos to encompass broader areas. For example, stakeholders expressed a strong interest in VBBD's applicability to such regional delivery system reforms as patient-centered medical homes, accountable care organizations, health insurance exchanges, and innovative payment reforms. At the same time, some employers seek much more targeted interventions that would create a test environment where they could pilot programmatic elements before undertaking a comprehensive VBBD program. By targeting only one health condition or intervening with only a microsegment of their population, employers would be able to ease into VBBD and build a business case based on data specific to their circumstances.

Data

Employers are eager for guidance on best practices related to acquiring, analyzing, and interpreting data as well as engaging employees. In particular, employers need information on how best to manage VBBD data

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and translate it into information that is meaningful and actionable for themselves, employees, and senior management. Some employers who are unable to access appropriate data would clearly benefit from guidance from health plan and PBM partners about the type of data they need and how to access it.

Communication

Employers are eager to obtain VBBD information packaged for different internal stakeholders, from employees and human resource staff to senior management and dependents. Obtaining buy-in from multiple sources is vital to launching and sustaining a successful VBBD program. While employers are unsure about what works in VBBD-related communication and what does not, they recognize that one message does not fit all and that varied media and messengers must be considered for different audiences.

NEXT STEPS

With the urgent need to implement solutions to the crises of rising costs and suboptimal clinical care, stakeholders are eager to build on the widespread interest in VBBD, which has been bolstered by federal health reform. Employers have spelled out their reasons for hesitating to move forward with VBBD programs: They need to be able to apply the lessons of the successful private and public programs to their own unique employee populations – a major challenge, since VBBD is essentially a highly targeted approach. In addition, they need to be able to reasonably project a return on investment that will typically not be realized in the first years of a VBBD program.

Among the other challenges are accessing the appropriate information from PBMs and other vendor partners upon which to structure cost-sharing that encourages the use of high-value services. Engaging employees to participate in this nontraditional program will also require innovative approaches. That employers and health plans continue to demonstrate great interest in making the substantial changes needed to implement VBBD – and to expand its reach to wider system reforms – attests to its powerful appeal. What is required is that more stakeholders collaborate to assemble the missing pieces and provide support to those poised to take this important step in improving health care and deterring wasteful spending.

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Northeast Business Group on Health is a network of employers, providers, insurers, and other organizations working together to improve the quality and reduce the cost of health care in New York, New Jersey, Connecticut, and Massachusetts. A not-for-profit coalition comprised of over 150 members and over a million covered lives, NEBGH speaks with one voice for quality, accountability, and value in the region's health care system. NEBGH helps large, midsized, and small businesses by informing health care decisions, improving the health care delivery system, and controlling costs.

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Northeast Business Group on Health's Solutions and Innovations Center (SIC) identifies, investigates, and disseminates innovative ways to improve the quality and value of health care for the region's employers. Working with leaders in the fields of medicine, academia, and business, the Center conducts objective, structured research to make a difference in employee health care in the near term. The Center focuses on innovative approaches to improving care and delivery that are likely to make a significant impact on cost and quality, including new care delivery models, leading-edge provider payment models, and new benefit designs that maximize health improvement and encourage team-based care.

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References

1. Gibson, T.B., Ozminkowski, R.J., Goetzel, R.Z. (2005). The effects of prescription drug cost sharing: A review of the evidence. American Journal of Managed Care, 11(11), 730-740.

2. Rice, T., Matsuoka, K.Y. (2004). The impact of cost-sharing on appropriate utilization and health status: A review of the literature on seniors. Medical Care Research & Review, 61(4), 415-452.

3. Trivedi, A.N., Rakowski, W., Ayanian, J.Z. (2008). Effect of cost sharing on screening mammography in Medicare health plans. The New England Journal of Medicine, 358(4), 375-383.

4. Fendrick, A.M., Chernew, M.E. (2006). Value-based insurance design: A "clinically sensitive" approach to preserve quality of care and contain costs. American Journal of Managed Care, 12(1), 18-20.

5. Fendrick, A.M., Chernew, M.E. (2006). Value-based insurance design: Aligning incentives to bridge the divide between quality improvement and cost containment. American Journal of Managed Care, 12(12), SP5-SP10.

6. Chernew, M.E., Rosen, A.B., Fendrick, A.M. (2007). Value-based insurance design. Health Affairs, 26(2), W195-W203.

7. Fendrick, A.M., Chernew, M.E. (2009). Value based insurance design: Maintaining a focus on health in an era of cost containment. American Journal of Managed Care, 15(6), 338-339.

8. U.S. Department of Health and Human Services. (2011). Report for Congress: National strategy for quality improvement in health care. Retrieved June 2, 2012, from http://www.healthcare.gov/center/reports/quality03212011a.html

9. Institute of Medicine. (2011). Essential health benefits: Balancing coverage and costs. Retrieved June 2, 2012, from http://www.iom.edu/Reports/2011/Essential-Health-Benefits-Balancing-Coverage-and-Cost.aspx

10. Medicare Payment Advisory Commission. (2010). Report to the Congress: Medicare payment policy. Retrieved June 2, 2012, from http://medpac.gov/documents/Mar10_EntireReport.pdf

11. Medicare Payment Advisory Commission. (2011). Report to the Congress: Medicare payment policy. Retrieved June 2, 2012, from http://medpac.gov/documents/Mar11_EntireReport.pdf

12. See, for example: Buttorf, C., Tunis, S., Weiner, J. (2011). Improving value and investing in prevention: Encouraging value-based insurance design in state health insurance exchanges. [White paper prepared for the Executive Board of Maryland's Health Benefit Exchange]. Retrieved June 2, 2012, from http://healthcareforall.com/wp-content/uploads/2011/11/VBID-and-HIEs-White-Paper-MCHI-TAC-Final-11-14-11.pdf

13. Mercer. (2008). National Survey of Employer-Sponsored Health Plans.

14. Mercer. (2011). National Survey of Employer-Sponsored Health Plans.

15. Aon Hewitt. Letter to: Office of Consumer Information and Insurance Oversight, U.S. Department of Health and Human Services (Washington, DC). 28 Feb 2011.

16. Mercer. (2011). National Survey of Employer-Sponsored Health Plans.

17. Choudhry, N.K., Fischer, M.A., Avorn, J., Schneeweiss, S., Solomon, D.H., Berman, C., Jan, S., Liu, J., Lii, J., Brookhart, M.A., Mahoney, J.J., Shrank, W.H. (2010). At Pitney Bowes, value-based insurance design cut copayments and increased drug adherence. Health Affairs, 29(11), 1995-2001.

18. Gibson, T.B., Mahoney, J., Ranghell, K., Cherney, B.J., McElwee, N. (2011). Value-based insurance plus disease management increased medication use and produced savings. Health Affairs, 30(1), 100-108.

19. Choudhry, N.K., Rosenthal, M.B., Milstein, A. (2010). Assessing the evidence for value-based insurance design. Health Affairs, 29(11), 1988-1994.

20. University of Michigan, Center for Value-Based Insurance Design. CT State Reform. Retrieved June 2, 2012, from http://www.sph.umich.edu/vbidcenter/ctstatereform.html

21. Kapowich, J.M. (2010). Oregon's test of value-based insurance design in coverage for state workers. Health Affairs, 29(11), 2028-2032.

22. University of Michigan, Center for Value-Based Insurance Design. V-BID Policies Support State and Local Employee Benefit Reform. Retrieved June 2, 2012, from http://www.sph.umich.edu/vbidcenter/healthreform/pdfs/StateLocalEmplBenefitReform.pdf

23. Choudhry, N.K., Avorn, J., Glynn, R.J., Antman, E.M., Schneeweiss, S., Toscano, M., Reisman, L., Fernandes, J., Spettell, C., Lee, J.L., Levin, R., Brennan, T., Shrank, W.H. (2011). Full coverage for preventive medications after myocardial infarction. The New England Journal of Medicine, 365, 2088-2097.

24. Shah, N.D., Naessens, J.M., Wood, D.L., Stroebel, R.J., Litchy, W., Wagie, A., Fan, J., Nesse, R. (2011). Mayo Clinic employees responded to new requirements for cost sharing by reducing possibly unneeded health services use. Health Affairs, 30(11), 2134-2141.

25. Kapowich, J.M. (2010). Oregon's test of value-based insurance design in coverage for state workers. Health Affairs, 29(11), 2028-2032.

26. University of Michigan, Center for Value-Based Insurance Design. V-BID Policies Support State and Local Employee Benefit Reform. Retrieved June 2, 2012, from http://www.sph.umich.edu/vbidcenter/healthreform/pdfs/StateLocalEmplBenefitReform.pdf

27. Choudhry, N.K., Avorn, J., Glynn, R.J., Antman, E.M., Schneeweiss, S., Toscano, M., Reisman, L., Fernandes, J., Spettell, C., Lee, J.L., Levin, R., Brennan, T., Shrank, W.H. (2011). Full coverage for preventive medications after myocardial infarction. The New England Journal of Medicine, 365, 2088-2097.

28. Shah, N.D., Naessens, J.M., Wood, D.L., Stroebel, R.J., Litchy, W., Wagie, A., Fan, J., Nesse, R. (2011). Mayo Clinic employees responded to new requirements for cost sharing by reducing possibly unneeded health services use. Health Affairs, 30(11), 2134-2141.

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