## Editorial

## Value and Increased Cost Sharing in the American Health Care System

It is not news to readers of this journal that Americans pay more than citizens of other countries for health care. Moreover, along many dimensions of quality it appears that we receive less health in return for this spending. Media reports commonly mention that our health care system is in crisis (Halper 2008).

Recognizing the predicament is, however, a lot easier than identifying solutions. One frequently advocated strategy to enhance efficiency is greater reliance on markets (Hubbard, Cogan, and Kessler 2005). In the 1990s, reliance on markets typically implied advocating competition among health plans. Currently, the pro-market strategy is often manifested in the move toward higher patient cost sharing at the point of service. In some cases this entails plans with higher copayments, as several papers in this issue discuss (Gilman and Kautter 2008; Reed et al. 2008; Wallace et al. 2008; Simoni-Wastila et al. 2008). In other cases this strategy is reflected by high-deductible health plans, often referred to as consumer driven plans. These plans represent a modest 1.7 percent of the private market (less than that in managed care plans), but enrollment has grown considerably from 438,000 in 2004 to over 3 million in January of 2006 (Government Accountability Office 2006).

When consumers pay a greater share of the cost of prescription drugs they consume less (Gilman and Kautter 2008; Reed et al. 2008; Wallace et al. 2008; Simoni-Wastila et al. 2008). In standard economic models, this reduction in use of prescription drugs due to higher out-of-pocket costs would be expected and interpreted as a sign of efficiency. It would be assumed that the value of health foregone by this price-related reduction in use was below the cost of care to the patient, and that therefore the greater cost sharing would lead to a more efficient system.

However, the applicability of this reasoning to health care decisions is uncertain for several reasons. First, the price of prescription drugs generally exceeds marginal cost (which may be desirable to provide incentives to innovate). If copayment rates are at or above marginal cost, further increases in

copayment rates will generate welfare loss, relative to a system that charged marginal cost, even if higher copayment rates move the out-of-pocket price closer to the actual price. Second, there is a considerable body of research which suggests that, when faced with cost sharing consumers reduce consumption of both high-value and low-value services (Newhouse 1993; Fendrick et al. 2001; Rosen et al. 2005). This is consistent with the findings of Gilman and Kautter (2008) and Simoni-Wastila et al. (2008) who note that use of maintenance medications for chronic diseases declines with rising prices. This contrasts, however, with economic models that assume that the least valuable services would be the first to be eliminated as prices rise.

Yet, abandoning market-based incentives completely is unlikely to provide an acceptable solution. Most proponents of a more regulated system recognize that the adoption of certain market principles may be needed to help manage demand and provide appropriate incentives for patients and providers. Many nationalized systems have increased the use of demand and supply side principles to improve health care quality and lower costs (Saltman and Figueras 1998; Callahan and Wasunna 2006).

The central question facing Americans, therefore, seems to be how market principles should be incorporated into the system and the extent of their use. Value Based Insurance Design (VBID) represents one demand-modifying strategy (Fendrick and Chernew 2006; Chernew et al. 2007) that can be implemented in any delivery system, from market-based to single-payer (Fendrick and Chernew 2007). VBID argues that patient cost sharing should be set based on the value (benefit net of cost)—not simply the price—of services. Examples of services where VBID is likely to be applicable include many cancer screening services, vaccinations, and prescription drugs for management of chronic disease. As net clinical value increases, patients' out of pocket contribution would fall. In theory, situations may arise in which patients could be paid to comply with those rare clinical interventions that provide particularly high value, and perhaps even reduce expenditures—e.g., colon cancer screening for patients who have first-degree relatives with colorectal cancer—if underuse of those services is substantial and overuse is not a great concern.

Because the value of specific services often varies by patient, ideal systems would provide targeting of copayments not only to high value services, but also to the patient groups who receive the value for those services. A 55-year-old woman with a family history of breast cancer would pay less for a mammogram than a 25-year-old woman with no family history. VBID, which focuses on demand-side interventions, should not be confused with supply-side efforts with similar names, such as Value-Based Purchasing, which focus

on contracting between purchasers and providers (Agency for Health Care Policy and Research 1997).

Implementation of a VBID system is not without barriers, many of which have been discussed in detail elsewhere (Fendrick and Chernew 2006; Chernew et al. 2008). Yet a number of vanguard employers and insurers have begun to offer programs that use clinical information to drive benefit decisions, thereby abandoning the archaic "one size fits all" approach that fails to acknowledge the heterogeneity in clinical value among medical interventions. For example, a growing number of large employers now offer reduced copayments for medications used to treat important chronic diseases, such as asthma, diabetes mellitus, and hyperlipidemia. (Freudenheim 2007). Others offer more targeted benefits, by providing copayment relief on certain services only if patients have a specific clinical diagnosis. For example, University of Michigan employees/dependents with a diagnosis of diabetes have markedly reduced copayments for medications to manage blood sugar, blood pressure, high cholesterol, and depression. (http://www.hr.umich.edu/ mhealthy/improve/diabetes/index.html accessed January 11, 2008). Employees without diabetes do not receive reductions in copayments for these medications. While there is no doubt that a targeted diagnosis-based VBID program requires an incremental investment in data infrastructure to identify specific patient groups, the financial return on investment of such an approach can be markedly enhanced with a focus on patients most likely to experience costly clinical events. After acknowledging these clinical and fiscal realities, Aetna, the nation's third largest health insurer, has instituted a copayment relief program for patients with a history of heart disease (Fuhrmans 2007) and recently announced a targeted value-based incentive program for self-funded insurers (Grossman 2007, http://www.aetna.com/news/2007/1205.htm accessed January 11, 2008).

The VBID approach should not be viewed as a panacea for our perceived crisis. VBID does little to address the serious incentive problems on the supply side that arise in current physician payment systems, nor does it meaningfully address structural or organizational inefficiencies in the system. Moreover, VBID systems are far from perfect. Certainly many high-value services will not be identified and included in the "preferred" groups and it is likely that some services that do not offer high value to all patients will receive discounts. Yet, to the extent that consumer cost sharing is used to constrain utilization and control costs, VBID systems—simple or targeted—seem preferable to ones that charge all patients the same for every service.

For VBID systems to work best, information systems must be developed. This includes not only the information technology (IT) infrastructure necessary to identify and administer VBID systems, but also the underlying research identifying services that provide high value and the patient groups for whom that high value accrues. For this reason VBID complements efforts to promote IT development, including electronic patient records, as well as efforts to expand comparative effectiveness research.

Some might argue that if information systems are sufficiently developed, VBID would not be necessary. Markets might approach the competitive ideal with well-informed consumers. Evidence justifying such faith in consumers has yet to be convincingly developed and, given the plethora of consumer decision problems and the vast array of information, it seems far from certain that information provision could eliminate inefficient choices.

Further, the principles behind VBID are still justified even if consumers behaved as if perfectly informed. VBID complements the risk mitigation function of insurance. Individuals purchase insurance to mitigate the financial risk associated with illness. Demand for high value services from perfectly informed consumes should be inelastic; they should buy the service even if charged the market price. Yet in these cases, it is optimal for consumers to pay very little out of pocket; there is little moral hazard to mitigate, so risk alleviation dominates.

VBID can also help address concerns that rising cost sharing exacerbates health care disparities. If low-income individuals are more sensitive to cost sharing, we might expect market-based initiatives to have more serious deleterious consequences on the economically disadvantaged, thus magnifying disparities. VBID, by reducing copayments on high value services, can maintain the cost reducing effects of market-based programs, while mitigating the adverse clinical effects.

Although many would like to believe that reducing copayments for high-value services will eventually save money by reducing use of expensive services, this is unlikely in many cases. Specifically, reducing copayments can only save money if the services being promoted are themselves cost saving (Fireman, Bartlett, and Selby 2004). Certainly in some cases this is possible (Rosen et al. 2007), if the services are well enough targeted to patients at high risk of expensive adverse outcomes. Wallace at al. (2008) report that in Oregon the savings resulting from increased cost sharing were offset by higher utilization of nondrug services in a Medicaid program, so one might imagine that the costs of lower copayments would be offset by reduced use of other services. But other evidence suggests that, broadly, the added use will not fully

offset the savings (Chandra, Gruber, and McKnight 2007), suggesting that VBID, if defined only as lowering copayments for high value services, will not pay for itself unless well targeted. Moreover, even if the costs of extra drug use are offset in aggregate, employers will typically realize a worse financial profile because they pay a larger share of inframarginal prescriptions.

However, cost savings should not be the standard applied in efforts to promote value. Value implies cost effectiveness, not cost savings. Substantial health is generated for relatively few dollars. Many of our most valued interventions, such as dialysis for patients with end-stage renal disease, are unlikely to be cost saving, but it would be inappropriate to deny coverage. Our health care system is not, and should not, be designed to save money.

This is not to say that the principles of VBID cannot facilitate cost containment. Any demand-side cost containment strategy should incorporate the principles of VBID. Barriers for high-value services should remain low, but conversely services of lesser or uncertain value may face higher cost sharing. Thus, VBID is less of a cost containment tool and more of a set of principles that can help guide the inevitable increased reliance on demand-side cost containment initiatives. While the economic impact of a VBID system will depend on the details of the program, adoption of this approach should not be delayed, given that actuarial models can allow the design of a VBID plan to attain predetermined cost targets. Regardless of the desired level of expenditure the VBID approach can enhance the clinical value of insurance because the financial incentives would increase use of the highly valued services, and lower use of less valued ones, guaranteeing more health per dollar spent.

As economic pressures continue to grow in the health care sector all purchasers are struggling to find ways to finance care. Both demand- and supply-side interventions are likely to be important. Many of these programs, including VBID, will require greater clinical and social sciences research, as well as greater investments in information infrastructure. Regardless of the setting, increasing value will require more clinically targeted management at all levels of the health care system. We are blessed with great advances in the sophistication of the technology used in the provision of care. It is now time to improve the sophistication of the systems that govern the underlying behaviors that drive health care utilization and spending.

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