Perspective

Value-Based Insurance Design And The Next Generation Of Consumer-Driven Health Care

Reevaluation of benefit design will move us closer to improving quality of care while decreasing costs.

by Troyen Brennan and Lonny Reisman

ABSTRACT: The next generation of consumer-driven care will require more attention to value-based insurance design so as to ensure that patients have access to appropriate and high-quality care. This can be accomplished so long as insurers carefully integrate financial incentives into benefit design, build advice about evidence-based medicine into their plans, and thoroughly use the increased facility of information technology in their efforts. [Health Affairs 26, no. 2 (2007): w204–w207 (published online 30 January 2007; 10.1377/hlthaff.26.2.w204)]

The U.S. Health Care System continues to struggle with the solution to rising costs, questionable quality, and diminishing access to care—three problems that are clearly closely related.1 Today, the greatest attention might be focused on the cost/access connection: As costs increase, more employers question whether they can continue to provide health insurance coverage, and more Americans lack adequate insurance when they are ill. Growth of the number of uninsured Americans puts ever-greater pressure on state and federal programs—in particular, Medicare and Medicaid—at a time when budget deficits do not appear to allow growth of entitlement programs.2

This pressure for ever-greater health care spending could be eased if we were able to remove inefficiencies and practice more effective care.3 The past decade has provided ample evidence that changes in inefficient practice patterns, focus on elimination of waste, and greater attention to safe health care practices could eliminate billions of dollars of costs while improving overall quality.4 The question is, How best to do this?

Consumer-directed care. The prominent answer in the early part of this century is greater use of consumer-directed health care.5 For more than thirty years, advocates of market-based approaches, such as Clark Havighurst and Regina Herzlinger, have argued that the health care system would operate far better if we eliminated provider-based monopolies, simplified insurance, clarified cost/quality options, and let patients’ own financial incentives guide their decision making.6 Put succinctly, the view of some market advocates is that providers’ historical control over supply and demand, combined with the moral hazard of the insurance relationship, is a recipe for the high-cost, relatively low-quality health care system we have today. Certainly, the system’s recent history seems to support these insights: U.S. health care costs have effectively doubled since 1999, but quality of care

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looks ever more suspect.7

**High-deductible health plan.** The centerpiece of consumer-driven care is the high-deductible health plan, which leads the insured person away from moral hazard and toward informed decisions.8 It is complemented by an emphasis on transparency in quality and pricing in health care, so that patients can make informed decisions about how to use their health care dollars.9 The logic of this approach is forceful, but so, too, are the problems that critics raise. These critics argue that a relatively small proportion of care is truly discretionary; articulate concerns about the ability of the chronically ill to access consumer-based benefits; and point to the huge gap between our present system of health care and one that is truly transparent.

**Appropriate evolution in consumer-driven care.** We are optimistic about consumer-driven care, so long as it evolves appropriately. Americans need to ensure that consumer-driven care does not obstruct access to cost-effective care, in particular by ensuring that the following three components are in place.

First, we believe that market concepts must be turned into reasonable and comprehensible financial incentives for consumers to seek and for hospitals and doctors to provide better care, through more-sophisticated benefit design. Second, these new benefit designs must be informed by cutting-edge clinical information that infuses the standard of practice into the insurance arrangements. Third, Americans should rely on the increasing facility of information technology (IT) to bring incentives and clinical information to the point of care. Integrating these three components will, we believe, help develop the informed patient who can navigate the market in health care and gain access to appropriate care.

**Functions of copayments.** The paper by Michael Chernew and colleagues illustrates the barriers that patients can face.10 Drug copayments are not usually considered as part of the consumer-driven revolution, but they are examples of product design that is intended to engage patients in rational decision making about health care. The simple economic explanation is that the copayment brings the patient’s judgment to bear on the question of whether a prescribed medication is really efficacious and necessary, thereby countering moral hazard. Underlying this are two assumptions: that medications prescribed by doctors can range from those that are very useful to those that are not so useful; and that patients will be able to discriminate. Otherwise, the copayment is simply a reallocation of the cost of insurance.

The authors describe how suboptimal care can occur in the face of blunt copayments. Patients are rarely sufficiently educated to discriminate between appropriate and inappropriate care. As a result, if faced with high copayments, they might choose not to use medications that over time would improve their health and actually lower health care costs. As Chernew and colleagues discuss, the first part of that proposition is fairly well proven by the experiences of Pitney-Bowes and of ActiveHealth Management with a number of clients: Lowering copayments improves adherence. This is not surprising, given the substantial literature on copayments’ negative effects on adherence.11

The next step in the argument is more important but less clearly defined by empirical research. Health insurers, or self-insured corporations, reduce their costs of insurance by collecting copayments. However, they incur the costs of illness if a patient, in light of a large copayment, does not adhere to efficacious or preventive therapies and then suffers further complications or deterioration of chronic illness. For example, John Hsu and colleagues have shown how certain outcomes deteriorate when patients in Medicare plans face annual drug benefit caps.12 At least in some circum-
stances, copayments are theoretically penny-wise and pound-foolish.\textsuperscript{13}

This is the point of a recent paper by Niteesh Choudhry and colleagues, who modeled the use of aspirin, beta-blockers, angiotensin-converting enzyme (ACE) inhibitors, and statins in patients who have suffered myocardial infarction (MI).\textsuperscript{14} The evidence is clear that this combination of medications will prevent further complications. Using estimates of the effect of copayments on adherence and the literature on effectiveness of the drugs, they found that no copayments, as opposed to standard industry copayments, would reduce mortality by 1.1 percent and reinfarction rates by 13.1 percent, and would save nearly $6,000 per patient. This benefit occurs in three years—well within the period of time in which an insurer or self-insured employer would be able to recoup the savings. We find this theoretical evidence sufficiently convincing to warrant a real trial of eliminating copayments for these drugs, either in an insured population or in collaboration with self-insured clients.

\textbf{Ensuring access in consumer-driven care.} More importantly, we think that the issue that Chernew and colleagues so well illustrate is on point with three components of insurance that will ensure appropriate access in consumer-driven health care. First, the economic incentives now created in plan design must be carefully scrutinized.\textsuperscript{15} The issue of copayments’ potentially negative effect has been recognized since key findings of the RAND Health Insurance Experiment were published ten years ago.\textsuperscript{16} In some cases, copayments will represent an appropriate balance of the costs of care between insured and insurers; in others, they will exacerbate comorbidities and increase costs for all.

Second, more-sophisticated clinical thinking must be incorporated into insurance arrangements. No well-informed cardiologist today would view as discretionary the use of statins, aspirin, ACE inhibitors, and beta-blockers after MI; the evidence of benefit is hard and overwhelming. Yet use of conventional copayments in this situation assumes that the patient should decide, and nonadherence is accepted as a consequence of these financial barriers. A more evidence-based approach would grade copayments based on the evidence of efficacy; no copayments for beta-blockers post-MI, but significant copayments for expensive antihistamines prescribed for common allergies, for example. In certain situations, insurers might even pay members to take their drugs—taking a page out of the public health book with regard to treatment of tuberculosis—or have patients absorb all of the costs for some products that are truly discretionary.

The third and perhaps most crucial component is the reliance on increasingly supple information systems. The IT revolution in health care is in its first phase. The ability to move ever-greater amounts of data in a nimble fashion and the current disarrayed organization of much of the U.S. health care system are motivating a variety of IT players to become involved in health management systems.\textsuperscript{17} Most of these efforts will initially be aimed at organizing data from a variety of sources.

But the next step, now under way in some parts of the insurance industry, is to use IT to fuse clinical information into benefit design and to better inform the patient. Today it is possible for health insurers to use claims data to identify patients who have suffered an MI, monitor whether or not they are on the appropriate medications, and alert doctors and patients to potential oversights. It is also possible to change the benefit design to automatically remove the copayments for these drugs. Finally, it is possible to provide patients with a portable personal health record that informs them about the importance of adherence and provides evidence-based advice about care. It is a relatively simple set of steps from here to an evidence-based formulary that would be a
great example of Chernew and colleagues’ value-based insurance design.

We believe that this next generation of consumer-driven care has major potential for improving quality while decreasing costs—a critical issue in our health care system. But it will take a commitment to removing inadvertent barriers to access by reevaluating benefit design; by integrating the latest evidence base issuing from medical science into insurance arrangements; and by developing information systems that can turn clinical data into useful consumer information for members and better advice for physicians. This prospect is within our grasp.

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