

Reinvention of Health Insurance in the Consumer Era

James C. Robinson, PhD, MPH

THE BACKLASH AGAINST MANAGED care has stimulated a thoroughgoing change in the products and policies of the private health insurance sector in the United States. For almost 2 decades, the industry interpreted its role as using network contracting and utilization review to restrain costs and modify physician practice patterns, while offering comprehensive benefits and minimal cost-sharing requirements to enrollees. The health insurance industry now renounces one-size-fits-all approaches and multiplies benefit designs, network structures, medical management programs, and pricing options to accommodate the diversity in consumer preferences and purchasing power. The industry is redefining its role as an entity that structures benefits to encourage cost-conscious choices, passes on price discounts negotiated with physicians and hospitals, offers voluntary medical management programs for a limited number of chronic conditions, and otherwise gets out from in between the consumer and that which the consumer wishes to consume.

This article describes the evolution of benefit, network, medical management, and premium pricing strategies in the health insurance industry. It is based on case studies of the 3 largest carriers in the nation (Aetna, United HealthCare, WellPoint Health Networks), 3 large regional plans (Blue Shield of California, Highmark BlueCross BlueShield, WellChoice), and 2 startup health plans (Definity, Vivius). Several hundred interviews were conducted with chief executive officers, chief medical officers, and other managerial and clinical ex-

The private health insurance industry in the United States has fundamentally changed its strategic focus, product design, and pricing policy as a result of the backlash against managed care. Rather than seek to influence the behavior of physicians through capitation and utilization review, the major health plans now seek to influence the behavior of patients through benefit designs that cover a broad range of services but with high co-payments, tiered network designs that cover a broad range of physicians but with variable coinsurance, and medical management programs that provide incentives for patients to better manage their own health care. Premium prices are carefully adjusted to cover the expected costs of care for each type of product and each class of patient, with a commensurate willingness to abandon enrollment where insurance premiums cannot outrun medical costs. The contemporary product and pricing policies reflect a retreat by the insurance industry from previous efforts to transform the health care system and embody a delegation to individual consumers of responsibility for setting priorities and making financial tradeoffs.

JAMA. 2004;291:1880-1886

www.jama.com

ecutives at the national and regional levels, with responsibilities for corporate strategy, medical policy, product design, premium pricing, underwriting, sales, marketing, and numerous other functions. Additional materials were gathered through interviews with clinical and administrative leaders at other health insurance plans, public and private purchasers of health benefits, insurance brokers, physician organizations, hospital systems, and investment banks. Details on particular firms have been presented in a series of articles covering benefit design,¹ network design,² medical management,³ and premium pricing.⁴ This article brings together from the detailed analyses the principles now guiding US major health insurers.

The new benefit, network, medical management, and pricing policies are contrasted with those pursued in the previous 2 decades to highlight the in-

surers' contemporary focus away from the supply (physician) and toward the demand (consumer) side of the health care market and from uniformity toward variety in products and prices. The 4 components of strategy are interdependent and embody a shift in emphasis from reducing health care costs on behalf of corporate purchasers to structuring health care choices by individual consumers. The retreat from managed care and reinvention of health insurance in the consumer era will provide diversity in forms of health care delivery that mirrors the diversity in patient preferences but poses new challenges to societal efforts to use insurance mechanisms to induce healthy

Author Affiliation: University of California, School of Public Health, Berkeley.

Corresponding Author: James C. Robinson, PhD, MPH, University of California, School of Public Health, 418 Warren Hall, Berkeley, CA 94720-7360 (jamie@socrates.berkeley.edu).

citizens to finance the care of less fortunate compatriots.

PRINCIPLES OF PRODUCT DESIGN

During the managed care era, from approximately 1980 to approximately 2000, the health insurance industry focused its strategies on understanding and influencing physicians, with only secondary attention to understanding and influencing patients. The guiding principle was that the key decisions in health care are made by physicians rather than consumers, that physicians differ widely in the cost and quality of the services they provide, and that insurers have the organizational capabilities and social legitimacy to intervene. The health plans discovered that patients often did not appreciate managed care initiatives, which they interpreted as efforts to save money rather than improve access and quality.^{5,6} The industry subsequently has sought to reposition itself as an agent of the employee rather than of the employer and to focus its activities on informing and supporting consumer health care choices.⁷

The most important characteristic of the private voluntary health insurance market is that individuals differ widely in what they want and are willing to pay for, and hence that successful health plans must offer different products at different prices to match the heterogeneity in demand. Variation in premium prices can be achieved through variations in the 3 principal components of the health insurance product: its benefits, networks, and medical management programs. Benefit design encompasses the services that are included and, for covered services, how much users must contribute to payment through deductibles, coinsurance, and co-payments. Network design encompasses which physicians and hospitals are covered and, for those included, the levels of cost-sharing required of enrollees to access each class of physician and hospital. Medical management design encompasses the decision rules that govern which services are covered for which

patients and conditions, within the universe defined by benefit and network design, as embodied in rules on prior authorization and programs for disease management. The market imperative of the consumer era is for insurers to mix and match characteristics across a full range of insurance products, to market combinations of these products to employers, and to structure the relationship among benefit, network, and medical management features so as to encourage employers and employees to buy-up from the basic and more economical products to richer and more expensive variants.

COMPONENTS OF THE HEALTH INSURANCE PRODUCT

Benefit Design

During the managed care era, the health insurance industry moved toward uniform and comprehensive benefit designs under the principle that financial incentives for cost-control should be directed at physicians rather than patients. The industry now is developing much less comprehensive benefit designs, each with a different premium price, to appeal to the many diverse customer segments. The contemporary transformation in benefit design centers around this increase in consumer cost-sharing provisions, the multiplication of benefit options offered to each consumer, and the shift from insured toward noninsured, albeit discounted, services.

The evolution from indemnity to health maintenance organization (HMO) coverage during the 1990s entailed a reduction in the percentage of total health care costs paid out-of-pocket by the consumer, as deductibles and percentage coinsurance were supplanted by modest co-payments, and as coverage was extended to previously excluded preventive, mental health, outpatient, pharmaceutical, and home health services.⁸ Richer benefits stimulate the demand for care⁹⁻¹¹ and contributed to the hostility encountered by managed care programs that sought to limit access to covered and, from the perspective of the patient, free services. In the contemporary

environment of resistance to managed care cost-control mechanisms, insurers are increasing co-payments for physician visits and drug prescriptions, converting fixed dollar co-payments into percentage coinsurance for the most expensive services, and imposing annual deductibles that must be paid by patients before the insurer's contribution begins.^{1,12}

Given the low cost-sharing baseline on which they build, the new premium contribution and benefit designs embody substantial increases in the consumer's financial responsibility while still leaving considerable headroom for future increases. For example, between 1998 and 2003, the monthly employee contribution to family insurance coverage increased from \$52 to \$201 but declined as a percentage of the total premium from 29% to 27%.¹³ The mean annual preferred provider organization (PPO) deductible increased during that period from \$106 to \$275 and the percentage of HMO enrollees paying \$15 or more for a physician office visit increased from 13% to 57%, but these payments remain a trivial proportion of the mean annual premiums for individuals (\$3384) and families (\$9072).¹³ Of the 14.5% predicted growth in payments by employers and employees in 2004, the vast majority (11%) will be absorbed through premium increases,¹⁴ with only approximately 3.5% being financed through increased consumer cost-sharing as part of the benefit buy-down.

If the most visible change in health insurance benefit design is the increase in consumer cost-sharing, the most important trend is the accelerating diversity among benefit designs offered to different market segments and to different consumers within each segment. Benefits are thinner and coinsurance requirements are more stringent for products sold to individuals and small firms compared with products sold to mid-sized and large firms, with unionized and public sector purchasers typically willing to pay the highest premiums for the most comprehen-

sive coverage. Thinner benefits are designed to hold down premiums for the most price-sensitive purchasers and to forestall adverse selection, which results from the propensity of consumers in greatest need of care to select insurance products with the richest benefits.¹⁵⁻¹⁷ Given the heterogeneity among employees within particular firms, insurers combine multiple benefit designs with correspondingly diverse premiums into packages that are sold to employers and then offered as choices to employees. Even small employers now typically are sold packages that include HMO, PPO, and other products (albeit from a single insurance carrier), each with multiple options for co-payments, coinsurance, and deductibles. At the extreme, individual enrollees are permitted to customize their own benefit designs through choice among coverage and cost-sharing provisions for physician visits, complementary medicine, hospital admissions, ambulatory surgery and diagnostic procedures, prescription drugs, and the other categories of health care services.

The most-discussed, if least-purchased, contemporary innovation in benefit design is a product that combines a high-deductible PPO with an employer-financed but employee-managed and tax-exempt health savings account (HSA), which can be used to pay for services falling below the deductible.^{18,19} The HSA balances can be rolled over and accumulated if they are not spent, thereby encouraging enrollees to make cost-conscious purchasing decisions with an eye toward their future as well as their current health care needs. Although enrollment in HSA products remains modest, the design is important as representing the evolution from collective insurance toward individual prepayment as the guiding principle of health care coverage.

The principle of collective insurance is that most enrollees will not use the benefits to which they are entitled because they are in good health, thereby leaving their premium payments to help finance the care of unhealthy enroll-

ees with high expenditures. This "use it or lose it" logic contrasts with the "use it or save it" logic underlying the HSA benefit design. Although the HSA product retains insurance principles for catastrophic care (above the high deductible), the savings account itself reflects noninsured prepayment principles, as unspent balances are retained by healthy enrollees rather than diverted to pay for the care of others. As a greater fraction of care is financed from the HSA or directly out-of-pocket, the health plan's contribution is less the traditional pooling of insurance risk and more the passing to enrollees of price discounts negotiated with physicians and hospitals. The overall trend in benefit design now is from fully insured services to services that are partially insured (coverage with co-payment provisions), then to services that are partially insured only after significant portion is paid by the enrollee (coverage with coinsurance and deductible provisions), to noninsured services fully paid by the enrollee but at insurer-negotiated discounted prices. Noninsured but discounted services currently are to be found primarily for prescription drugs (discount cards) and for complementary medical services (eg, acupuncture, chiropractic) but are increasing rapidly in prominence as more physician and ancillary services are paid directly by the patient because those costs are less than the now higher deductible.

Network Design

Network contracting played a central role in managed care, reflecting that era's focus on physicians as the key decision maker and on cost-control as the key objective. Health plans sought to identify a narrow panel of efficient physicians and hospitals, negotiate low fees by promising higher patient volume, and influence clinical decisions through capitation payment incentives and utilization review. The contemporary industry perspective is that network contracting plays an important but secondary role, after benefit design, in overall health plan strategy. Con-

sumer desires for choice of physician and hospital at the time of care undermine narrow network products,²⁰ which are built on the principle that choice of network at time of insurance enrollment will determine choice of physician subsequently at time of care seeking.²¹ Moreover, the consolidation of specialty groups and hospital systems and the reduction of excess capacity have sharply limited the ability of insurers to extract fee discounts and influence practice patterns under the threat of network exclusion.²² Nevertheless, the insurance industry is not reverting to nonnetwork indemnity products, in which every willing physician was reimbursed equally without requiring fee discounts as a condition of participation. The insurers and their customers recognize that substantially lower prices can be negotiated through even modest limits on network participation and are emphasizing broad but noncomprehensive networks as a balance point between the cost-control virtues of narrow networks and the choice-supporting virtues of comprehensive networks. The leading network designs for many insurers, for example, include 80% to 90% of each market's physicians and hospitals, whereas traditional managed care networks often included only 50% and traditional indemnity networks included 100%.

The breadth of each network, defined in terms of the number and prestige of the participating physicians and facilities, determines its cost, and therefore insurers seek to maintain multiple networks to support products at distinct premium levels. Many health plans market different HMO and PPO networks, with the latter including a broader range of specialists and, in some cases, primary care physicians. In environments with significant numbers of medical groups and independent practice associations, such as in California, the HMO network often can be structured around large physician organizations and the PPO network around small individual practices. In environments without numerous physician organizations, such as in New

York, built
tincti
in the
physi
work
are ve
burse
Medic
limite
tal sys
tated
to infl
exper
work
toward
native
ance l
miur

Pri
amon
ment
consc
Most
out-o
ers fa
to cos
sician
netw
major
least 3
at leas
differ
tual fe
an us
fee.¹⁴

with t
each a
sharin
netw
lary b
benef
work
to hos
sidere
pecial

The
tiate c
cians
negot
terms,
and co
the mc
pitals.
second

York, both HMO and PPO networks are built on small practices, with the distinction being in the number rather than in the organizational structure of the physician practices. Health plan networks for Medicaid products typically are very narrow due to low state reimbursement rates, while networks for Medicare Advantage products often are limited to medical groups and hospital systems willing to be paid on a capitated basis. As medical costs continue to inflate, insurers in some markets are experimenting with new narrow networks, counteracting the general trend toward network breadth, as an alternative to high deductibles and coinsurance for holding down the rate of premium growth.

Price-conscious consumer choice among networks at time of enrollment is supplemented by price-conscious choice at time of seeking care. Most insurance products have limited out-of-network coverage, but consumers face substantially higher exposure to costs if they use noncontracted physicians and hospitals. To access non-network physicians, for example, the majority of PPO enrollees must pay at least 30% coinsurance, over and above at least a \$500 deductible, plus the full difference between the physician's actual fees and the insurer's definition of an usual, customary, and reasonable fee.¹⁴ Health plans are experimenting with tiers of physicians and hospitals, each at a distinct level of consumer cost-sharing, even within their contracted networks.² The 3-tier (generic, formulary brand, nonformulary brand) drug benefit serves as the model for network tiers,²³ which have been applied to hospital services and are being considered for some physician services, especially for high-cost specialties.

The tiered network designs differentiate contracting hospitals and physicians according to cost, including both negotiated fees and utilization patterns, and charge higher co-payments and coinsurance to enrollees electing the more expensive physicians and hospitals. Information on quality plays a secondary role in the definition of hos-

pital and specialist tiers but may assume a greater role if reliable performance measures become available. The classification of physicians and hospitals and differentiation of co-payment levels by tier is inherently confusing to patients, however, and some health plans are substituting percentage coinsurance for dollar co-payments. In contrast with fixed dollar co-payments, percentage coinsurance automatically requires patients who use more expensive physicians and hospitals to pay more than patients who use less expensive alternatives and, in addition, automatically increases the consumer's out-of-pocket cost each year as physician and hospital fees increase.

Network contracting plays an important role for services that are less visible than physician services and that can be purchased on a volume-discount basis. Substantial cost-savings are to be obtained, for example, by ordering drugs through mail order facilities rather than retail pharmacies, clinical tests from national laboratories rather than small local firms, and durable medical equipment from a single vendor rather than multiple vendors. Network design also is important for costly services in which there is a favorable association between the volume provided and the quality of care, as in organ transplantation. Centers-of-excellence network principles are being extended on an experimental basis from transplantation to cardiac surgery, oncology, and other tertiary care services in which the severity of the conditions and the financial exposure to coinsurance increase the willingness of patients to use a narrow network. At the other extreme on the continuum of complexity, insurers also rely on network contracting for behavioral, dental, vision, chiropractic, and ancillary professionals and for sports clubs, vitamins, herbal therapies, and ancillary products. Many of these supplementary networks obtain discounts for enrollees without the services being included among the insured benefits, with the distinction between insured and discounted services centering around whether costs are

borne by both users and nonusers (insured services) or only by users (discounted services).

Medical Management

In its efforts to control costs, managed care imposed administrative oversight on practitioners within its contracted networks, especially for hospital admission, length-of-stay, and specialty procedures. After some initial successes in restraining cost growth,^{24,25} these utilization review programs encountered the natural limits of arms-length efforts to intervene in clinical decision-making and engendered strong resistance by patients and physicians. Health plans have scaled back and, in some prominent instances, altogether abandoned primary care gatekeeping, prior authorizations, and other barrier methods of medical management. The contemporary approach focuses on stratifying the enrollee population by health status and potential for successful intervention, developing distinct programs for particular conditions and levels of severity, focusing interventions on patients and processes where financial savings are to be obtained, and offering broader programs to those payers willing to pay more to get more.³

The stratification and selective targeting of medical management programs derives from the highly uneven distribution of health risks and expenditures across the insured population, with approximately 67% of a private insurer's enrollment being quite healthy, another 20% with acute conditions in any 1 year, 15% with significant chronic illnesses, and the sickest 1% of enrollees with complex and catastrophic conditions incurring a very large share of total expenditures.³ Medical management programs seek to identify which enrollees belong in each of these principal categories, in both the current and the coming year. Predictive modeling, the statistical assignment of future risks based on past pharmaceutical and physician claims experience, is supplemented by data from nurse-administered and patient self-administered health risk assessments and by the no-

tification requirements for hospital admission and specialty procedure as the basis for enrollee stratification. Interventions for healthy enrollees typically are restricted to mail and Internet-based disease prevention reminders, as only limited savings in reduced health care utilization can be obtained from enrollees whose baseline level of utilization is low. Programs for patients experiencing acute episodes are focused on improving coordination of ambulatory testing prior to hospital admission, discharge planning, subacute and skilled nursing services, home health, and durable medical equipment. Patients with complex and catastrophic conditions may be assigned a nurse case manager but these patients often are undergoing such specialized and rapidly evolving care that the insurer's focus is on channeling them to in-network professionals or centers of excellence and otherwise monitoring but not intervening in the clinical process.

Health plans have identified patients with serious chronic conditions as the category most likely to benefit clinically and generate financial savings based on medical management programs. Health plans have shifted the focus of their medical management initiatives away from attempts to influence physician behavior toward attempts to influence patient behavior. Patients with chronic conditions such as asthma, diabetes, and congestive heart failure exert significant impacts on the course of their own diseases based on how they manage their diet and exercise, comply with medications and other recommended therapies, and schedule appointments with physicians at appropriate intervals. The intervention component of medical management centers around telephone contact with patients by nurses who monitor changes in self-assessed health and functional ability, provide information and reminders, and seek to coordinate the many physicians and vendors used by the patients. Serious gaps in care prompt contact by the insurer's medical director with the attending physician or facility adminis-

trator. The costs of mounting a medical management program increase as the mode of intervention moves from Internet to social worker to registered nurse to medical director, and health plans are continually measuring the effectiveness and financial return-on-investment of their initiatives.

Medical management programs vary not only across clinical conditions but across customer segments, as purchasers differ widely in their appreciation and willingness to pay for quality improvement as part of health insurance. A core set of low-cost programs typically is inserted as a mandatory component of products sold to individuals and small firms, self-insured products sold to large corporations, and the highly regulated products administered for state Medicaid programs. More extensive programs are created for populations with a high incidence of chronic illness, such as HMO products for Medicare, and for corporate purchasers willing to pay substantially higher premiums for programs covering a broader spectrum of conditions and staffed with a higher ratio of nurses and medical directors per enrollee. However, some self-insured corporate and labor union health benefit programs are unwilling to pay for even the minimal set of medical management programs and are exempted from these initiatives and charged by insurers only for network access, claims processing, and other administrative functions.

PRINCIPLES OF PRICING DESIGN

Under managed care, health plans emphasized uniform products and uniform premiums but in the contemporary environment multiply product designs to be able to offer a full continuum of prices. The driver of pricing policy is the diversity in customer ability to pay and the lack of political mechanisms to force part of the citizenry to pay prices above costs so as to allow insurers to charge other citizens prices below costs. In addition to variation in product characteristics, the components of pricing policy include medical

underwriting, employer contribution strategies, and alternative funding mechanisms for unforeseen high costs.⁴

The cost of offering a particular health insurance product derives not merely from the characteristics of the product itself, including benefits, networks, and medical management, but from the characteristics of those individuals who purchase it, including health status and propensity to seek care. Medical underwriting is the attempt to predict future expenditures for particular groups and individuals, based on demographic characteristics and historical claims costs, and to set future premiums accordingly. Underwriting was deemphasized during the managed care era as health plans pursued enrollment growth in anticipation of economies of scale in administration and deeper discounts from physicians, hospitals, and drug manufacturers. Health plans also placed substantial confidence in their network channeling and medical management programs to limit the variation in costs among their enrollees. Underwriting and risk-based premium pricing have reemerged as the industry has come to recognize the paucity of scale economies in health insurance, the limited efficacy of medical management in controlling expenditures for the sickest enrollees, and the consequent imperative to ensure that premium revenues cover expected claims costs for each customer segment. Health plans are no longer willing to set prices below costs to grow their market share (penetration pricing) or to maintain prices above costs for some customers and below costs for others (community rating). In a competitive market environment, all products and all customer segments must be profitable all the time.

The willingness of purchasers to buy an insurance product can be enhanced through changes in the employer and employee contribution strategy. Health insurance typically is sold in 2 stages, first to employers who contract with insurers for multiple product options and then to employees who select one product off the menu made

available by the employer. Employers can choose to pay the entire premium for whichever option the employees choose, a defined percentage of the premium, or a defined monetary contribution toward the premium, leaving the employees to pay the remainder through payroll deductions. Employers are shifting from full payment to either defined percentage or defined monetary contributions to increase employee sensitivity to the economic implications of the options selected and thereby increase their willingness to impose limits on their own choices and coverage. The employer's financial obligation also can be varied through alternative mechanisms for allocating insurance risk, the probability of being obligated to pay high and unexpected medical claims. Employers can shift the entire risk to the insurer (fully insured funding), pay the insurer only for administrative functions while retaining full responsibility for paying claims (self-insured funding), or pay routine claims directly while shifting high-cost claims to the insurer (partially insured funding). Major insurers offer the full set of contribution strategies and funding options to accommodate the preferences of the purchasers.

The cumulative impact of variations in product design, underwriting rules, employer contribution options, and funding alternatives is to transform pricing into a central component of health plan strategy. Under managed care, success was dependent heavily on physician networks and medical management programs, but now it is more dependent on the actuarial skills that identify sustainable prices for each characteristic of the product and the purchaser.

COMMENT

The US health care system continually generates new clinical interventions that extend and improve the quality of life. Some innovations decrease costs by displacing more expensive forms of care, but most add to expenditures by alleviating uncertainty, discomfort, and disability in contexts in which previ-

ously no intervention was available.²⁶ Although individuals desire each new treatment and bitterly resent efforts to limit access, they evince little understanding of the economic consequences of their decisions and only modest willingness to pay more to get more health care. Because of the consumer backlash against managed care's efforts to limit supply through network contracting and utilization review, the insurance industry has shifted its efforts toward limiting demand through higher cost-sharing, tiered networks, and medical management. The mantle of consumerism is popular in a culture that distrusts both big business and big government, evoking as it does images of individual rights and responsibilities. Nevertheless, the consumer focus of health insurance will encounter several challenges and the need to refashion its methods and redefine its mission in the years to come.

Higher deductibles, tiered networks, and patient-oriented medical management programs change incentives for the use of routine and low-cost services, but do not directly influence the demand for and supply of services for patients who have exceeded their maximum cost-sharing liabilities. However, the vast majority of health care expenditures are incurred by these individuals. For example, 56% of the health care costs for nonelderly persons with employment-based health insurance are incurred by the 5% with the greatest utilization; 69% of costs are incurred by the 10% with the greatest utilization.²⁷ Public and private purchasers will continue to look to health plans to attenuate inflation and improve the cost-effectiveness of covered services, forcing the plans to return at some point to initiatives that engage physicians and the supply of health care services as well as consumers and the demand for care. Insurer initiatives will undoubtedly be more effective if they are supported rather than opposed by practicing physicians, and medical management initiatives by physician organizations are more robust in contexts in which external incentives from health insurers are strong.²⁸ The relaxation of net-

work exclusions and utilization review may lessen plan-physician tensions and lay the groundwork for cooperative initiatives in coming years.

The principal role of the insurance industry in a consumer-oriented health care system is to facilitate meaningful choices by packaging disparate services into products that can be compared in terms of price, quality, and convenience. Most consumers will never be able to evaluate the myriad individual physicians, products, and procedures in medicine any more than they can evaluate the detailed components of their computer or automobile. Well-designed insurance products can decrease the large number of trivial choices and provide information and incentives to support a smaller number of significant choices. However, the contemporary proliferation of benefit designs, network designs, and medical management programs is adding more to the complexity of health care than it is to the much-needed simplification. This reflects a period of transition from one set of products to another, but in part it reflects efforts to reduce, rather than enhance, the comparability of competing products and to discourage, rather than encourage, the enrollment of individuals with the greatest need for medical care. Complexity increases administrative expenses, produces consumer mistrust, and stimulates regulation and litigation in the health care system.

The emphasis on product variety, underwriting, and actuarial pricing is eroding the already fragile social pooling of insurance risk in the health economy, based as it is on implicit subsidies from the perennially healthy to the chronically ill. The new benefit designs serve to protect healthy nonusers from chronically ill users because all users pay premiums but the chronically ill users pay much more in deductibles and coinsurance. Healthy consumers will be favored financially by low-premium, high-deductible products, as these consumers will incur little by way of routine costs but remain protected in the event of a catastrophic illness. Con-

sumers with chronic medical conditions, on the other hand, are in frequent need of clinical services and will pay considerable sums before reaching their insurance product's annual out-of-pocket maximum. Expenditures for the healthiest consumers will be limited to the premium but for the most severely ill consumer expenditures will consist of the premium plus the deductible, the coinsurance above the deductible, and payment for services excluded from coverage (eg, durable medical equipment). The new products and policies will test the limits of US individuals' willingness to assign responsibility for financing health care to those individuals who use it and exempt those who do not.

The methods of managed care enjoyed initial success before encountering increasing opposition and declining effectiveness, and it is to be expected

that the benefit, network, medical management, and pricing strategies currently being developed by the health insurance industry will experience subsequently the iron law of diminishing marginal returns. It is easy to foresee a consumer backlash against consumer-driven health care, stimulated by stories of patients refusing services when faced with high deductibles and network tiers. On the positive side, a shift in decision-making responsibility from the employer to the employee and from the insurer to the enrollee will create a social consciousness of the imperative to establish priorities as to who will receive which services now, which later, and which never. A greater sense of personal responsibility among patients for their own health and health care will attenuate some forms of cost inflation and support the prevention and treatment of many chronic condi-

tions. But individual patients require financial subsidies, valid information, and empathetic support if they are to grapple successfully with the difficult challenges of illness and medicine. During the long term, the insurance industry will need to combine its contemporary focus on consumers with a commensurate focus on physicians, administrative simplicity, and the social pooling of risk if it is successfully to balance limited resources and unlimited expectations in health care.

Funding/Support: This research was supported by the Robert Wood Johnson Foundation through its Health Care Financing and Organization program and by the California HealthCare Foundation.

Role of the Sponsors: The Robert Wood Johnson Foundation and the California HealthCare Foundation did not participate in the design and conduct of the study, in the collection, analysis, and interpretation of the data, or in the preparation, review, or approval of the manuscript.

Additional Information: Additional information on the case studies underlying this article are available from the author.

REFERENCES

- Robinson JC. Renewed emphasis on consumer cost sharing in health insurance benefit design. *Health Aff (Millwood)* [serial online]. 2002;suppl Web exclusive: W139-W154.
- Robinson JC. Hospital tiers in health insurance: balancing consumer choice with financial incentives. *Health Aff (Millwood)* [serial online]. 2003;suppl Web exclusive: W3-135-W3-146.
- Robinson JC, Yegian JM. Medical management after managed care. *Health Aff (Millwood)*. In press.
- Robinson JC. From managed care to consumer health insurance: the fall and rise of Actna. *Health Aff (Millwood)*. 2004;23:43-55.
- Thorpe KE. Managed care as victim or villain? *J Health Polit Policy Law*. 1999;24:949-956.
- Luft HS. Why are physicians so upset about managed care? *J Health Polit Policy Law*. 1999;24:957-966.
- Robinson JC. The end of managed care. *JAMA*. 2001;285:2622-2628.
- Gabel JR, Ginsburg PB, Pickreign JD, Reschovsky JD. Trends in out-of-pocket spending by insured American workers, 1990-1997. *Health Aff (Millwood)*. 2001; 20:47-57.
- Manning WG, Newhouse JP, Duan J, et al. Health insurance and the demand for medical care: evidence from a randomized experiment. *Am Econ Rev*. 1987;77:251-277.
- Wong WD, Anderson R, Sherbourne CD, et al. Effects of cost sharing on care seeking and health status: results from the Medical Outcomes Study. *Am J Public Health*. 2001;91:1889-1894.
- Danzon PM, Pauly MV. Health insurance and the growth in pharmaceutical expenditures. *J Law Econ*. 2002;45:587-613.
- Gabel J, Claxton G, Holve E, et al. Health benefits in 2003: premiums reach thirteen-year high as employers adopt new forms of cost sharing. *Health Aff (Millwood)*. 2003;22:117-126.
- Kaiser Family Foundation and Health Research and Education Trust. *Employer Health Benefits 2003 Annual Survey*. Menlo Park, Calif: Kaiser Family Foundation; 2003.
- Raskin JR. *Health Care: Managed Care 2004 Outlook: Spreading Out*. New York, NY: Lehman Brothers Equity Research; 2004.
- Lee JS, Tollen L. How low can you go? the impact of reduced benefits and increased cost sharing. *Health Aff (Millwood)* [serial online]. 2002;suppl Web exclusive: W229-W241.
- Rothchild M, Stiglitz J. Equilibrium in competitive insurance markets: an essay on the economics of imperfect information. *Q J Econ*. 1976;90:629-649.
- Newhouse JP. Reimbursing health plans and health providers: efficiency in production versus selection. *J Econ Perspect*. 1996;34:1236-1263.
- Christianson JB, Parente ST, Taylor R. Defined-contribution health insurance products: development and prospects. *Health Aff (Millwood)*. 2002;21:49-64.
- Gabel JR, Lo Sasso AT, Rice T. Consumer-driven health plans: are they more than talk now? *Health Aff (Millwood)* [serial online]. 2003;suppl Web exclusive: W395-W407.
- Draper DA, Hurley RE, Lesser CS, Strunk BC. The changing face of managed care. *Health Aff (Millwood)*. 2002;21:11-23.
- Enthoven AC. *Health Plan: The Only Practical Solution to the Soaring Costs of Medical Care*. Reading, Mass: Addison-Wesley; 1980.
- Strunk BC, Ginsburg PB. Tracking health care costs: trends stabilize but remain high in 2002. *Health Aff (Millwood)* [serial online]. 2003;suppl Web exclusive: W266-W274.
- Joyce GF, Escarce JJ, Solomon MD, et al. Employer drug benefit plans and spending on prescription drugs. *JAMA*. 2002;288:1733-1739.
- Feldstein PJ, Wickizer TM, Wheeler JRC. Private cost containment: the effects of utilization review programs on health care use and expenditures. *N Engl J Med*. 1988;318:1310-1314.
- Weinick RM, Cohen JW. Leveling the playing field: managed care enrollment and hospital use, 1987-1996. *Health Aff (Millwood)*. 2000;19:178-184.
- Baker L, Birnbaum H, Geppert J, et al. The relationship between technology availability and health care spending. *Health Aff (Millwood)* [serial online]. 2003;suppl Web exclusive: W537-W551.
- Berk ML, Monheit AC. The concentration of health care expenditures, revisited. *Health Aff (Millwood)*. 2001;20:9-18.
- Casalino L, Gillies RG, Shortell SM, et al. External incentives, information technology, and organized processes to improve health care quality for patients with chronic diseases. *JAMA*. 2003;289:434-441.