# Movement Toward Individual Health Benefit Accounts

ROBERT A. CONNOR, PH.D., M.H.A.
Department of Healthcare Management, Carlson School of Management, University of Minnesota

## ABSTRACT

There are strong pressures for employers to pursue defined contribution health benefits with individual health benefit accounts such as Medical Savings Accounts (MSAs), Health Care Reimbursement Accounts (HCRAs), and Comprehensive Individual Medical Accounts (CIMAs). Health care consumers are becoming more assertive. The political backlash against managed care is eroding provider-based cost control mechanisms. Health insurance premium inflation is intensifying.

Advocates of the movement toward individual health benefit accounts view them as a means of restoring autonomy to the physician-patient relationship and controlling costs. Opponents are concerned that individual health benefit accounts of any type will segment insurance markets, benefiting the healthy and wealthy at the expense of the chronically ill and the poor. Can these accounts be designed so as to achieve their positive effects and minimize negative effects?

*Author correspondence:*
**Robert A. Connor, Ph.D.**
Associate Professor
Department of Healthcare Management
University of Minnesota
3-140 Carl S Mgmt
321 19th Avenue S
Minneapolis, Minn 55455

This paper has been peer reviewed by appropriate members of MANAGED CARE's Editorial Advisory Board.

## INTRODUCTION

As this article goes to press, it looks like federal legislation authorizing a four-year pilot for Medical Savings Accounts (MSAs) will expire without continuation at year's end. People who believe MSAs would only unravel health insurance markets — benefiting the healthy and the rich at the expense of the sick and the poor — will be relieved, no doubt. Still, pressure continues for employers to adopt defined contribution health benefits with some type of individual health benefit account.

Employers are caught in the middle. They must confront pressure on the demand side of the health care equation from consumers — including their employees, who are more active participants in their care — with easy access to medical information on the Internet and increasing exposure to direct-to-consumer medical advertising. Employers also face mounting pressure on the supply side of health care. The political backlash against managed care is eroding provider-based cost-control mechanisms, just when they are most needed to constrain a resurgence of double-digit insurance premium inflation.

Wedged between these conflicting forces, many employers are seeking a way out of the middle without abandoning employee health benefits. Many are considering defined contribution health benefits, wherein an employer commits a specified dollar amount toward health benefits instead of a specified package of health care benefits with open-ended costs.

Accompanying this move toward defined contribution benefits is a shift in the direction of greater individual choice, control, and responsibility for health care in the form of individual health benefit accounts. MSAs are probably the most publicized version of these accounts, but there are other versions. Several kinds of individual health benefit accounts are springing up, some using Internet technology to create products that would have been infeasible five years ago.

Advocates of the movement toward individual health benefit accounts view them as a means of restoring autonomy to the physician-patient relationship without losing cost control. Opponents are con-

## STRUCTURE OF THIS ARTICLE

- **Do Insurance Constraints Benefit Consumers?** This section provides the conceptual background for the historical shift of employer-based health insurance to managed care. It is vital for understanding the present transition to defined contribution benefits and individual health benefit accounts.
- **The Evolution of Employer-Based Health Insurance** traces the evolution of the level at which insurance is purchased, from individuals to groups to group-individual hybrids.
- **Individual Health Benefit Accounts: Types, Pros, and Cons** highlights different types of individual health benefit accounts, their pros and cons, and ways to optimize their good effects while minimizing the bad.

cerned that individual health benefit accounts of any type will segment insurance markets between the healthy and the sick and between the wealthy and the poor.

Strong sentiments exist on both sides of the debate, but relatively little empirical evidence has emerged thus far to resolve these differences. Congress planned a study of MSA effects on selection, cost, consumer choice, and other issues, but it was not completed (USGAO, 1998). As we will discuss later, several excellent simulations have projected the probable effects of MSAs, yet these effects depend on MSA design parameters such as deductible level, multiple vs. single plan offerings, scope of services, risk and income adjustments, and type of tax deduction or credit. Accounts with certain design parameters might benefit the healthy and wealthy, but accounts with other design parameters might be neutral or actually benefit the chronically ill and the poor.

Despite noncontinuation of MSA legislation in 2000, the combination of unflagging pressure on employers and enduring uncertainty about the effects of accounts with different design parameters suggest that this debate will not go away. The MSA pilot may be over, but proposals for individual health benefit accounts with fresh, new acronyms will arrive next year. In anticipation of this impending arrival, this article covers the evolution, definition, and pros and cons of different individual health benefit accounts. It is intended for decision-makers in health plans and other providers, businesses, legislative bodies, and research organizations.

## DO INSURANCE CONSTRAINTS BENEFIT CONSUMERS?

Supply-side constraints in health insurance, such as restrictions on provider selection and service coverage, generally are not popular among consumers. In fact, they are one reason for the backlash against managed care. Consumers are put off by demand-side constraints such as large copays, deductibles, or waiting lines also. This begs the question: If consumers do not like these constraints, then why do these constraints dominate health insurance markets? If a restaurant chain prepared food that most people did not like, would that chain grow to 80% of the market?

One possible explanation is employee misrepresentation, which refers to the idea that employers generally make health insurance contracts that do not accurately represent employee preferences. Consider the restaurant-marketplace analogy. Suppose that instead of selecting and paying for restaurants on our own, we all had restaurant insurance. Also, suppose health food specialists arranged this restaurant insurance for us. In this situation, one might well find a market dominated by health food restaurants filled with people sullenly eating healthy fare, when in fact they prefer their cuisine deep fried.

**With managed care, everyone agrees before entering a health plan to abide by constraints that will avert use of extra services. As a result, the insurance plan will have less waste and a lower premium, and consumers will be better off. Seen in this light, employers may actually have been maximizing employee welfare by moving to managed care during the past two decades.**

The employee misrepresentation explanation may have some merit, but it raises other questions. Especially in a tight labor market, wouldn't employers who neglect to accurately represent employee preferences in health care benefits tend to lose out? If a greedy employer wants to exploit workers by minimizing their pay, why not represent employee preferences in health benefits, pay employees lower wages, and come out ahead on balance? Misrepresentation of employee preferences in health benefits can reduce employer profit. The employee misrepresentation explanation only suffices if employees are immobile and forced to accept whatever wage-benefit package an employer provides.

A supplemental or alternative explanation for health insurance constraint is that some level of control actually improves employee welfare. This would explain why insurance constraints do not vanish in a tight labor market. This reasoning is based on the concept of "moral hazard," wherein insured people use extra services because they pay little or nothing at the time of service. Although these extra services may not be charged to the insured person at the time of use, each has a real cost that is added to future insurance premiums. In the long run, everyone in the insurance pool shares the cost if one person gets an extra service. The result is the use of services with costs that exceed their benefit and, ultimately, are paid by consumers.

Let's return to the restaurant analogy. Suppose that you are going out to eat with a group of ten people. Someone in the group (probably someone with expensive taste in food) proposes that you all share a

common bill and split it evenly. Unless friendships or other arrangements temper behavior, the group will probably spend more with a single check split evenly than it would have with separate checks. People in the group will order items that are not worth the menu price, due to the low marginal price each individual faces; each person pays for only a tenth of the extra things they order. Who wants to order a cheap meal while others order drinks, desserts, and shrimp cocktails? Moral hazard translates to excess consumption and a higher bill for everyone.

If the ten diners were able to agree in advance which types of food are "extra" and could enforce a collective decision not to order extra food, they then could constrain moral hazard, avoid ordering things with a cost that outweighs its benefit, and all be better off. They could even enlist the help of the server to discourage excess ordering — "Excuse me, sir, do you really want those extra calories?" It would be fascinating to see such "managed dining" in operation.

Moving from restaurants to health care again, one can see that health insurance is similar to splitting the check except that there are tens of thousands of fellow consumers instead of just ten. There is a welfare loss from inefficient consumption due to unconstrained moral hazard — a loss that can be limited by constraining supply (e.g., through managed care) or demand (e.g., through copays or lines). With managed care, everyone agrees before entering a health plan to abide by constraints that will avert use of extra services. As a result, the insurance plan will have less waste and a lower premium than an unconstrained plan, and consumers will be better off. Seen in this light, employers may actually have been maximizing employee welfare by moving to managed care during the past two decades (Connor, 2000). If, however, plan members can avoid abiding by their agreement and plan constraints through legal action, the arrangement unravels, moral hazard returns, and consumer welfare is eroded.

There is another way for the check-splitting diners to avoid the inefficiency of moral hazard. Each diner in the group could receive a defined contribution voucher for a certain dollar amount. If he spends less than this amount on the meal, he can keep the savings to use for future meals or withdraw it for other purposes. This is roughly the restaurant version of an MSA. Like "managed dining," it constrains inefficiency caused by moral hazard. It also circumvents the need to agree on which food choices are excessive and the need to enforce this agreement during the dining experience. It is thus less likely to unravel due to litigation. The parallels that can be drawn to health care suggest why many people think that individual health benefit accounts may be a more viable way of constraining moral hazard.

This discussion of moral hazard and the possibility that some insurance constraints can actually benefit consumers sets the stage for a discussion of the developments in employer-based health benefits.

## THE EVOLUTION OF EMPLOYER-BASED HEALTH BENEFITS

Table 1 summarizes the evolution of employer-based health insurance in the United States. Constraints on moral hazard are shown across the top: supply-side constraints (such as managed care or regulatory rationing); demand-side constraints (such as copays, deductibles, or waiting lines); or no constraints. The different levels at which health insurance or care may be purchased appear in the far-left column. The evolution of employer-based health benefits began during the middle of the 20th century, with a movement from individual health insurance to group health insurance, shown by an upward arrow in the far-right column. Employer response to rising health care costs is represented by right-to-left arrows in the middle row. Advantages of the move from individual to group health insurance include: (1) pooling sicker and healthier people together so that cross-subsidies can occur; (2) economies of scale in administration; (3) lower care prices, due to clout from group purchasing; (4) better information on care quality, attributable to the clout and agency role of the employer; and (5) tax benefits (from employer and employee perspectives, if group health insurance only is tax deductible; from a societal perspective, if tax subsidy of health insurance is viewed positively).

Disadvantages associated with the move from individual to group health insurance include: (1) decision-making based on group averages, which translates to fewer individual choices and less influence from individuals concerning covered services and provider preferences; (2) greater inefficiency due to moral hazard with group vs. individual insurance, if individual insurance is experience-rated; and (3) greater tax benefits for the wealthy (when individual insurance is not tax deductible but group insurance is, and there is no tax deduction limit).

The next step in the evolution of employer-based health benefits was prompted by rapidly rising health care costs during the final quarter of the 20th century. Employers responded by moving to insurance with either demand-side constraints (such as copays and deductibles) or supply-side constraints (such as managed care).

Recently, the combination of several powerful trends has led many employers to consider a shift back toward individual health benefit accounts with a defined contribution. These trends include a resurgence of high health care inflation, a backlash by employees and physicians against provider-side constraints as well as

## TABLE 1 Tracing the development of employer-based health insurance

| Level at which insurance is purchased | Type of constraint on moral hazard | | |
|---|---|---|---|
| | **Supply-side constraints** | **Demand-side constraints** | **No constraints** |
| **Nation** | National health insurance with managed care or regulated supply | National health insurance with high copays or lines | National health insurance with complete coverage and no constraints |
| **Employer** | Employer-based health insurance with managed care | Employer-based health insurance with high copays | Employer-based health insurance with complete coverage and no constraints |
| **Employer and Individual** | Employer-based health benefits with individual accounts (MSA, CIMA) and managed care | Employer-based health benefits with individual accounts (MSA, CIMA) without managed care | |
| **Individual Only** | Individual insurance or MSA or CIMA, with managed care | Individual insurance or MSA or CIMA, without managed care | Individual insurance with complete coverage and no constraints |

the possibility of increased litigation, and higher demand due to increased health care consumerism (MoreHealthOptions, 2000). Advocates of individual health benefit accounts believe that these accounts will not only contain health care costs, but also bolster employee choice and satisfaction.

Not surprisingly, the pros and cons of a move from group employer-based health insurance to individual health benefit accounts are roughly the mirror image of the advantages and disadvantages listed for the shift from individual to group insurance several decades ago. Potential advantages of the move from employer group to individual health benefit accounts therefore include: (1) greater individual choice with respect to providers and covered services; (2) less intrusion into the physician-patient relationship; and (3) less inefficiency due to moral hazard when an individual can keep part of an account surplus.

Conversely, disadvantages of the move from employer group to individual health benefit accounts would be likely to include: (1) segmentation of the insurance market, leaving sicker people in traditional plans with higher premiums; (2) higher administrative costs (unless coordinated by employer or other agent); (3) higher health care prices due to less clout (unless coordinated by employer or other agent); (4) poorer information on care quality (unless coordinated by employer or other agent); and (5) greater tax benefits for the wealthy (if individual accounts allow greater tax benefits for the wealthy than group health insurance does).

Interestingly, many disadvantages associated with individual health benefit accounts can be prevented if the employer or another agent plays an active role. The employer or other agent can reduce administrative costs, negotiate prices or create markets to foster competition, and provide information on care quality. It is not surprising then that some of the new Internet-based health benefit ("e-benefits") companies offer precisely these services in conjunction with their individual health benefit accounts.

The potential adverse segmentation risk and tax effects from individual health benefit accounts are tougher problems but might be min-

imized by proper design parameters. We will explore this further in the next section on different types of individual health benefit accounts.

## INDIVIDUAL HEALTH BENEFIT ACCOUNTS: TYPES, PROS, AND CONS

### *Medical Savings Account*

A Medical Savings Account (MSA) is a personal account funded by tax-exempt contributions with which an individual (employee) pays itemized health care bills, and from which a surplus at the end of the year can be used to pay health care bills in future years or withdrawn for other purposes after payment of taxes and a fee. Although not theoretically required for an MSA, a catastrophic health insurance policy, which pays for all health care bills above a high annual deductible, almost always accompanies MSAs. Like provider-side constraints, MSAs can improve consumer welfare by constraining moral hazard. Nonetheless, MSAs generally allow greater choice of provider and services than managed care plans. For example, most MSA plans allow the individual to see any provider and will cover any health care expense allowed by the IRS. This covers a wider range of services than most managed care plans.

Employer MSA contributions are exempt from federal income tax, Social Security tax, and state income tax in many states (Goldman et al, 2000). Employee MSA contributions, which pay Social Security tax, are less desirable. Since the benefits of MSAs with open-ended tax exemption are greater for wealthy people, some experts have proposed a fixed-dollar tax credit (Pauly and Goodman, 1995).

MSAs require federal authorization, because they involve federal tax exemption. MSAs were authorized until the end of 2000 in a four-year pilot in the Health Insurance Portability and Accountability Act. This act placed several limitations on MSAs:

- Annual MSA contributions cannot exceed 65% of the catastrophic insurance deductible for individual coverage or 75% for family coverage.
- The minimum deductible for the catastrophic insurance is $1,500 for individuals and $3,000 for families.
- MSAs are only allowed for employees of firms with fewer than 50 employees, the self-employed, and the uninsured.
- Both an employer and employee cannot contribute to an MSA, only one or the other.

To date, there have been only around 100,000 MSAs under the pilot. Opponents say that this shows that MSAs do not work. Advocates say that the pilot limitations are too strict and that there would be many more MSAs if these limitations were relaxed. They also note a recent survey showing 60% of executives expect that most U.S. employers will offer MSAs by the year 2010 (Wrobel and Metropulos, 1999). As this article is going to press, a proposal is being considered by Congress to continue MSAs and relax restrictions on firm size and the minimum deductible (Landers, 2000). In any case, this legislation faces stiff opposition. The MSA pilot may expire at the end of the year without continuing legislation.

There has not been a lot of empirical research concerning MSAs to help resolve this heated debate. Nonetheless, there have been some excellent simulations and case studies that offer insights into the effectiveness of MSAs. Since concerns about MSAs center on whether they will primarily attract the healthy and the wealthy, we will focus on results relevant to these two issues.

Simulations in the literature generally predict the disproportionate selection of MSAs by healthy people, but results are mixed and often dependent on MSA design parameters. Keeler et al (1996) tested two MSA concepts: an MSA so stringently funded by an employer that employees would never withdraw funds; and an MSA funded by an employee (or generously funded by an employer). Keeler's simulation predicts that healthy people will tend to select an MSA that is stringently funded by an employer.

Thorpe's (1995) model also predicts that healthy people would be more likely to choose an MSA plan with a high-deductible catastrophic insurance. The American Academy of Actuaries (1995) estimated that selection of MSAs by the healthy could cause premiums for sicker people remaining in traditional insurance to increase by 60%. Zabinski et al (1999) simulated the effects of MSAs based on Americans' actual mix of health plans rather than drawing stylized comparisons with prototype plans. Zabinski's simulation predicts that MSAs will attract the healthy when offered alongside traditional health insurance. Kendix and Lubitz (1999) simulated the effects of offering MSAs to Medicare beneficiaries in fee-for-service (FFS) Medicare. Their simulation predicts that, if Medigap coverage is allowed to pay cost sharing, then MSAs will appeal primarily to healthy beneficiaries.

**MSAs generally allow greater choice of provider and services than managed care plans.**

Other simulation results, some with different MSA plan designs, predict no biased selection or even disproportionate selection of MSAs by sicker people. Keeler's (1996) simulation predicts that sicker people will tend to select an employee-funded MSA if it has a low catastrophic in-

## Sizing Up the MSAs

**MSA advocates say MSAs will:**

- Control costs without intrusion into the patient-physician relationship.
- Reduce the number of uninsured by offering a low-cost, tax-exempt alternative to traditional health insurance.
- Empower people with greater control over their health care and health — by allowing them to shop for high-quality, low-cost care and by encouraging healthful lifestyles.
- Improve satisfaction by offering wide choice of providers and scope of services.
- Provide equal tax benefits to people who choose high out-of-pocket insurance plans instead of low-deductible plans.*

**MSA opponents say MSAs will:**

- Mainly attract the healthy and wealthy — leaving the sick and the poor in traditional insurance with high premiums.
- Attract people who are already insured, rather than the uninsured.
- Provide a tax break for the wealthy that is so great it overshadows any positive health care effects.
- Cause people to neglect preventative care.**

* Archer 2000, Citizen's Council on Health Care 1999, Elizondo 1995, Gawande 1998, Goldberg 1999, Hamilton 1999, HealthCare 2000, Matthews 1996, MoreHealthOptions 2000, Rushton 1999, Scandlen 1999, Senate Record Vote Analysis/Health Insurance Reform Act of 1996, Whelan 1999.

** Center on Budget and Policy Priorities 1998, Gleckman 1999, Lav 2000, Moon 1996, MoreHealthOptions 2000, NCPA 1998, Samaad 1999, Senate Record Vote Analysis/Health Insurance Reform Act of 1996.

surance deductible. Goldman et al (2000) simulated the effects of employer-funded MSAs for small firms and predict that MSAs would not disproportionately attract the healthy — who would prefer to be uninsured and take higher wages. Kendix and Lubitz's (1999) Medicare simulation predicts that, if Medigap coverage is not allowed to pay cost sharing, then MSAs appeal to both very healthy and extremely ill beneficiaries.

Both Keeler et al (1996) and Goldman et al (2000) assumed that $1.00 of HMO care is worth $.90 of FFS care, due to the value of greater freedom of choice under FFS. They also noted that this assumption has a measurable effect on simulation results. One implication of this is that if sicker people value choice of provider and services more than healthy people, MSAs offering greater choice may attract more sick people than simulations currently predict. Choice plays an important role in satisfaction with care (Gawande et al, 1998; Strategic Health Perspectives/Louis Harris & Associates, 1999).

Pauly and Herring (2000) explain how selection dynamics depend on the interactions of MSA plan design, employer behavior, and employee behavior. Kendix and Lubitz (1999), Zabinski et al (1999), and Pauly and Herring (2000) all note that unequal employee MSA contributions can also reduce biased selection.

Simulation predictions concerning preference for MSAs by wealthy people are mixed as well. Keeler's (1996) simulation predicts that wealthy people will tend to select an employee-funded MSA. Zabinski's (1999) simulation also predicts that MSAs attract the wealthy when offered alongside traditional health insurance. On the other hand, Goldman's (2000) simulation predicts that MSAs would not tend to attract the wealthy — who prefer the higher tax breaks that are afforded by a comprehensive HMO.

### *Health Care Reimbursement Account*

Health Care Reimbursement Accounts (HCRAs) are not new. Despite this fact, it is important to review them at least briefly here, as the basis for the newer health benefit products being offered through the Internet. Like MSAs, HCRAs are personal accounts funded with tax-free contributions that an individual uses to pay health care bills. Unlike MSAs, however, HCRAs have traditionally been used in a secondary role to pay for copays, deductibles, and services not covered by primary, low-deductible insurance. Also, with HCRAs, the individual loses any money left in the account at the end of the year. The "use it or lose it" incentive of HCRAs differs from the "save it for use later" incentive of MSAs. Currently, a key advantage associated with an HCRA is its flexibility relative to an MSA. For example, there are no restrictions on employer size with HCRAs. This is one reason some e-benefits companies are using HCRAs as the foundation of their online health benefit products.

### *Comprehensive Individual Medical Account*

A Comprehensive Individual Medical Account (CIMA) is an individual

health benefits account that a person uses to buy health insurance as well as to pay bills for individual health care services. This approach differs from MSAs and traditional HCRAs, which are only used to pay bills for individual health care services — not the insurance policy, which is provided separately.

CIMAs are flexible. An individual can use a CIMA to purchase full health insurance from a health plan that has an established network of providers, with a single capitation payment and a single contract. Alternatively, an individual can create a custom network of providers by combining multiple subcapitation payments and multiple contracts. With subcapitation contracts, each provider is paid a monthly fixed amount to provide only the care that the employee needs from that provider. Finally, an individual can use a CIMA to simply pay all their health bills on a fee-for-service basis, with no insurance function.

The pros and cons of a particular CIMA follow those of the health benefit plan that it most closely approximates — traditional health insurance, MSA, HCRA, or self-insurance. The greatest advantage offered by a CIMA is the flexibility it provides. Individuals can fully customize their health benefits. Multiple subcapitation contracts can also restore a competitive market among providers in areas where there is an oligopoly among full-capitation health plans.

The greatest potential disadvantages of a CIMA are: significant market segmentation between the healthy and the sick due to individual flexibility in benefits design, complexity of multiple subcapitation contracting, and lack of care coordination among multiple subcapitation contracts. Concerning the latter, HMOs have developed sophisticated internal policies and risk pools to coordinate care, align incentives, and avoid cost shifting among capitated providers. When an individual has multiple subcapitation contracts, these policies and risk pools are absent. It may be difficult for the individual to resolve disagreements among providers concerning referrals and care coordination.

## Conclusion

Many employers are investigating individual health benefit accounts with defined contributions, including Medical Savings Accounts, Health Care Reimbursement Accounts, and Comprehensive Individual Medical Accounts. Advocates see them representing the dawn of a new era in health benefits that will empower patients and physicians while containing costs. Opponents revile them as a misguided attack on the sick and the poor.

Can these health benefit accounts be designed so as to achieve their positive effects while minimizing negative effects? Some of the negative effects can be lessened through active coordination by the employer or e-benefits company — reducing administrative costs, negotiating prices, or creating competitive minimarkets where providers offer services and consumers buy them, and providing consumers with quality of care information. Other negative effects, especially market segmentation by health risk and income level, are more challenging. Yet they might also be minimized with proper plan designs. For instance, the disproportionate selection of individual health benefit accounts by the healthy might be minimized in several ways. Selection dynamics can become more balanced through risk-adjusted employer contributions; varying the size and location of the window between account contribution and catastrophic insurance deductible, if any; varying the degree of provider-side constraints in accompanying catastrophic insurance, if any; and varying the scope of covered services. Disproportionate selection of individual health benefit accounts by the wealthy might be minimized by careful design and/or by limiting tax benefits.

Since these accounts would be part of a complex system involving human behavior, these questions are best answered by empirical results. In the words of a prominent simulation designer: "Better information about employer experiences and the reasons for differences with experimental results would be extremely valuable." (Ozanne, 1996) With the expiration of the MSA pilot, it may be tempting to think that these issues will dissipate and further experimentation will not be needed. These issues could fade away if: the United States changes course and adopts national health insurance; consumers change sentiment and grow fond of provider-side constraints; or health premium inflation changes direction and drops to the level of general inflation. Without the emergence of at least one such change, however, employers will continue to pursue individual health benefit accounts, and further investigation into the effects of account design will continue to be important.

## References

American Academy of Actuaries. Medical Savings Accounts: Cost Implications and Design Issues. Public Policy Monograph 1; Washington, DC:May 1995.

Archer, B. Give people private health insurance with choice. *The Houston Chronicle*. January 25, 2000: A21.

Citizen's Council on Health Care. Medical Savings Accounts. St. Paul, MN;1999. Available at http://www.cchc-mn.org.

Connor RA. Health Care Finance and Financial Management, 2000; manuscript, 615 pp.

Elizondo, JB. Medical savings accounts pay off for employer. *The Detroit News*. July 17, 1995.

Gawande AA, Blendon R, Brodie M, Benson JM, Levitt L, Hugick L. Does dissatisfaction for health plans stem from having no choices? *Health Affairs*. 1998;17(5):184-194.

Gleckman H. The nasty side effects of medical savings accounts. *Business Week*, October 25, 1999, p. 42.

Goldberg RM. Save medical savings accounts. *The Weekly Standard*. September 13, 1999;p. 21.

Goldman DP, Buchanan JL, Keeler EB. Simulating the impact of medical savings accounts on small business. *Health Services Research*. April 2000;31:1: Part I,53-75.

Hamilton RF. Savings accounts can give patients real choice. *St. Louis Post-Dispatch*. August 17, 1999;B15.

HealtheCare provides a better health care experience. Available at http://www.healthecare.com. Accessed 2000.

Keeler EB, Malkin JD, Goldman DP, Buchanan JL. Can medical savings accounts for the nonelderly reduce health care costs? *JAMA*. 1996;275(21):1666-1671.

Kendix M, Lubitz JD. The impact of medical savings accounts on Medicare program costs. *Inquiry*. 1999;(36):280-290.

Landers SJ. Congress pushes proposal in last-ditch attempt to resuscitate medical savings accounts. *American Medical News*. October 9, 2000.

Lav IJ. Health care, but only for the young and healthy. *Los Angeles Times*. May 11, 2000;B-11.

Lav, IJ. Center on Budget and Policy Priorities. Medical savings account proposal poses serious risks to insurance market and to less healthy individuals while providing new tax shelter for high-income taxpayers. July 21,1998. Available at: http://www.cbpp.org/721msa.htm.

Lav IJ. Center on Budget and Policy Priorities.MSA Expansion in patients' bill of rights could drive up health insurance premiums and create new tax shelter. Available at: http://www.cbppp.org. Accessed March 2, 2000.

Matthews M. Why are medical savings account (MSA) plans so popular and effective? *Investor's Business Daily*. 1996. Available at: http://www.medicalsavingsaccount.com.

Moon M, Nicols LM, Wall S. Medical savings accounts: a policy analysis. *The Urban Institute*. March 1996.

MoreHealthOptions.com, 2000.

National Center for Policy Analysis. Medical Savings Accounts: Obstacles to Their Growth and Ways to Improve Them. NCPA Policy Report No. 216. July1998. Available at: http://www.ncpa.org.

Ozanne L. How will medical savings accounts affect medical spending? *Inquiry*. 1996;33:225-236.

Pauly MV, Goodman JC. Tax credits for health insurance and medical savings accounts. *Health Affairs*. 1995;14(1):126-139.

Pauly, MV, Herring BJ. An efficient employer strategy for dealing with adverse selection in multiple-plan offerings: an MSA example. *J Health Economics*. 2000;19:513-528.

Rushton S. Medical savings account participation jumps 28 percent. Available at: http://www.house.gov/archer/news. Accessed October 5, 1999.

Samaad M. Despite high hopes, few have signed up for medical savings accounts. 1999. Available at: http://www.bankrate.com. Accessed February 9, 1999.

Scandlen G. The boon of medical savings accounts. Letter to the editor. *The Washington Post*. September 26, 1999;B6.

Schneider EC, Epstein AM. Performance Reports on CABG Surgery: Impact on Referral Practices and Access to Care. AHSR & FHSR Annual Meeting Abstract Book.1996;13:38-39.

Senate Record Vote Analysis, Health Insurance Reform Act of 1996, S. 1028 Kassebaum second-degree perfecting amendment No. 3677 to the Dole/Roth Amendment No. 3676. 104th Congress, 2nd session; April 18, 1996; Page S-3568, Temp Record, Vote No. 72. Available at: http://www.senate.gov/~rpc/rva/1042/104272.html.

Strategic Health Perspectives/Louis Harris & Associates. Most people with employer-provide health insurance plans have no real choice of plans. *Medical Benefits*. March 30, 1999; 4.

Thorpe KE. Medical savings accounts: design and policy issues. *Health Affairs*. 1995;14(3):254-259.

U.S. General Accounting Office. Medical Savings Accounts: Results from Surveys of Insurers. December 1998;GAO/HEHS-99-34; 17 pp.

U.S. General Accounting Office. Medical Savings Accounts: Findings from Insurer Survey. December 1997;GAO/HEHS-98-57;17 pp.

Whelan J. In defense of medical savings accounts — readers report. *Business Week*. November 29, 1999:16.

Wrobel D, Metropulos K. Consumerism, e-commerce and biotechnology advances to cause disruptive changes in health system over next decade, worldwide PwC study reports. PricewaterhouseCoopers; October 1999. Available at: http://www.pwcglobal.com/healthcare.

Zabinski D, Selden T, Moeller J, Banthin J. Medical savings accounts: microsimulation results from a model with adverse selection. *J Health Economics*. 1999;18:195-218.