Defined Contribution Health Benefits

by Paul Fronstin, EBRI

- This Issue Brief discusses the emerging issue of “defined contribution” (DC) health benefits. The term “defined contribution” is used to describe a wide variety of approaches to the provision of health benefits, all of which have in common a shift in the responsibility for payment and selection of health care services from employers to employees. DC health benefits often are mentioned in the context of enabling employers to control their outlay for health benefits by avoiding increases in health care costs. DC health benefits may also shift responsibility for choosing a health plan and the associated risks of choosing a plan from employers to employees.

- There are three primary reasons why some employers currently are considering some sort of DC approach. First, they are once again looking for ways to keep their health care cost increases in line with overall inflation. Second, some employers are concerned that the public “backlash” against managed care will result in new legislation, regulations, and litigation that will further increase their health care costs if they do not distance themselves from health care decisions. Third, employers have modified not only most employee benefit plans, but labor market practices in general, by giving workers more choice, control, and flexibility.

- DC-type health benefits have existed as cafeteria plans since the 1980s. A cafeteria plan gives each employee the opportunity to determine the allocation of his or her total compensation (within employer-defined limits) among various employee benefits (primarily retirement or health). Most types of DC health benefits currently being discussed could be provided within the existing employment-based health insurance system, with or without the use of cafeteria plans. They could also allow employees to purchase health insurance directly from insurers, or they could drive new technologies and new forms of risk pooling through which health care services are provided and financed.

- DC health benefits differ from DC retirement plans. Under a DC health plan, employees may face different premiums based on their personal health risk and perhaps other factors such as age and geographic location. Their ability to afford health insurance may depend on how premiums are regulated by the state and how much money their employer provides. In contrast, under a DC retirement plan, employers’ contributions are based on the same percentage of income for all employees, but employees are not subject to paying different prices for the same investment.
Table of Contents

Introduction ..................................................................... 3
Why DC Health? .............................................................. 6
DC Retirement Plans ...................................................... 9
DC Health Models ......................................................... 11
   Employment-Based Group Model ............................ 12
   Cafeteria Plan Model ................................................ 12
   Nonemployment-Based Group Model ...................... 13
   Individual Market ..................................................... 15
Insurance & Policy Issues ............................................. 16
   Adverse Selection ...................................................... 17
   Choice of Plans ........................................................ 17
   Portability .................................................................. 18
   Health Care Costs ..................................................... 18
   Employer as Advocate .............................................. 20
   Delivery Innovation and Health Care Quality .......... 20
   Tax Treatment .......................................................... 20
   Future Public Policy .................................................. 21
   Access to Information ............................................... 21
Conclusion ...................................................................... 21
Appendix 1: DC Health Surveys ................................... 22
Appendix 2: Research Literature .................................. 26
References ...................................................................... 28

Tables and Charts

Chart 1, Health Care Cost Inflation, 1987–2000 ........... 3
Chart 2, Civilian Wage and Salary Workers
   Ages 18–64 Offered Health Insurance by Their
   Employer, by Firm Size, 1988 and 1993 ................. 4
Chart 3, Percentage of Persons With
   Employment-Based Health Insurance in Own
   Name Whose Employer Fully Finances Health
   Insurance, by Firm Size, 1987–1999
   (Employee-Only Coverage) ................................. 4
Chart 4, Average Health Care Spending, by Age
   and Gender, 1996 ...................................................... 7
Chart 5, Satisfaction Levels Lower for Managed
   Care Enrollees .......................................................... 8
Chart 6, Managed Care Enrollees in Health Plan
   Less Time than Fee-for-Service Enrollees ............... 9
Chart 7, Satisfaction Levels Higher as Length
   of Time With Health Plan Increases ................... 10
Chart 8, Use of Fixed Contribution Among
   Employers Offering a Choice of Health Plan .......... 12
Chart 9, Demand for Health Care Services Under
   Moral Hazard .......................................................... 19
Chart 10, Employer Receptiveness Toward Defined
   Contribution Health Benefits ............................... 24
Chart 11, Likelihood of Switching to a Defined
   Contribution Health Plan Within the Next
   Five Years, by Firm Size ....................................... 25
Chart 12, Confidence in Self and Employer to Select
   Best Available Health Plan ................................... 26

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The employment-based health insurance system, the most common form of health insurance coverage in the United States, currently provides health insurance for roughly two-thirds of the American population under age 65 and has changed significantly in recent decades. Between World War II and the 1970s, health benefits provided by employment-based health plans were broadly characterized as traditional fee-for-service health insurance because basic benefits were stated dollar amounts for inpatient and outpatient care. Employees and their families chose their health care providers, and claims for reimbursement were filed after individuals had already received care. In these plans, benefit denials were only related to monetary payments after health care services had been received.

In the 1970s, comprehensive programs replaced this structure, and health benefits were defined in terms of dollar amounts for inpatient and outpatient care. This meant that the insurance coverage would cover virtually all health care services that health care providers deemed medically necessary, although there were exclusions. The insurance plan’s ongoing costs, which were paid mostly by employers, were driven by an open-ended commitment made by the employer that designed a plan or bought a policy from an insurance company. This is why traditional health benefit plans are usually described as “defined benefit” plans.

The period between the mid-1980s and the mid-1990s was one of the main turning points in the evolution of the employment-based health insurance system. During this period, health insurance premiums and employer health care costs were facing double-digit annual increases, in some years close to 20 percent (chart 1). In response, many small firms dropped coverage, while many large firms shifted the cost increases onto employees either by raising their share of the premium or by increasing deductibles and co-payments, although no attempt was made to withdraw from the plan’s open-ended (“defined benefit”) design. For example, between 1988 and 1993, the percentage of employees in firms with fewer than 10 employees who reported that their employer offered health benefits dropped from 39 percent to 31 percent (chart 2). In addition, while both small employers and large employers required larger out-of-pocket contributions from employees, employees in large firms were more likely than those in small firms to bear the cost of insurance premiums (chart 3).¹

¹ As seen in chart 3, employees in firms with fewer than 100 employees are more likely than employees in firms with 100 or more employees to have their health insurance premiums fully financed by their employer. This is due to the fact that insurers often impose minimum participation requirements on small firms, in essence forcing them to not require employees contributions toward premiums. However, economic theory suggests that employees pay for health insurance premiums in the form of lower wages.
At the same time that employers were shifting premium increases onto workers, they began to move workers into managed care arrangements. While the movement to managed care brought about declines in health care cost inflation, at least temporarily (as discussed below), it has not come without controversy. This movement fundamentally altered the way health insurance worked. Instead of deciding what to pay for health care services after care was already received, decisions about the appropriateness of care were more frequently made before health care services were provided. Employers and health plans initially used precertification for many inpatient services or second surgical opinions before moving toward full-blown managed care. In other words, rather than freezing benefits or capping contributions, employers and health

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**Chart 2**

_Civilian Wage and Salary Workers Ages 18-64 Offered Health Insurance by Their Employer, by Firm Size, 1988 and 1993_

![Chart showing the percentage of civilian wage and salary workers ages 18-64 offered health insurance by their employer, by firm size, 1988 and 1993.](chart2)


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**Chart 3**

_Percentage of Persons With Employment-Based Health Insurance in Own Name Whose Employer Fully Finances Health Insurance, by Firm Size, 1987-1999 (Employee-Only Coverage)_

![Chart showing the percentage of persons with employment-based health insurance in own name whose employer fully finances health insurance, by firm size, 1987-1999.](chart3)

plans moved from open-ended commitments (which covered a virtually limitless range of health care services) to the management of employee and health care provider behavior to affect the type and amount of health care services delivered. Because decisions about whether or not certain health care services were covered by the plan were often made before health care services were provided, benefit decisions have often been interpreted as medical necessity decisions.2

Largely as a result of the movement to managed care, the period between 1993 and 1997 was one of modest health care cost increases. During this period, both small and large employers generally did not continue to shift an increasing share of the cost increases onto employees. In fact, the evidence shows that employees paid the same percentage of the premium in 1993 and 1997 (Fronstin, 1998).

With the re-emergence of health care cost inflation in 1998, employers once again are examining alternatives to control health care cost increases. But it would be a simple (and shortsighted) assertion to predict that small employers simply will drop health care benefits and large employers will again require larger contributions from employees, as happened in the late-1980s and early-1990s. Unlike the period between 1987 and 1993, when the United States was experiencing unemployment rates of between 5–8 percent, the nation currently is experiencing the tightest labor market in approximately 30 years, with unemployment rates as low as 3.9 percent in 2000. As long as employers are competing for scarce labor resources, it is unlikely that they will be able to cut back on health benefits either by requiring larger contributions from employees or by dropping the benefit.3 This is a highly visible issue in the hiring process, since health insurance has been and continues to be the benefit most valued by workers and their families. Sixty-five percent of workers responding to a recent survey rated employment-based health insurance benefits as the most important benefit (Salisbury and Ostuw, 2000). Hence, employers most likely will examine other alternatives to offset the increase in the cost of providing health benefits to employees.

One emerging alternative that is starting to receive a great deal of attention is a way of designing and financing health benefits. This restructuring of health benefits is often referred to in the literature as “defined contribution” (DC) health benefits.4 Similar to the terminology used for retirement benefits, shifting from a “defined benefit” to a “defined contribution” changes the focus from the service to the subsidy provided by an employer.

DC health benefits often are mentioned in the context of allowing employers to be able to control their outlay for health benefits by avoiding increases in health care costs. These plans would essentially change employer thinking from trying to manage the range of covered health care services and utilization through the way benefits are designed to setting limits on employer contributions, and, in some cases, requiring employees to design their own benefit plans. Thus, DC health benefits could be an effective way of controlling health care costs for an employer.

DC health benefits are also often mentioned in the context of giving individuals more control of their health care dollar and the design of their benefits. As a result, under this type of plan, individuals (and providers) should have more control over medical necessity decisions. While there are several types of DC arrangements, the most important difference among them is whether the employer or employee controls how contri-

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2 The Supreme Court pointed out in its unanimous decision Pegram v. Herdrich (120 SCt 2143, 2000) that, as a practical matter “eligibility decisions cannot be untangled from physicians’ judgments about reasonable medical treatment.”

3 In fact, it was the labor shortages of World War II, combined with wage controls, that resulted in the initial employer contributions for health benefits, and the ultimate tripling of health coverage by the end of the war (Weir et al., 1988).

4 It has also been referred to as “defined care,” “consumer driven,” and “consumer-centric.”
Contributions are used to pay for health care services. One suggestion, based on the Federal Employees Health Benefits Program model, has employers providing employees with a defined amount of money, which the employee would then use to purchase one of a range of plans chosen by the employer. At the other extreme, an employer would create an account and the employee would buy services with funds from the account. A person could supplement the employer’s contribution with his or her own funds and, depending on the type of plan, purchase a richer benefit plan or more services.

As will be discussed in more detail below, DC-type health benefits have existed as cafeteria plans since the 1980s. A cafeteria plan gives each employee the opportunity to determine the allocation of his or her total compensation (within employer-defined limits) among the various employee benefits that are offered (primarily retirement or health). Most types of DC health plans currently being discussed could be provided within the existing employment-based health insurance system, with or without the use of cafeteria plans. They could also allow employees to purchase health insurance directly from insurers, or they could drive new technologies and new forms of risk pooling through which health care services are provided and financed.

DC health benefits have also been discussed in the context of e-commerce: The growth of the Internet can enable employers to move to a benefits structure that takes full advantage of new technology. The Internet would facilitate plan selection during the open-enrollment season, and would also provide tools and resources that would enable employees to make informed decisions about health plans and health care providers. These new technologies may also give rise to new types of products and may enable employers to assume new roles more in line with emerging health consumerism. New technology may also enable new types of health benefits to emerge, much as the Internet already is giving individuals information about various health care services that they are using to challenge medical and benefit decisions made by health care providers and health plans.

Why DC Health?

There are three primary reasons why some employers currently are considering some sort of DC approach:

- First, employers once again are looking for ways to keep their health care cost increases in line with overall inflation.
- Second, some employers are concerned that the public “backlash” against managed care will result in new legislation, regulations, and litigation that will further increase their health care costs if they do not distance themselves from health care decisions.
- Third, employers have modified not only most employee benefit plans, but labor market practices in general, by giving workers more choice, control, and flexibility. For example, as is discussed in more detail...
below, employers have fundamentally changed employee benefits for retirement income. The interest in DC health benefits is consistent with this movement and would continue a more general evolution in employee benefits that reduces employer paternalism and increases worker choice.

During the late 1980s and early 1990s, health care costs were increasing faster than the overall consumer price index (CPI) and faster than the medical portion of the consumer price index (MCPI). In some years, health care costs were increasing nearly 20 percent for some employers, cost increases that many private employers simply did not want to pay (Fox, 1998). For example, in 1988 overall inflation according to the CPI was 4 percent, the MCPI was 7 percent, but employer spending on health benefits rose 19 percent (chart 1).

Health care costs were increasing for a number of reasons. Under the traditional fee-for-service system, health care providers had no financial incentive to provide health care services in the most efficient setting. Furthermore, technological innovation, improved treatments, consumer activism, quality shortfalls, administrative inefficiencies, and an aging population were all contributing to rising health care costs. While the growth rate in employer spending on health benefits declined after 1988, it continued to outpace the CPI and the MCPI, and also remained above 10 percent. Employers quickly looked for alternatives to fee-for-service health benefits. Managed care (which by then had existed for decades, although mostly in the West and Pacific Northwest) promised to control costs through improved coordination and efficiency by reducing the inappropriate or unnecessary use of health care services, by reviewing proposed health care services before they were provided, by increasing access to preventive care, and by maintaining and improving quality of care.

Managed care, it seems, was able to reduce the rate at which health care costs were increasing. According to chart 1, employer costs for health care barely changed between 1994 and 1997, and the gap narrowed between the CPI and the MCPI. One major factor that led to the reduction in health care cost increases was the migration to lower cost, managed care plans. Managed care plans also altered the incentive structure from a fee-for-service or cost-plus reimbursement scheme to a payment scheme in which health care providers were paid a salary, a fixed amount per patient (a “capitated” basis), or a pre-negotiated discount on fee-for-service charges. In return for the new payment scheme, health care providers were guaranteed high volume levels because they would be providing health care services for a large group of subscribers (which had the effect of reducing consumer choice of health care provider). Also, health providers accepted more “risk” because they had to compete with an oversupply of physicians and an oversupply of hospital beds. Managed care plans also shifted some types of care from costly inpatient settings to less costly outpatient settings.

Currently, health care costs once again are rising faster than the CPI and MCPI, and many employers are reluctant to absorb the cost increases. Health care costs are increasing nearly 10 percent annually, and are expected to continue increasing at this rate (if not more) in the future. There are several reasons why these costs will continue to increase:

<table>
<thead>
<tr>
<th>Year</th>
<th>Men</th>
<th>Women</th>
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<tbody>
<tr>
<td>1999</td>
<td>$3,695</td>
<td>$3,296</td>
</tr>
<tr>
<td>1998</td>
<td>$3,396</td>
<td>$3,096</td>
</tr>
<tr>
<td>1997</td>
<td>$3,000</td>
<td>$2,700</td>
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<td>1996</td>
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<td>1995</td>
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<td>1990</td>
<td>$200</td>
<td>$0</td>
</tr>
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</table>

Chart 4
Average Health Care Spending, by Age and Gender, 1996

Source: Employee Benefit Research Institute estimates from the 1996 Medical Expenditure Panel Survey.
*Excludes one observation where expenditures were greater than $400,000.
First, the U.S. population is aging. While this does not have a major impact on health care costs on a year-to-year basis, it will continue to affect health care costs over the long run because health care use increases with age (chart 4).

Second, new technology, especially pharmaceuticals, will continue to be developed. New technology for the delivery of medical services either replaces existing technology or brings something new to the medical field that did not exist in the past. As new technologies emerge, demand for related services increases as consumers and providers tend to demand the “latest and greatest” services.

Third, health care providers and insurers have been consolidating, ultimately increasing their bargaining power. Health care providers are now in a better position to negotiate higher fees with insurers and employers, and insurers are also in a better position to negotiate with employers.

Fourth, the managed care backlash may have resulted in health insurers relaxing restrictions on access to health care services. Furthermore, in 1998, growth in health maintenance organizations (HMOs) ceased, and point-of-service (POS) plans lost market share. It appears that consumers and employers are now voting with their feet. The managed care backlash, combined with the return of health care cost inflation, are in part to blame for the stagnation of HMOs and POS plans.

Finally, the strong economy likely is having an impact on enrollment and health care spending, resulting in more employees enrolled in less-restrictive preferred provider organizations (PPOs) as they enjoy rising real income and become willing to pay more for better benefits and additional health care services. Employers offer health benefits as a form of compensation in order to recruit and retain qualified employees and as a way to improve employee productivity.Locking employees into a plan that limits choice and perhaps reduces their satisfaction may be less costly, but it may not be cost-effective in terms of an employer’s recruitment, retention, and lost productivity costs.

The managed care backlash also may be stimulating interest among employers in DC health benefits. Surveys have shown that enrollees in managed care plans are less satisfied with their employment-based health plan than are enrollees in fee-for-service health plans. Specifically, 35 percent of HMO-type enrollees were either extremely or very satisfied with their health plan, compared with 50 percent of PPO-type enrollees and 56 percent of fee-for-service enrollees (chart 5). While the lower satisfaction levels may be because

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5 UnitedHealthcare, as an example, ended its practice of requiring pre-authorization for certain types of care in 1999. See www.unitedhealthcare.com/press/991109ccoord.html

6 For a description of the different types of managed care plans, see Ken McDonnell and Paul Fronstin, Health Benefits Databook (Washington, DC: Employee Benefit Research Institute, 1999), pp. 3-5.

7 See EBRI, the Consumer Health Education Council, and Mathew Greenwald and Associates, 2000 Health Confidence Survey, www.ebri.org/hcs/. In this survey, plan type was categorized by the number of managed care plan design features (out of a total of four) a respondent reported to describe his or her health plan. Individuals enrolled in plans with three or four plan design features are considered to be in “HMO-type” managed care plans; individuals enrolled in plans with one or two of these features are considered to be in “PPO-type” managed care plans; and individuals enrolled in plans with none of the four features are considered to be in “traditional” fee-for-service insurance plans.
persons enrolled in managed care tend to be enrolled in their health plan for less time than persons in fee-for-service health plans (chart 6), and it is known that satisfaction varies with length of time enrolled in a plan (chart 7), the dissatisfaction with managed care has led to bipartisan legislative proposals for potentially costly health care mandates. Such “patients’ rights” bills have raised serious concerns among employers about new liability for the decisions they make regarding health insurance benefits. Business groups have publicly and repeatedly warned that subjecting employers to new liability risks may force them to reconsider their role in the current employment-based structure under which health benefits are provided to employees.

Various surveys have shown interest in DC health benefits by both employers and workers, but it appears that the definition of the term “DC health” means different things to different people, and no clear conclusions can be reached from public opinion on the issue (see appendix 1).

Given the experience that employers have had with DC retirement plans, it is not surprising that they would consider moving employees to DC health benefits. The concept of a DC health benefit is similar to that of the DC retirement plan, but in practice the two plans are radically different. Before discussing DC health benefits, this section examines how DC retirement plans fit into the retirement savings system.

Until recently, defined benefit (DB) pension plans were the primary vehicle through which employers and unions funded employees’ retirement. A DB plan is a retirement plan in which benefits are calculated according to a formula or rule. Formulas are more common and are usually based on years of service and/or a percentage of pay, or a negotiated flat-dollar amount. Benefit levels, as determined by the formula used, are guaranteed as a stated retirement income commencing at a specific age. The plan sponsor is responsible for making contributions to a pension fund, overseeing the investment of the fund’s assets, and benefits payments from the fund. The plan sponsor absorbs the investment risk, and the fund’s assets are used to fulfill benefit promises. If a private plan sponsor were to go bankrupt and plan funds were not sufficient to pay beneficiaries, benefits would be paid by the Pension Benefit Guaranty Corporation (PBGC), part of the U.S. Department of Labor, for most private DB plans, although the benefit payouts are subject to some prescribed limits. It is important to note that DB plans were never intended to provide all income in retirement; rather, they were just one leg of the “three-legged” retirement stool, which also includes Social Security and personal savings.

By contrast, defined contribution retirement plans emerged in the 1920s as profit-sharing or savings plans. A few large employers, and many small employers, used these programs as primary retirement plans. For most employers, DC retirement plans, such as 401(k) plans, were supplemental plans offered to employees with DB retirement benefits considered the primary retirement plan. DC retirement plans provide tax-deferral of current compensation through individual accounts. There are several types of DC retirement plans, the most common including 401(k) plans, profit-sharing, stock bonus, savings or thrift plans, and money purchase plans. The final retirement benefit in all DC retirement plans reflects the total of employee contributions, employer contributions, investment gains or losses, outstanding loan balances, preretirement withdrawals,
and possibly forfeitures. The final account balance is generally paid to the individual as a lump sum when he or she leaves the job orretires. The individual then has the option of rolling the account over into a qualified plan (such as an individual retirement account (IRA)), which would preserve the assets for retirement; rolling the account over into the new employer’s plan; or taking the lump sum as cash income and paying income taxes as well as, in some circumstances, a tax penalty. Some employees also have the option of annuitizing the account through options provided by the existing plan. DC retirement plans increasingly are the primary employment-based retirement plan for workers, although DB retirement plans are still an important part of the retirement system (Olsen and VanDerhei, 1997). Concern over the increased prevalence of DC retirement plans has arisen because these plans shift the responsibility of planning for retirement from employers to employees. In general, DC retirement plans put more responsibility and risk on the worker, although this may be offset by larger accumulations of retirement income (depending on investment allocation and experience) than under a defined benefit plan of similar cost to the employer. Since the DC retirement system is relatively new, and few employees with only DC retirement plans have reached retirement age, some researchers speculate that DC retirement plans could result in inadequate retirement income for some employees.

Most DC retirement plan participants are responsible for deciding about their participation in the plan, how much current pay to defer, and how the funds should be invested. Employees typically bear the risk of their investment decisions, meaning that their account will gain value if the investments perform well or lose value if they do not. DB retirement plans traditionally have paid benefits in the form of annuities to retirees, while DC retirement plans typically pay benefits in the form of lump-sum distributions to all departing participants, even if they are not retiring from the work force. As a result, employees also often have to decide whether to save benefit distributions for retirement or spend them sooner. As mentioned above, these factors mean that retirement security may be jeopardized for some employees.

Employers also may be affected by the move to DC retirement plans in ways they have not realized. A recent study found that there are substantial costs to employers related to the stress associated with employees’ poor personal financial performance, with roughly 15 percent of employees in the United States experiencing stress to the extent that it negatively affects their productivity (Garman, Leech, and Grable, 1996).

While a DC plan can allow employees a lot of freedom to choose how much to save for retirement and how to invest their savings, employees do not have complete freedom over their participation and investment decisions. Under most DC retirement plans, employees are given “residual control” over some aspects of the plan. Employers still generally choose the invest-

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8. Forfeitures include employer contributions in the account of an individual who terminates employment with the plan sponsor prior to being fully vested.
9. An annuity provides income at regular intervals for a specified period of time, such as for a number of years or for life.
10. Lump-sum distributions are much more common today in DB retirement plans.
ment options offered to employees, or can set other parameters by which employees must abide within the plan. Employers may also require that their matching contributions to workers’ DC accounts be invested in company stock, rather than cash. According to a recent study, employees have an average of 11 investment options within their DC retirement plan, although the median number of options is nine (Hewitt Associates LLC, 1999). Overall, 67 percent of plans offered between six and 11 investment options. Typically, employees are given a number of high-risk, medium-risk, and low-risk investment options from which to choose. Furthermore, there are federally established limits on how much money employees can set aside in DC retirement plans, and many employees base their contributions on the amounts that employers are willing to match (VanDerhei and Copeland, forthcoming).

Findings from surveys and anecdotal evidence suggest that employees may appreciate DC retirement plans more than DB plans of equal employer cost (Olsen and VanDerhei, 1997), and may do so for several reasons. First, DC retirement plans tend to be easier to understand than DB plans, in large part because DC retirement plan benefit statements are not projected based on life expectancy, interest rate, and salary projections, but instead are reported at their present value; their accumulated value also is reported to workers more frequently and is far more “visible” than are DB plan benefits. Second, the relatively high average rates of return available from the equities market over recent years may have seemed attractive enough that employees were willing to exchange guaranteed benefits, up to a monthly limit (as determined by the PBGC), from a DB plan for the ability to decide for themselves (given the framework established by employers) how assets were to be invested for retirement. Furthermore, if it is the case that more people believe they will be better off financially in retirement if they assume control of the assets earmarked for retirement than if they let their employer make the investment decisions for them, fewer people are likely to demand the risk-pooling safety of DB plans. Third, employees simply may not understand the relative advantages and disadvantages of different retirement plan types and designs.

For example, Gustman and Steinmeier (1999) found widespread misinformation among worker reports of pension provisions.

While DC health benefits may offer some of the same advantages to employees as DC retirement plans, workers may resist such a change because of the potential complexities of DC health benefits as they relate to evaluating the quality of health plans and providers, choosing a health plan, and financing the choice.

Unlike DC retirement plans, which are fairly well defined, the term “defined contribution” has been used to describe a wide variety of very different approaches that employers could use to provide employees with health benefits—all of which are more complicated than a DC retirement plan. However, all of the approaches to DC health benefits do have a common theme that is similar to a DC retirement plan: shifting the responsibility for payment, choice of health plan, and risk to employees. DC health benefits may also shift responsibility for choosing a health plan and the associated risks of choosing a health plan from employers to employees. However, it is impossible to measure how these changes will affect workers since the degree to which they would assume responsibility for payment, choice of health plan, and risk all vary with the different types of DC health benefit approaches.
The array of approaches to a DC health benefit fall into two broad categories: group approaches and nongroup (or individual) approaches. The first approach includes the use of employers as well as nonemployment-based groups to affiliate for some common purpose, such as the selection or purchase of health insurance; the second approach leaves these functions up to the individual. The various approaches, along with their advantages, disadvantages, and other concerns, are discussed below.

**Employment-Based Group Model**

Perhaps the most straightforward approach is the employment-based group model. It would function essentially the same way DC retirement plans operate, with some exceptions. Like a DC retirement plan, employees would be given “residual control” over some aspects of the health benefit. Employers would offer an array of health benefit options and allow employees to choose from those options. Employers most likely would provide a fixed contribution toward those options, which likely would be determined based on the employer’s budgeted cost for the year. The employer contribution might cover 100 percent of the lowest-cost option, some amount less, or maybe even a slightly higher amount. If a worker wanted more benefits than the employer was willing to pay for, he or she would pay for the additional benefits out of pocket, on a pre-tax basis, and select from among the choices offered by the employer. In the strictest sense, this approach would function more like a DC retirement plan than any of the other approaches discussed below.

To a large and growing degree, many large employers already offer an employment-based DC health benefit with a fixed contribution (the impact of this is discussed more fully in Appendix 2, Research Literature). According to a recent study, 27 percent of employers that offer a choice of plans contributed a fixed-dollar amount in 2000, up from 13 percent in 1994 (chart 8), although only 40 percent of those using a fixed-contribution approach set their contribution level at the lowest-cost health plan offered to employees. However, very few employers actually offer a choice of health plan. According to Marquis and Long (1999), only 17 percent of employers offered a choice of health plan in 1997, and when they did, it was usually a choice between just two plans. Without knowing how employees are distributed across firms, most people would get the impression that few employees are offered a choice of plan. Surveys vary on this question: 43 percent of employees were offered a choice of health plan according to Marquis and Long (1999), while 65 percent were offered a choice of health plan according to KFF/HRET (2000). While these estimates are not the same, both indicate that far more employees are offered a choice of health plan than is suggested by simply looking at the percentage of employers that offer a choice. Large employers are more likely to offer a choice of health plans than are small employers.

**Cafeteria Plan Model**

Employers may look toward already existing cafeteria plans as a framework for offering DC health benefits. Generally, cafeteria plans provide benefits similar to those included in a traditional benefits plan, such as (but not limited to) health insurance, retirement benefits, life insurance, disability insurance, and paid leave. A cafeteria plan gives each employee the opportunity to determine the allocation of his or her total compensation (within employer-defined limits) among the various employee benefits that are offered. Employees may choose among different types of benefits and levels of coverage. Some plans allow employees to receive cash in lieu of benefits, or to set aside money for retirement through a 401(k) plan.

Employers have cited health care cost containment as one of the most important reasons for originally
adopting a cafeteria plan (Foley, 1993). Cafeteria plans do this by allowing employers to use a DC approach to health benefits by determining the level of funding for the cafeteria plan annually, rather than providing the same level of benefits each year regardless of cost increases. This approach has the advantage of shifting part or all of the cost increases to employees. Employers can use this approach to limit rising health care expenditures, although these savings may come at the expense of employee satisfaction.

Both employers and employees may benefit from the implementation of a cafeteria plan. Employees may be able to make their total compensation more valuable by choosing their desired combination of pay and benefits. If employees are more satisfied with their benefits, employers may benefit from a more productive workforce. Surveys of employers with cafeteria plans indicate that meeting diverse employee needs is often a major plan objective (Foley, 1993).

Two important features requiring careful design in a cafeteria plan are the allocation of employer contributions and the pricing of benefit options. Employers generally base these features on objectives that need to be balanced. Common objectives include creating a pricing structure that conveys a realistic benefit value to employees, providing employees with coverage similar to that offered under the previous plan without increasing employee cost, and implementing the plan without added employer cost. Employers also need to consider the risk of incurring increased costs as a result of adverse selection. But inevitably, employers cannot meet all of these objectives, partly because at the time of cafeteria plan implementation most firms do not allocate benefit dollars equally among all employees. This is especially true in regard to health insurance.

Although some employers allocate contributions on a per capita basis, most use a combination of factors, which can vary by the type of benefit offered in the cafeteria plan (Foley, 1993). In this way, employers can provide certain employees with more flexibility, thus maintaining some of the subsidies that were in place before the cafeteria plan. Pricing benefit options is a complicated and research-intensive process: Employers must analyze claims data and determine a fair price for each benefit option, including prices for alternative coverage categories, such as employee-only versus family coverage for health insurance. After arriving at realistic benefit option prices, employers may choose to adjust these prices to encourage employees to choose certain options (e.g., managed care) or provide different subsidies for particular benefits such as family health insurance.

Employers report that cafeteria plans have been generally successful in meeting some of the major program objectives. In a survey conducted in 1993, 99 percent of employers with cafeteria plans reported that they had reached their major program objective of meeting diverse employee needs (Hewitt Associates LLC, 1993). However, only 72 percent of employers who cited controlling health expenditures as a major program objective felt they had met their goal. More recently, fewer employers are reporting cost savings from cafeteria plans. Between 1996 and 1998, the percentage of employers with 500 or more employees reporting a cost savings from implementing a cafeteria plan declined from 45 percent to 32 percent (William M. Mercer, 1999). Cost savings are likely not materializing because employers are unable to pass along cost increases to employees during a period of time when recruiting and retaining workers is a growing challenge. In general, employers have not utilized a pure DC approach for cafeteria plans. Also, cost savings become more difficult to identify because it is more difficult to measure savings the longer a plan is in effect.

Nonemployment-Based Group Model

The nonemployment-based group model approach has its roots in managed competition. The concept of managed competition was developed by Stanford University Professor Alain Enthoven in the late 1970s as an alternative to the existing market for health insurance and
Managed competition would alter the health insurance market by substituting plan sponsors for individual consumers and benefit managers as knowledgeable negotiators with health insurance plans.

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Individuals under managed competition would be offered a menu of choices of health plans and be given price and quality of care information for each plan. Theoretically, they then could choose the plan whose combination of price and quality most suited their preferences. Such a choice requires that insurance policies be standardized to facilitate consumer choice, consumers be given a financial stake in their choice, and quality measures be developed that consumers can use to make choices.

Large employers could act as sponsors for their employees, but sponsors could also include federal, state, or local government agencies; private, not-for-profit organizations; or regulated for-profit entities such as public utilities. But one of the difficulties with the managed competition or fixed-contribution approach is that when large employers act as sponsors, choices often are limited, and often the choices are from the same insurer or health plan. If employers do not act as sponsors, they could still play a vital role in financing health benefits. They could continue to provide a financial contribution and could choose to provide a fixed-dollar amount that their employees could use toward the purchase of health insurance.

The fixed-dollar contribution approach is similar to a DC retirement plan in a number of ways. First, assuming employers (especially large ones) continue to choose the health plans and offer a choice, this approach retains much employer control over the plan and plan choices. Plan sponsors, whether they are employers or independent sponsors, would set up the general framework for the plan, allowing employees to make decisions within this framework.

One difference between the fixed-dollar approach and DC retirement plans is the way the benefits are funded. Under a DC retirement plan, employers usually contribute a fixed percentage of a worker’s income toward the plan, not a fixed dollar amount. Under a DC health benefit, employers could contribute a fixed percentage of income toward the cost of the benefit. Employers would also likely cap their contribution at a certain level of income in order to cap their expenses. If health care costs increase faster than income, employees would then have an incentive to choose fewer benefits if they were not willing to pay the cost increases. Employers could also contribute a fixed percentage toward the cost of the plan. For example, an employer might contribute 80 per-cent toward the cost of any plan offered, although employers would still pay more when their employees choose more expensive plans. The other aspects of health coverage, such as employee choice of health plan, would operate the same way as under the fixed-dollar contribution approach.

Perhaps the health plan that comes closet to being characterized as managed competition is the Federal Employees Health Benefits Program (FEHBP). While the FEHBP technically falls into the employment-based group model approach, it provides a model for price competition and cost-conscious consumer choice. With roughly nine million enrollees, the FEHBP is unique in that the employer is the sponsor acting as the collective purchasing agent, and employees can choose from many different insurers and health plans. It is also unique because of the strong role of the Office of Person-
According to reports by both the U.S. General Accounting Office (2000b) and Long and Marquis (2001), employer purchasing coalitions did not increase health insurance coverage or reduce health care costs, but they did allow small employers to offer a much greater choice of health plans to employees.

Similarly, the U.S. Congressional Budget Office (2000) examined association health plans (AHPs), another type of group formed for the purpose of buying health insurance. The CBO concluded that the most successful AHPs would be the ones that attracted the healthiest populations.

One issue regarding nonemployment-based groups is that insurers have been reluctant to offer insurance to groups formed for the purpose of buying health insurance. The U.S. General Accounting Office (2000b) found that many insurers are reluctant to offer products to small-business purchasing coalitions, and some have even withdrawn from the coalitions because of high administrative costs and the risk of adverse selection associated with purchasing cooperatives.

Similarly, the U.S. Congressional Budget Office (2000) examined association health plans (AHPs), another type of group formed for the purpose of buying health insurance. The CBO concluded that the most successful AHPs would be the ones that attracted the healthiest populations.

Individual Market

Under an individual market, or nongroup market, employees would be responsible for choosing their own health insurance, and could choose any health plan available in their market. Assuming all employers adopted this model, portability of health insurance would no longer be an issue: When employees changed jobs, they would not have to change insurers or providers. Employers could continue to provide a defined contribution to the worker in order for him or her to be able to purchase health insurance. On the one hand, employers could simply “cash-out” their health benefits by increasing worker wages commensurate with the value of the health benefit that the employer was providing. In this case, the defined contribution would...
become taxable income and the employer would no longer be offering health benefits. If wage increases did not keep pace with insurance cost increases, over time, employees would bear an increasing burden of the cost of health insurance. Alternatively, employers might choose to provide vouchers\textsuperscript{14} for employees to purchase health insurance on the individual market. The value of the voucher would continue to be treated on a tax-preferred basis, meaning it would not be included in an employee’s taxable income, since the employer would be paying health insurance premiums directly to the insurer that the employee chooses. One important point to note about this approach is that since employers would be paying the insurer, it is possible that the employer would still be providing a “health plan” that would be regulated by the Employee Retirement Income Security Act of 1974 (ERISA), the principal federal law that regulates employee benefit programs.

Whether employers provide vouchers or simply increase the taxable wages of employees, employers would have to decide whether to provide the same payment per person, or whether to provide higher-risk or unhealthy employees more money than healthy, less risky employees. They would also have to address how to provide payments for workers with families. The decision an employer would have to make regarding how much money to provide employees to purchase health insurance raises all kinds of equity questions, no matter what decision is made. For example, does a small employer have the capacity to risk-adjust the value of a voucher? Currently, a small employer that purchases health insurance for its employees generally pays the same amount per worker regardless of variations in its employees’ health status. Obviously, it would be easier for employers of all sizes to simply pay out an average cost per person.

If all employees received an equal distribution level, it is likely that older employees would not be able to purchase health insurance on their own solely with the funds distributed from their employer. Under the assumption that insurers operating in the individual market are allowed to “age-rate” the premium, older individuals would likely pay higher premiums than younger ones. If insurers set premiums using experience rating, there might be added pressure on employers to value the voucher or cash out the benefit plan based on an actuarial (age-based or risk-adjusted) formula instead of a community-rated basis. Cutler and Reber (1998) include a detailed discussion of risk-adjusted employer payments. One issue with any risk-adjustment mechanism is that age is not a perfect proxy for risk. Within any given age group, there is a wide variation in health status. Also, risk-adjusted payments may need to be recalculated each year, as individual risks change.

Employers may decide not to invest in the resources necessary to provide risk-adjusted payments.

Overall, an individual-based approach to DC health benefits with or without vouchers is much different from a DC retirement plan. Under such a DC health plan, employees likely would face different premiums based on their personal health risk and perhaps other factors such as age and gender. Employees might or might not be able to afford health insurance, depending on how premiums are regulated by the state and how much money their employer provides. Under a DC retirement plan, employers usually give all employees the same percentage of income, but employees are not subject to paying different prices for the same investment: Employees of all ages in all geographic regions pay the same price for any mutual fund or individual stock that they pick to invest in for retirement. But that concept is not easily applied to a DC health benefit, especially in the individual market.

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\textsuperscript{14} A voucher can be thought of as the equivalent of a coupon that could be redeemed for health insurance.

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The purpose of any insurance system is to create an economically
A sustainable way to spread the risk of loss across high-risk and low-risk individuals and to assure that the risk pool costs remain fairly certain. In the United States, the most common source of health insurance coverage is employment-based health plans. These plans are popular because they offer many advantages over other forms of health insurance and types of delivery systems. While the current system offers many advantages over a DC health benefit system, it also is fraught with numerous drawbacks that may be addressed through DC health benefits. The issues discussed below are related to both the current system and a DC health benefit system.

Adverse Selection

Adverse selection exists when a disproportionate number of unhealthy individuals are enrolled in a specific health plan. In other words, a health plan may suffer from adverse selection when unhealthy individuals are more likely than healthy individuals to enroll in the plan.

In a purely voluntary system, such as the U.S. system, the risk of adverse selection is relatively high. In order to reduce adverse selection, insurers often seek to enroll groups of individuals rather than the individuals themselves; even though they are not able to single out higher-risk or unhealthy individuals in the group, they often get the good risks along with the bad risks.

When it comes to insuring a group of individuals, employment-based groups are often considered “natural groups” in the sense that they were formed for reasons other than the purchase of health insurance. Insurers are more willing to provide insurance for a naturally formed group than for a group that was formed solely for the purpose of buying health insurance because the risks of adverse selection are mitigated.

If workers were given the money to buy health insurance directly from an insurer, it is likely that at least some insurers might practice “cream-skimming” or “non-price rationing,” practices designed to cover only the good risks while avoiding the bad ones. In an individual-based system, insurers would likely not have to insure groups of individuals (taking both good and bad risks), which potentially would allow them to avoid bad risks. As long as individuals have a choice of insurer, and a small percentage of those individuals are the heaviest users of health care services, insurers will likely want to avoid that small percentage unless they were able to perfectly price insurance according to risk. In other words, unhealthy individuals would pay much higher premiums than healthier individuals. Some individuals may even be deemed “uninsurable.”

Choice of Plans

As mentioned above, only 17 percent of employers offered their employees a choice of health plans (Marquis and Long, 1999), although between 43–65 percent of employees have access to more than one health plan (Marquis and Long, 1999; and KFF/HRET, 2000). Even when employees do have a choice of plan, they may have a choice of only two or three plans, even though those two or three plans chosen by the employer could be the best plans available in the area. Individuals might have a greater array of health insurance choices if health insurance coverage were not tied to employment. In addition, DC health benefits (whether or not tied to employment) may or may not result in more choices for employees. The additional choices will vary quite substantially with location. While persons in large states and large metropolitan areas might be able to choose from 20 or more insurers, persons in small states would have very few options. For example, in some New England states, consumers expecting to purchase health insurance in the individual market only have a handful of choices.

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15 Individual-based insurance in the market for automobile or homeowner’s insurance does not suffer from the same adverse selection issues as health insurance. Unlike health insurance, automobile insurance is mandatory in most states for persons wanting to drive a car. Because the mandate is not enforced, there are additional costs to drivers that do buy insurance. Drivers often carry additional insurance to cover uninsured motorists. Homeowner’s insurance is also mandated in the sense that most individuals would not qualify for a mortgage unless they prove to the lender that they have homeowner’s insurance.
of choices. In the state of Maine, consumers in the individual market can choose from between five HMOs and one fee-for-service plan. In the states of Vermont and New Hampshire, consumers can choose from four insurers. In the state of Connecticut, consumers in the individual market can choose from 15 insurers. While it is possible that insurers will move to the individual market if consumers move there, it is likely that insurers will first fight for maintaining the employment-based system, as it has demonstrated the ability to avoid adverse selection and provide administrative efficiencies and economies of scale.

Portability

Currently, health insurance is not usually portable from job to job: Employees typically cannot continue to participate in their health plan when they change jobs. As a result, they often remain with current employers for a number of reasons related to their health coverage. A prospective employer may not offer health insurance; the worker (and his or her family members) may have to change doctors when changing health plans; a waiting period may be required before the worker becomes eligible for coverage; the benefits package offered through the prospective employer may be less generous than the worker’s current benefits. These scenarios may result in “job lock”—employees forgoing job opportunities that could potentially increase their productivity, job satisfaction, and income, in order to preserve existing health insurance benefits. Portability of health insurance could help alleviate the loss of health benefits when a worker is offered a new job.

Health Care Costs

The existence of economies of scale in the purchase of group health insurance coverage results in a lower average premium. When economies of scale exist, the average administrative costs of insuring a group make up a smaller percentage of the cost of health insurance. Also, large firms that are able to exert market power are more likely to offer health benefits than small firms because they can purchase the same plan at a lower cost. In addition, employers may be better at finding or negotiating for lower-cost health plans than employees would be in the individual market.

Health care costs could either decline or increase in a DC health care environment. For instance, some employees may choose less extensive benefits than those currently provided by their employer. If health insurance currently acts to induce demand for health care services, utilization of services could decline. Employees may choose health plans that forgo preventive and routine health care in order to save money. However, it should be noted that preventive and routine health care services sometimes detect conditions and diseases at early stages, when both the treatments and costs are less intense. If conditions and diseases are first being treated at later stages, the cost of providing health care may actually be higher in the long run. Furthermore, if it is less costly to treat a disease in its early stage, there is an opportunity cost of late detection in the form of resources being devoted to health care that could be more productive.

16  www.state.me.us/pfr/ins/indhlth.htm
17  See www.bishca.state.vt.us/hca/insur/tips/indivlist1100.htm for the list of insurers offering products in Vermont, and see www.state.nh.us/insurance/LifeHealth/individual.pdf for the list of insurers operating in New Hampshire.
18  www.state.ct.us/cid/appind.htm
19  See Custer et al. (1999) for a commentary on the employment-based system and an individual-based system by insurer representatives.
20  The Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) allows employees at their own cost to continue their health benefit on job change, but only for 18 months. In addition, the premiums that a person pays toward COBRA are usually not excludable from taxable income as are premiums that employers pay toward a worker’s health benefits.
21  The Health Insurance Portability and Accountability Act of 1996 (HIPAA) prevents employers and insurers from imposing pre-existing condition exclusions of longer than 12 months for individuals with a history of prior health insurance. Employers may still require that employees fulfill a waiting period before becoming eligible for any health benefits.
elsewhere. On the other hand, some employees might choose more extensive benefits and ultimately pay more for health insurance. If health insurance currently acts to induce demand for health care services, utilization of services could increase. This concept is known as moral hazard—meaning individuals demand a greater quantity of health care services when health insurance pays for at least part of the cost of receiving care. Another way to understand moral hazard is by looking at a simple demand and supply curve chart. Chart 9 shows the demand for health care services for a person without insurance and for a person with insurance. In this chart, D is the demand curve for health care services and S is the supply curve. An individual without health insurance will demand quantity Q_2 at a price of P_2. However, a person with insurance will usually never have to pay P_2 to receive Q_2 of health care services. Insurance coverage that reduces the price of health care services to zero will increase quantity demanded to Q_3. Findings from the RAND Health Insurance Experiment indicate that as coinsurance rates increased, utilization and expenditures for health care services declined (Manning et al, 1987). However, the risk of increasing prices is that individuals will go without needed care. A recent study found that Medicare beneficiaries will forgo medically necessary drugs when out-of-pocket costs for those drugs increase (Adams et al., 2001).

The provision of health care services may have advantages that go beyond simply improving health. Research has shown that advances in medical technology that have improved life expectancy have had a significant positive impact on the economy. Murphy and Topel (2000) found that improvements in life expectancy due to technological innovations in medical care added $2.4 trillion per year (in 1992 dollars) to national wealth between 1970 and 1990. There could be a cost to society in the form of forgone economic output if mortality is higher because employees are price-sensitive to preventive care and/or not fully utilizing medical technology. Employers might benefit from DC health benefits if they used them to cap their cost. If the cost of health insurance increases faster than real wages, or faster than employer contributions, employers might save money in the long run but the increased use of DC health benefits might also result in care being deferred, lost productivity and economic output, and more costs in the long run.

The degree to which employers can shift the cost of coverage onto employees will vary with the strength of the economy and the labor market. Because health benefits are a form of total compensation, employers will not be able to cut benefits, thereby cutting total compensation, when unemployment levels are low. Today, unemployment rates are running just over 4 percent and more small employers are adding health benefits to recruit and retain employees even when their health care costs are increasing more than 10 percent annually (KFF/HRET, 2000). As seen in cafeteria plan arrangements, this is further evidence that employers cannot simply cut back on their contributions to health benefits when health care expenditures are increasing, because any savings from reducing health benefit costs will likely be offset by higher recruitment and retention costs. Health insurance costs may rise as administrative costs associated with nongroup coverage increase. While
administrative costs may fall if people sign long-term contracts, long-term contracts have not emerged with other forms of insurance. In fact, employees may prefer short-term contracts at first because they do not want to lock themselves into a plan. Locking into a long-term contract would defeat the notion of choice and accountability if employees cannot change plans if they are dissatisfied with the one they chose. Discouraging annual plan hopping, though costly, goes against the idea that employees should be able to choose freely. Insurers may also prefer short-term contracts unless they are able to adjust premiums during the period of time covered by the contract.

**Employer as Advocate**

Employers are not only able to find or negotiate lower health insurance costs than employees can in the individual market, they also act as an advocate for employees during coverage disputes between the insured and the insurer. For example, an employer experiencing widespread dissatisfaction with a specific health plan will either find a new plan or threaten to find a new plan if the insurer does not respond to the issues raised by the plan’s members. Insurers are more likely to respond to an employer than to an individual because of the risk of losing a large group contract.

**Delivery Innovation and Health Care Quality**

Employers frequently become involved in health care quality assessment and policy development. Many believe that employers are better able to monitor quality of health care than individuals, especially since large employers began to pay closer attention to health care quality when costs rose sharply in the 1970s and 1980s. One result was the formation of employer coalitions for the purpose of sharing information about quality that would enable members to contract with the best insurers and providers. For example, the New York Business Group on Health (NYBGH), which began in 1981, is an informational coalition whose members include employers of all sizes, unions, insurance companies, consultants, government agencies, hospitals, and a variety of other provider groups.23 The coalition does not lobby or take positions on issues, but instead engages in typical informational activities such as analyzing health system issues, publishing reports, holding conferences, and generally serving as a forum for addressing health care matters as they relate to employers and the workplace. Furthermore, groups such as the Pacific Business Group on Health and the Leapfrog Group24 are also actively involved in the delivery of quality health care services to workers.

**Tax Treatment**

Under current tax law, individuals who receive health insurance benefits through the work place pay no taxes on the employer contribution or the benefits received. That contrasts sharply with individuals who purchase health insurance directly from an insurer, who generally are not able to deduct the cost of the insurance from taxable income.25 As a result, there are substantial differences in the cost of employment-based coverage vs. individual health insurance that are not attributable to differences in benefits or administrative savings. An individual purchasing health insurance through an insurer would not receive the same tax benefits as one covered through the workplace. Similarly, the self-employed currently are able to deduct only part of the cost of their health insurance, although recent tax legislation is phasing in full deductibility of health insurance premiums.

23 See www.nbch.org (the National Business Coalition on Health) for more information about health care business coalitions.

24 www.leapfroggroup.org

25 Individuals can deduct the portion of health care expenses (including health insurance premiums) that exceed 7.5 percent of adjusted gross income if they itemize deductions. The number of individuals claiming this deduction is quite small and has been declining as a percentage of the number of returns filed (Internal Revenue Service, 1998–1999).
The responsibility that DC health benefits would require of workers for cost, choice of health plan, and risk varies quite substantially with the different types of approaches. It may also induce those already covered to purchase more generous coverage.

Access to Information

The Internet is often cited as a low-cost mechanism to enable DC health benefits to emerge. The Internet can be used not only to provide a backbone to administer health insurance enrollment, and other duties, but can be the outlet for the information consumers need to make informed decisions about their health insurance. Unfortunately, many workers do not have access to the Internet either at work or at home, making the cost of obtaining information about health plans higher than for workers who do have Internet access. Furthermore, of those employees who do have access, they often have access only at work, and some employers may not want them taking the time out of their work schedule to search for information about plans, since it may lead to reduced productivity or higher relative labor costs. Alternatively, some employers may make special arrangements at work for employees without Internet access. Ultimately, if the cost of providing access to information outweighs the benefits, the lower costs associated with DC health benefits may be offset by higher costs elsewhere.

Conclusion

The term “defined contribution” has been used to describe a wide variety of different approaches that employers could use to provide employees with health benefits. There are substantial differences between the DC health benefit approaches put forth so far. Hence, the responsibility that DC health benefits would require of workers for cost, choice of health plan, and risk varies quite substantially with the different types of approaches. As mentioned above, a...
number of different types of DC health plans already exist (e.g. cafeteria plans, FEHBP) and have been used by employers for some time now; however, there is currently no significant presence of DC health benefits existing outside of traditional employment-based models.

Employers are considering moving away from traditional defined benefit health plans to DC health benefits for a number of reasons. The primary reason is to control costs by shifting the responsibility for selecting health care services and plans from the employer to the worker. These changes come at a time when the Internet may enable employers to move to a benefits structure that takes full advantage of new technology. However, a number of issues arise that must be addressed in order for the transition to DC health benefits to occur.

The most difficult issue to address in a DC health benefit market likely will be an infrastructure that addresses adverse selection. Absent a government mandate on individuals to purchase health insurance, it is likely that healthy individuals will choose to go without health insurance coverage or will choose less extensive health plans. Even when DC health benefits are offered within the current employment-based health insurance system, adverse selection may be an issue. Almost every study examined in this paper found evidence of adverse selection when employers moved toward a more defined contribution approach.

As managed care becomes more complex, health care costs continue to rise, and technological innovation in health care services advances, some employers may find it increasingly attractive to define their contribution for employee health benefits, rather than defining the benefit provided. However, despite some early surveys of business executives and health care leaders that predict a shift to DC health benefits in the near future, more recent survey data suggest a number of reasons why the issue is more complex and the outcome less certain. With unemployment rates remaining at or near 4 percent, it is unlikely that many employers will be able to afford to take major steps away from the current employment-based defined benefit type of health insurance system.

DC Health Surveys

A number of surveys have been conducted of both employees and employers to ascertain their interest in concepts underlying DC health benefits. The findings from these surveys paint a mixed picture at best. For example, 60 percent of human resource executives at mid-sized companies wish they could empower their employees to make their own benefit decisions,27 and more than 62 percent of health care leaders report that employers will move to DC health benefits by 2010 (PricewaterhouseCoopers, 1999).28 However, more recent survey data suggest there is a modest level of interest among employers and employees, and that it is unlikely employers will take major steps toward abandoning the existing employment-based health insurance system—although they may abandon their open-ended commitment toward funding the system and may re-evaluate their role in determining which health care services are medically necessary. Moreover, it is unclear how respondents to these surveys defined DC health benefits.

Major DC health surveys include the following:

PricewaterhouseCoopers (PWC) (2000)—In August and September 2000, senior human resource executives from 35 large employers were interviewed in-person to learn about their views on DC health benefits. This survey does not support the earlier findings of PricewaterhouseCoopers (1999) mentioned above. The interviews determined that only one employer out of the 35 (or 3 percent) was in the process of implementing a


28 This survey reported the findings of discussions with 50 “leading” thinkers around the world and 380 top health care executives.
DC health benefit, although it is not known what type of approach was being used. Eight additional employers (23 percent) were considering implementing a DC health benefit within four years, although again it is not clear what approach the employers would take. The majority, 24 employers (or 69 percent), currently were not considering a move to a DC health plan, although they may consider it in the future. Two employers (6 percent) reported that they would not consider the move.

While employers expressed an overall interest in the DC health benefit concept, they reported major barriers toward implementing such an approach. For example, employers did not think employees were ready to assume the responsibility for managing their own health benefits, especially since most employees do not understand the current system. It could be argued however, that employees do not have to understand the current system because employers in large part make the decisions about health benefits for them. Employers also reported that the insurance industry was not capable of providing health insurance in a DC health benefit environment that resulted in employees buying insurance on their own; they were concerned about pursuing an untested approach; and they were concerned about the subsequent reaction of employees, especially in the current tight labor market.

Gaining insight from 35 interviews, while useful, is also challenging. The fact that only one employer was implementing a DC health plan should not be used to suggest that more employers will not implement such plans in the future. First, the sample size is too small to draw conclusions about employer intentions. Second, as noted above, eight employers are considering implementing a DC health plan within four years. It is likely that most employers will wait until other major employers act in order to see how plans are implemented and to gauge the reaction of employees.

Employees may actually react favorably to a DC health plan, depending upon how the conversion is implemented. PWC also interviewed more than 800 individuals by telephone to understand the perspective of consumers. Overall, respondents were more likely to prefer their current plan than any of the DC health plan options described, although some employees do prefer a DC health benefit option over their current plan. For example, 26 percent of respondents would prefer a plan that costs them 10 percent more than their current plan and allows them to go to any doctor with the same health benefits. While this option is not a DC health benefit option, it does suggest that employees are willing to pay higher out-of-pocket costs to improve their choice of health care providers. Just over 20 percent of respondents reported that they preferred a high-deductible plan to their current plan. It should be noted, however, that the option given to survey respondents included a $2,000 deductible combined with a $1,800 employer contribution to a spending account that could be rolled over each year. Very few respondents (9 percent) preferred an increase in cash wages in lieu of health benefits. This has implications for DC health benefits, because if the 9 percent who opted out were the healthiest persons in the risk pool, premiums would increase for those remaining in the pool. Another point to note is that employees who were less satisfied with their health benefits were more likely to prefer cash wages in lieu of health benefits. If dissatisfaction with health benefits increases in the future, employees may be more receptive to DC health benefits and employers will then have more incentive to offer them.

KPMG (1999)—In the fall of 1999, KPMG and Professor Regina Herzlinger of the Harvard Business School focused on Fortune 1000 companies to understand employer and worker attitudes toward DC health plans. Just over 100 senior executives (including 56 chief executive officers) were interviewed for the project. More than 14,600 employees from 177 Fortune 1000 companies were also interviewed. Instead of asking directly about DC health benefits, the concept of DC health benefits was described for employers and employees. The statements used were as follows:

For Employers—“What if your company were no
longer required to select health care insurers for your employees but instead could provide the same level of financial contribution to a tax-advantaged employee account? Each employee could then use these funds in combination with their own contributions to evaluate and purchase their own health care coverage from all the available insurers in their area.”

For Employees—“What if you were able to select from any health plan being offered in your area, at the cost you choose, using both your employer contributions and the personal contributions you make, instead of having your employer select plan options for you? How interested would you be in this concept as a replacement for your current health care selection options from your employer?”

Nearly half of the employers interviewed reported that they were receptive to the concept. Roughly one-third perceived the advantage of the concept as giving employees a greater choice of health plans. Less than 20 percent perceived better cost control as an advantage of the concept.

The survey found that among those receptive to the idea, 80 percent would likely switch to the concept within one year. However, these employers would make the change only if there were no impact on their employees and no impact on the company’s tax situation. More than 90 percent of the employers surveyed were satisfied with the options they currently offered employees. Among employees, 25 percent were extremely interested in the concept, 19 percent were very interested, and 29 percent were somewhat interested. Choice and portability were drivers influencing interest in the concept. Among the 23 percent not interested in the concept, the main reasons were convenience and satisfaction with the current plan, the fact that they trusted the employer to make the most informed decision about their health benefits, and lack of information to make the choice.

William M. Mercer—In 2000, William M. Mercer released the results of two surveys that assessed employers’ opinions about DC health benefits. In the first survey, released in October 2000,29 276 major employers were interviewed. Findings from the survey indicate that 45 percent of employers reported that they were interested in DC health benefits, although only 8 percent were highly interested, with 4 percent highly likely to implement a plan. Most employers (70 percent) reported that they were unlikely to stop providing health benefits within the next two or three years, although 5 percent were highly interested in an exit strategy. The employers were more interested in using the Internet to manage their benefit program.

The second survey released by William M. Mercer in 2000 interviewed more than 3,300 employers (William M. Mercer, 2000).30 Overall, most employers were either not receptive to or never considered DC health benefits (chart 10). Five percent were highly receptive to either vouchers or giving employees the cash value of their health insurance. Twenty-four percent were somewhat receptive to vouchers, while 18 percent

were somewhat receptive to giving employees the money. Overall, 22 percent were not at all receptive to vouchers and 49 percent had never given vouchers any thought, while 53 percent were not receptive to giving employees the money and 24 percent had never given it any thought.

**Kaiser Family Foundation and Health Research and Educational Trust (KFF/HRET)**—In 2000, the KFF/HRET survey of 1,887 employers found that very few employers would likely switch to a DC health plan within the next five years. Overall, 7 percent were very likely to switch and 13 percent were somewhat likely to switch (chart 11).

**WorldatWork/EBRI (1999)**—In the summer of 1999, WorldatWork and EBRI conducted the Value of Benefits survey, a study of 1,000 workers. More than 80 percent of the sample was covered by employment-based health insurance. Findings from the survey indicate that most workers are satisfied with their current health insurance benefits. Nearly 70 percent of those with health benefits reported that they were satisfied with the amount of health benefits received, while 19 percent were willing to trade lower wages for better benefits, and 10 percent were willing to trade fewer benefits for higher wages.

**EBRI (2000)**—In the spring of 2000, EBRI conducted the Health Confidence Survey, a study of 1,001 persons, 556 of whom were covered by employment-based health insurance. Questions concerning DC health benefits were not asked of respondents to the survey. However, survey participants were asked a series of questions in order to gauge their confidence in their own and their employers’ purchasing decision. Findings from the survey indicate that persons with employment-based health insurance coverage were more confident that their employer could select the best available plan than that they could do so if they had to. Specifically, 43 percent of persons with employment-based health insurance were either extremely or very confident that their employer selected the best available health insurance for its employees, while 37 percent were somewhat confident and 20 percent were not confident (chart 12). In contrast, when individuals with employment-based health insurance coverage were asked about purchasing health insurance if their employer or union stopped offering coverage, 32 percent were extremely or very confident that they could choose the best available plan, 32 percent were somewhat confident, and 35 percent were not confident. These findings are consistent with the findings from the surveys of employees mentioned above, indicating that most employees may prefer to stay with the current system.

**Hewitt (2001)**—This survey also found a modest amount of interest in a DC approach. The survey interviewed 633 corporate human resource and finance executives and staff administrators, from more than 600 organizations, who work closely with employee
benefits and health plans in firms with mostly 1,000 or more employees. Among those surveyed, 22 percent either already had or were interested in DC health benefits. Of those considering a DC health benefit in the next few years, an overwhelming 85 percent were considering it to control program costs, though 70 percent reported that returning control of health care decisions to employees was appealing. Thirty percent wanted to limit their liability from lawsuits.

**WBGH/Watson Wyatt (2001)**—A recent survey of 61 large employers, representing more than 1.7 million full-time employees, examined how employers are planning to respond to rising health care costs in 2001. Findings from the survey indicate a modest interest in DC health benefits: 12 percent of the respondents were likely to move to a DC approach and another 19 percent were somewhat likely. The employers surveyed were much more likely to indicate that they would increase employee education with Internet-based medical information (41 percent likely and 47 percent somewhat likely). These employers were also more likely to reduce benefits (27 percent likely and 18 percent somewhat likely).

**Summary**—It should come as no surprise that surveys show both employers and employees to be interested in the concept of DC health benefits. Health care costs are rising and many employees are dissatisfied with the current system, so it is natural that when presented with a new idea, employers and employees would be interested. However, it is not clear from the surveys what “DC health” benefits actually mean to the respondents or how the concept is understood. Also, the surveys did not go far in educating participants on future possibilities related to DC health benefits. As a result, the findings from the surveys described above paint a picture that can be viewed in different ways. While employers and employees are interested in the DC health benefit concept, they express concerns that may become major barriers against moving away from the existing employment-based health insurance system.

**Research Literature**

There is small but growing literature that has tried to quantify the effects of managed competition on health insurance premiums. An examination of the findings from these studies may help to understand the potential impact of DC health benefits. In some cases, these studies have examined “natural experiments” such as when a large employer added a fixed contribution approach to the benefits package. In these cases, the studies used the data from before and after the introduction of a fixed contribution approach to determine its effects. In other studies, the researchers compared public- or private-sector employers that did and did not use a fixed contribution approach to quantify the effects of managed competition.

One of the early studies (Jensen et al., 1984) examined how health plan choice affected premiums. The researchers had data on employee health benefits from 56 employee groups in 1981 and 66 employee groups in 1982, which were collected from two surveys of large employers in Minnesota. The study examined employers that offered a choice between an HMO and a traditional fee-for-service health plan, with a fixed contribution level tied to the cost of the HMO (the lower-cost plan), against employers that did not offer the HMO option. Under the fixed contribution approach, employ-
ees who chose the more expensive plan would fully bear the burden of the additional cost. The study found that offering the HMO option with the fixed contribution tied to the cost of the HMO did not lower health insurance premiums. Lower premiums were found among employees that offered only a traditional fee-for-service plan. The authors concluded that the findings may be due to worker self-selection: Unhealthy (high-users) of medical care tended to join the fee-for-service plan over the HMO, raising the fee-for-service plan premium relative to plans that did not offer an HMO option.

Hill and Wolfe (1997) examined managed competition in the state of Wisconsin. In 1984, Wisconsin moved to a managed competition model to provide health benefits for more than 51,000 state employees. A fixed contribution approach was used in which the worker was required to pay 100 percent of the difference between the lowest-cost plan and the plan that he or she chose, if the difference was more than 5 percent. All HMOs set premiums to be within 105 percent of the lowest-cost plan, ensuring that the premiums were free to employees. As a result, the gap between the HMO and fee-for-service premiums widened, reflecting adverse selection. The initiative had the effect of encouraging competition. After 11 years, the initiative was found to have improved the performance of area hospitals, and influenced the rate of diffusion of new and expensive medical equipment. However, it did not control premium growth, as compared with other measures of medical costs.

Two studies have looked at the effect of moving to managed competition at the University of California (Buchmueller and Feldstein, April 1997; and Buchmueller, 1998). Prior to 1994, the University of California (UC) system set its contribution equal to the cost of the health plan with the largest membership, but in 1994 UC adopted a fixed-dollar premium contribution policy. UC reduced the employer premium contribution to the amount charged by the least costly plan available statewide. The policy led to a high degree of plan switching by UC employees. Of those employees whose premiums did not increase between 1993 and 1994, roughly 5–6 percent switched plans. Of those with a premium increase, 30 percent of the HMO enrollees switched plans, while 50 percent of the fee-for-service enrollees switched plans, with nearly all joining a “free” plan. Overall, a $10 per month increase in out-of-pocket premiums resulted in a roughly fivefold increase in plan switching. The vast majority of those switching plans chose plans that provided similar benefits and did not require out-of-pocket premium contributions.

The movement to a fixed contribution approach produced large savings for UC. However, the policy change also contributed to adverse selection, which drove one plan out of the UC internal market. The high-option plan had to raise premiums 49 percent in 1996 because of adverse selection. Overall, in the three years following the benefits change, real spending by the UC health benefits program declined 24 percent per employee, although this estimate may overstate or understate the true decline due to the change caused by other factors.

Feldman and Dowd (1993) found that managed competition may substantially reduce health care costs by inducing employees to change from more expensive to less expensive health plans. Their study examined the impact that the state of Minnesota’s move from a contribution policy based on the premium for the fee-for-service plan to one based on the premium for the low-cost insurer had on health insurance costs. After the state moved to a defined contribution system, employees were required to pay 100 percent of difference between the cost of the lowest-cost plan and any other plan that they chose. The study found that the cost savings for state employees in the Twin Cities due to employees switching to low-cost plans was 5.9 percent of actual health care premiums in 1993.

A survey of 562 employers offering a choice of health plans in 1994 and 1995 found employers that did not pay more for higher-priced plans experienced a much smaller increase in premiums than employers that did pay more for higher-priced plans (Hunt et al., 1997). Those that did not subsidize the cost of higher-priced plans included employers that offered fixed-dollar
contributions, as well as those that offered a subsidy in favor of the lower-price plans. Overall, the employers that subsidized lower-priced plans experienced a 0.23 percent increase in premiums, while those that subsidized higher-priced plans experienced a 2.15 percent increase in premiums.

In another study by Dowd and Feldman (1998), large public employers were examined. The study found that average premiums for coverage were 7–8 percent more per month for employers paying the full premium, compared with employers using a fixed-contribution approach based on the lowest-cost plan.

Finally, Cutler and Reber (1998) examined competitive reforms that took place at Harvard University. In 1995, Harvard moved to a fixed contribution for health benefits. Contributions were set at 85 percent of the least-costly policy for employees earning below $45,000 a year, 80 percent for employees earning between $45,000 and $70,000 a year, and 75 percent for employees earning more than $70,000 a year. Nonunion employees experienced the change in 1995, while union employees were not affected until 1996, which allowed the researchers to look at a treatment group (the 1995 nonunion workers) and a control group (the 1996 union workers).

The study found that enrollment in the high-cost PPO plan fell 4 percent for the treatment group and was unchanged for the control group in 1995. The reverse was true in 1996. The study also found evidence of adverse selection: Younger employees were found to be more likely to switch to less costly plans than older employees. This resulted in a 16 percent premium increase in the high-cost plan in 1996. Non-random disenrollment continued. Within three years, the high-cost plan was no longer offered because of adverse selection. The welfare loss to employees due to adverse selection was between 2–4 percent of the baseline spending. Also, between 1994 and 1995, the policy change resulted in a one-time cost reduction of between 5–8 percent, mostly coming from insurer profits. Cutler and Reber (1998) concluded that finding the right risk-adjustment mechanism is necessary to minimize adverse selection; otherwise society will forgo a large portion of the potential gains from market reforms.

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