# Employer-sponsored health insurance: what's offered; what's chosen?

Newly available BLS data reveal that one-third of employees who were offered health care plans in 1992–93 had a variety of plan types from which to choose

Michael Bucci and Robert Grant a variety of health care plans, thanks to the growing prevalence of preferred provider organizations (PPO's) and health maintenance organizations (HMO's) offered by employers during the past 15 years. New data from the Bureau of Labor Statistics show that two-fifths of full-time workers in private industry were offered a choice of health plans. More than one-half of full-time private establishment employees were offered a PPO or HMO plan, and nearly one-third of those who were offered health insurance could choose from more than one type of plan.

During 1992–93, 58 percent of private establishments offered their full-time employees at least one health plan. (See table 1.) Nearly 90 percent of those establishments offering a health plan offered only one plan, and less than 2 percent offered more than four plans. However, approximately one-third of private establishment employees that were offered health care could choose from more than one type of plan. These employees selected traditional fee-for-service plans more often than PPO's and HMO's for nearly every combination of plan types offered.

Since its inception in 1979, the Employee Benefits Survey<sup>1</sup> has provided data on the percentage of workers who receive employer-provided health insurance through different types of funding arrangements. During this period, the percentage of employees covered by alternative health care "delivery systems" such as HMO's and PPO's has grown significantly. (HMO's offer prepaid care from a select group of providers; PPO's allow employees to choose their provider, but

offer financial incentives when designated doctors and hospitals are chosen.) As a result, the share of health care participants covered by feefor-service plans has declined.

In the past, the Employee Benefits Survey presented data on the percentage of employees participating in each type of health care plan. However, no attempt was made to distinguish between the type of plan chosen when more than one type was offered to the employee. This article combines health choice data for employees of medium and large private establishments in 1993 with previously released data for employees of small private establishments in 1992 to produce, for the first time, data on private establishment health plans chosen by employees.<sup>2</sup>

#### Theories of choice

When presented with a choice of health insurance plan types, employees must determine which plan best suits their needs. To understand how this process evolves, it is helpful to first examine the theory of demand for insurance and the ways in which individuals make choices.

Irving Pfeffer finds that the individual need for insurance is determined by both personal expectations and uncertainties.<sup>3</sup> In determining whether to purchase insurance, individuals assess their current situation and decide on their expected needs for coverage. In making this decision, the individual must also allow for the potential occurrence of uncertainties.

In theory, the economic well-being of the individual who purchases insurance is increased.

Michael Bucci and Robert Grant were economists in the Division of Occupational Pay and Employee Benefit Levels, Bureau of Labor Statistics. The individual takes the opportunity to forecast expected and unexpected outcomes and, by purchasing insurance, increases the likelihood that these outcomes will be favorable.

S.E. Berki and Marie Ashcraft expand on Pfeffer's hypothesis of the demand for insurance to explain other factors that affect the choice among health plans.<sup>4</sup> According to the authors, enrollees first identify the types of medical services that they expect to utilize. They then single out the plan that best addresses these areas of perceived future need. Berki and Ashcraft classify this as risk perception. Second, enrollees account for their perceived financial vulnerability by selecting a health care plan that best addresses their anticipated financial loss due to illness. The combination of these two factors then leads the individual to look for particular features in a health care plan.

In addition to the explanations of demand for insurance, other factors are at work when choosing a health plan. Most existing models of health choice assume that the individual making the choice operates in a rational manner. First, an individual determines his or her needs. Then, information is gathered on all available options that might meet these needs. All options are considered and ranked according to their ability to fulfill the individual's stated needs. Finally, the option that best meets these needs is selected.

H.A. Simon argues that individuals do not always practice all the steps outlined in the rational decisionmaking model.<sup>5</sup> Instead, they "satisfice." In satisficing, the first step is again to determine one's needs. However, the individual does not gather complete information on all available options. Instead, the first few options that appear or the first that look appealing, following a cursory review, are selected by the individual for further study. The benefits provided by these options are then compared with the individual's needs. The first option that appears to be satisfactory is then chosen.

### Factors influencing the choice

Regardless of the method used, there are many factors that influence the decision to enroll in a particular type of health plan. Many of these have been cited in studies of the health choice decision. Chief among these are immediacy of need, personal characteristics of the enrollee, and plan insurance and delivery characteristics.

Types of plans available. The growth of HMO and PPO enrollment has been one result of efforts to contain health care costs. Critics of fee-for-service plans contend that such plans provide little incentive to limit costs because of their practice of reimbursing enrollees for all usual, customary, and reasonable charges, regardless of who provides these services. Critics also maintain that fee-for-service plans do not always take steps to

Table 1. Number of health care plans offered to fulltime employees, private establishments, 1992–93

	Plans offered—		
Number of health care plans			
All private establishments	,		
Total	100	100	
3	42 50 6 1 (') (')	12 47 18 8 6 3 3	
Medium and large private establishments	100	·	
0	20 38 23 9 6 2 1	100 4 30 26 12 9 6 6 7	
Total	100	100	
0	43 51 5 1 (') (')	20 62 12 3 3 (')	

1 Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

ensure that there is a verifiable need for the care that is provided. In recent years, fee-for-service plans have taken steps to combat these criticisms by instituting numerous cost containment measures, such as preadmission certification and utilization review. Both HMO's and PPO's take steps to curb costs by emphasizing preventive medicine and by providing price reductions for care received from designated providers.<sup>7</sup>

HMO's provide comprehensive medical services to members on a prepaid basis. Typically, HMO's provide full coverage for inpatient care such as room and board, surgery, and medical consultations. Outpatient care, such as doctor's office visits and prescription drugs, may be subject to a copayment. The majority of HMO's require enrollees to receive all services from a panel of physicians and hospitals.

PPO's are another, more recent, alternative to fee-for-service plans and HMO's. PPO's contract with employer groups to provide coverage at discounted rates. Enrollees may then choose to receive care from either panel providers or nonpanel providers. In either case, providers are reimbursed on a fee-for-service basis. If panel hospitals or providers are used, however, enrollees are rewarded through lower required payments for services.

Theories of factors. David Mechanic states that the immediacy of the individual's need for health insurance can have a significant effect on the type of plan chosen. Specifically, if an individual expects to incur a certain type of expense, that individual will seek out a plan that provides the most generous coverage in that particular area. In short, the immediacy of the need can affect the amount of time and effort

Table 2. Health care plans offered to full-time employees by type of plan and contributory status, private establishments, 1992–93

[In percent]

Plan and contributor	Plan offered—		
	By establishment	To employee	
Ail health plans			
Employee coverage			
Wholly employer financed	51	52	
Partly employer financed	53	66	
Family coverage			
Wholly employer financed	26	31	
Partly employer financed	77	84	
Fee-for-service			
Employee coverage			
Wholly employer financed	50	51	
Partly employer financed	52	58	
Family coverage			
Wholly employer financed	28	32	
Partly employer financed	75	76	
Preferred provider organizations			
Employee coverage			
Wholly employer financed	52	43	
Partly employer financed	49	63	
Family coverage			
Wholly employer financed	19	22	
Partly employer financed	81	83	
Health maintenance organizations			
Employee coverage			
Wholly employer financed	38	35	
Partly employer financed	66	75	
Family coverage	1		
Wholly employer financed	21	20	
Partly employer financed	83	88	

NOTE: The percentages add to greater than 100 because one establishment could offer both a wholly employer-financed and a partly employer-financed plan, and therefore be included in both categories. The same holds true for employees.

that individuals allot towards their choice of health plan.

Additionally, persons who are dissatisfied with their present plan will have a more immediate incentive to seek out a different type of plan. Features that are said to lead to high satisfaction include low plan premiums, good physician-patient relationships, low maximum out-of-pocket expenses, limited administrative requirements, and preventive care coverage. HMO's are known for offering the three latter items. Fee-for-service plans offer enrollees more freedom in securing a good doctor-patient relationship. PPO's can provide lower plan premiums and out-of-pocket expenses than fee-for-service plans. If individuals are dissatisfied with any of these features in their present plan, they may look for a new plan that better addresses their needs, provided that the employer offers a choice among plans.

The personal characteristics of the employee may also influence the employee's health care decision. Age, type of family, perceived health status, and financial status may affect an employee's risk perception and financial vulnerability. For instance, a young, single employee who does not expect to require medical care in the future may be willing to pick a plan solely on the basis of its low monthly premium cost. Conversely, an employee who is expecting to become pregnant within the coming year may disregard monthly premium costs and instead look for a plan that provides prenatal and well baby care. HMO's, which emphasize preventive care and typically provide unlimited hospitalization care, might have a greater appeal to this employee. Finally, an employee's decision to enroll in a particular health plan may be influenced by the employment status of his or her spouse. If a married employee is offered only one plan and the plan requires employee contributions, the employee may opt to enroll as a dependent in his spouse's plan if his spouse's employer pays the entire family health care premium.11

Personal attitudes and beliefs may also influence the employee's health plan choice. Some employees may prefer the traditional fee-for-service plans, while others might be more willing to accept alternative health care plans, such as HMO's and PPO's.

The final determinants that influence the type of health plan chosen are plan insurance and delivery characteristics. <sup>12</sup> Insurance characteristics include such features as the types of medical services covered, the monthly premium cost of the plan, and cost-sharing aspects of the plan (such as the deductible, coinsurance, and maximum benefit payments). These features are among the more obvious items that may be studied as an individual makes an initial assessment of a plan's relative worth. For example, if an employee is presented with a choice of two health care plans — an HMO and a PPO — the employee may choose solely on the basis of the difference in the monthly premiums of the two plans.

A plan's delivery characteristics are slightly less obvious.

As such, they are more open to the individual decisionmaker's perception and attitudes. Delivery characteristics can be categorized by: access to care, continuity of care, comprehensiveness of coverage, and clinical quality.<sup>13</sup> Because these factors are less apparent, it is helpful to look at them in detail.

In Berki and Ashcraft's view, access to health care is made up of three separate components: spatial, psychosocial, and temporal access. Spatial access refers to the relative distance between the site where medical care is provided and the individual's home or workplace. Psychosocial access refers to the ease of communication between patient and provider. This can be affected by a perceived difference or similarity in social standing. Temporal access can be described as the length of time that the patient must wait between the initial attempt to obtain care and the time when that service is ultimately delivered.

In assessing the health care choice made by employees, these three issues of access can provide quite different results depending on the type of plan chosen. Additionally, the importance attached to these variables can vary quite markedly depending on the individual employee. For some, the location of the health care facility may be of utmost importance. Others may wish to see a doctor as soon as possible. Access to care, then, can be a powerful determinant of the employee's health choice.

Continuity of care may also be important. The decision to join a particular health plan can be heavily influenced by an employee's desire to continue an existing doctor-patient relationship. To many employees, this relationship is the most important feature of the health care arrangement. An employee may be willing to spend more money (in the form of a higher premium) to maintain a long-standing relationship. To maintain freedom of choice among providers, some individuals may opt not to join an HMO or PPO. If, however, an employee has little history of illness and has not developed a relationship with a particular doctor, the employee may be more willing to choose a plan on reasons of cost alone.

Another delivery characteristic is comprehensiveness of coverage. This refers to the ability to receive all types of care at one site. For instance, a group/staff model HMO<sup>15</sup> may provide all outpatient services under one roof, something that might not be available with a traditional fee-for-service arrangement. This convenience may have a strong appeal to some potential enrollees.

Finally, clinical quality of care is another delivery characteristic. Clinical quality pertains to the perceived or actual necessity and effectiveness of the medical services provided. This may, in large part, be based on past experiences with a health care provider. If past experiences with one type of delivery system have resulted in satisfaction with the effectiveness of care, an employee may seek out this type of plan.

Table 3. Health care plans offered to full-time employees by type of plan, private establishments, 1992–93

(In percent)

	Pian offered—		
Type of plan	By establishment	To employee	
All private establishments			
Total	100	100	
With health care	58	88	
Fee-for-service Preferred provider	45	60	
organization Health maintenance	9	26	
organization	9	32	
Without health care	42	12	
Medium and large private establishments			
Total	100	100	
With health care	80	96	
Fee-for-service Preferred provider	52	62	
organization	25	38	
organization	30	49	
Without health care	20	4	
Small private establishments			
Total	100	100	
With health care	57	80	
Fee-for-service Preferred provider	44	58	
organization	9	16	
organization	8	18	
Without health care	43	20	

NOTE: The percentages add to greater than 100 because one establishment could offer more than one type of health plan, and therefore be included in more than one category. The same holds true for employees.

Of course, a relatively healthy individual with no previous medical care history may have no basis for assessing quality of care in different fee arrangements. This person may attach little weight to this variable or may rely on the opinions of coworkers.

The presence of managed care—the process of ensuring that the services provided are medically necessary and delivered in a proper setting—may also affect the enrollee's attitude towards the clinical quality of care received. Because the major focus of managed care programs is to ensure that all care provided is necessary and prudent, HMO's and PPO's (which have instituted managed care programs to a greater extent than fee-for-service plans<sup>16</sup>) may attract more employees for whom clinical quality of care is important. On the other hand, some potential enrollees may view managed care procedures as intrusive and time-consuming.

[In percent]

Table 4.	Health plan combinations offered to full-time employees, private establishments, 1992–93
1	employees, private establishinens, 1772-73
ì	• • • •

	Plan offered—		
Type of plan	By establishment	To employee	
All private establishments		<u>.</u>	
Total	100	100	
Fee-for-service only Preferred provider organization	72	47	
(PPO) only Health maintenance	13	15	
organization (HMO) only	8	8	
Fee-for-service and PPO	1	2	
Fee-for-service and HMO	4	15	
PPO and HMO	2	9	
Fee-for-service, PPO, and HMO	1	5	
Medium and large private establishments			
Total	100	100	
Fee-for-service only	44	32	
Preferred provider organization			
(PPO) only	18	15	
Health maintenance organization		]	
(HMO) only	8	6	
Fee-for-service and PPO	2	2	
Fee-for-service and HMO	17	22	
PPO and HMO	9	14	
Fee-for-service, PPO, and HMO	3	9	
Small private establishments			
Total	100	100	
Fee-for-service only	74	62	
Preferred provider organization	1	1	
(PPO) only	12	14	
Health maintenance organization			
(HMO) only	8	11	
Fee-for-service and PPO	1	1	
Fee-for-service and HMO	3	7	
PPO and HMO	2	3	
Fee-for-service, PPO, and HMO	(')	1	
		l	

1 Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

## Plan offerings

Nearly nine-tenths of full-time employees in private establishments were offered at least one health care plan by their employer, but only three-fifths of private establishments offered at least one health plan. This discrepancy results from the fact that larger establishments were more likely to offer health care than smaller establishments. Similarly, larger establishments also offered more types of health plans. Only one-tenth of private establishments offered more than one type of plan, but nearly one-third of private establishment

employees were offered more than one type of plan.

Approximately one-half of the private establishments in the survey paid the full cost of employee coverage for at least one health plan. (See table 2.) Barely more than one-quarter of private establishments paid for at least one family plan in full. Private establishments were more likely to pay for the entire cost of a fee-for-service plan or PPO than an HMO.

Fee-for-service plans were the most common type of health plan offered by private establishments, with slightly fewer than one-half offering such plans. (See table 3.) PPO's and HMO's were offered by an approximately equal number of establishments, with one-tenth offering each. More than nine-tenths of establishments offering health care offered only one type of plan, with a fee-for-service plan being the most common plan type offered by itself. (See table 4.) Seventy-two percent of establishments offered only fee-for-service type plans, 13 percent offered only PPO's, and 8 percent offered HMO's. When establishments offered more than one type of plan, the most common combination was a fee-for-service plan in conjunction with an HMO, offered by 4 percent of establishments.

As noted earlier, larger establishments were more likely to offer health care to their employees, and were more likely to offer a greater variety of choices. For example, 58 percent of the establishments offering health care employed 88 percent of employees, and only 12 percent of employees were not offered at least one health care plan. In addition, even though less than 2 percent of establishments offered four or more health plan choices, 15 percent of employees could select from four or more health plans.

Approximately seven-tenths of the employees who were offered health care plans by their employer had only one type of plan available, with the rest having a choice of at least two types of plans. The most common options open to employees were a fee-for-service only, a PPO only, and a fee-for-service and an HMO. Approximately 5 percent of employees could choose from all three types of plans.

#### **Employee choice**

Regardless of the combination offered, when a fee-for-service plan was offered it was the most common choice. When fee-for-service plans were offered along with HMO's, approximately 60 percent of full-time employees chose a fee-for-service plan. When the combination included fee-for-service plans and PPO's, employee choices were evenly divided. Employees were also nearly equally split between PPO's and HMO's when such a choice was given. When all three types were offered, fee-for-service plans were chosen by 40 percent, while HMO's and PPO's were each selected by 30 percent of employees. These data did not vary by establishment size. (See table 5.)

#### Table 5.

Percent of participants enrolled in health care plans, by combination of plans offered, private establishments, 1992-93

	Type of plan			
Combination offered	Total	Fee-for- service	Preferred provider organiza- tion (PPO)	Health mainte- nance organiza tion (HMO)
All private establishments				
Total with a choice	100	40	24	36
Fee-for-service and PPO	100	51	49	
Fee-for-service and HMO	100	62	<b>-</b>	38
PPO and HMOFee-for service, PPO,	100	-	55	45
and HMO	100	40	30	30
Medium and large private establishments				
Total with a choice	100	38	25	37
Fee-for-service and PPO	100	52	48	
Fee-for-service and HMO	100	61	\   —	39
PPO and HMOFee-for-service,	100	-	56	44
PPO, and HMO	100	40	30	30
Small private establishments				
Total with a choice	100	47	20	33
Fee-for-service and PPO	100	51	49	]
Fee-for-service and HMO	100	65	l <del>-</del>	35
PPO and HMO Fee-for-service, PPO,	100	_	52	48
and HMO	100	36	35	29

Note: These data are limited to full-time employees.

As the following tabulation shows, 14 percent of employees were in establishments offering a health plan, but elected no coverage. Among several possibilities for this situation, some reasons are that employees may be covered on a spouse's health plan, may not be able to afford the premiums, or may be ineligible due to a service requirement.

Type of plan	Percent choosing
Total	100
No plan	
Fee-for-service	51
PPO	19
HMO	16

These new data indicate that despite the availability of choices among health care plans, employees frequently choose traditional fee-for-service arrangements. Also apparent is that larger establishments are more likely than smaller ones to offer choices of health care plans and alternative health care arrangements. Thus, while the percent of establishments offering choices and alternatives is small, such features are available to a sizable proportion of employees.

### **Footnotes**

- ¹The Employee Benefits Survey has provided information on the incidence and provisions of employer-provided benefit plans since 1979. The survey includes details on paid leave, employer-sponsored insurance, and retirement. Three different sectors of the economy are studied. Medium and large private establishments (100 or more employees) are studied in odd years. State and local governments and small private establishments (1–99 employees) are studied in even years. Data in this article are from the 1992–93 surveys of private establishments; preliminary work on this subject has been published in 'Health Insurance: Employer Offerings and Employee Choice in Small Private Establishments," *Compensation and Working Conditions* (Bureau of Labor Statistics, August 1994), p. 1, and "Health Insurance: BLS Reports on Employer Offerings and Employee Choice in State and Local Governments, 1992" (Summary 94–7).
  - <sup>2</sup> The data used in this analysis are limited to full-time employees.
- <sup>3</sup> Pfeffer, Irving, *Insurance and Economic Theory* (Homewood, IL, Richard D. Irwin Inc., 1956) p. 113.
- <sup>4</sup> S.E. Berki, and Marie Ashcraft, "HMO Enrollment: Who Joins What and Why: A Review of the Literature," Milbank Memorial Fund Quarterly/Health and Society, vol. 58, no. 4, 1980, pp. 588-632.
  - <sup>5</sup> H.A. Simon, Administrative Behavior (New York, N.Y., Free Press, 1976).
- <sup>6</sup> Fundamentals of Employee Benefit Prorams, 4th ed. (Washington, D.C., Employee Benefits Research Institute, 1990) p. 209.
- <sup>7</sup> The following discussion of HMO's and PPO's is taken largely from Thomas P. Burke and Rita S. Jain, "Trends in employer-provided health care benefits," *Monthly Labor Review*, February 1991, pp. 24–30.
- <sup>8</sup> David Mechanic, "Consumer Choice Among Health Insurance Options," Health Affairs, Spring 1988, p. 139.
- 9 While an immediate need for a certain type of care may influence the employee's choice of health plans, it should be noted that many plans impose both eligibility requirements and exclusions for pre-existing conditions on employees. For example, in 1993, 52 percent of full-time employees in medium and large private establishments had to fulfill a certain length of service before being eligible for health insurance coverage. In addition, 57 percent of full-time participants in plans other than HMO's were required to be enrolled in a plan for a certain length of time before coverage would be granted for a medical condition that existed prior to initial enrollment in the plan.
- <sup>10</sup> Robert Puelz, "A Selection Model for Employees Confronted With Health Insurance Alternatives," *Benefits Quarterly*, Second Quarter 1991, p. 19.
- <sup>11</sup> The Employee Benefits Survey tabulates health plan "participants," that is, individuals who are actually covered by their employer's plan. Employees who decline coverage, because they are covered by their spouses' health care plan or for other reasons, are not considered health plan participants.
- 12 Berki and Ashcraft, p. 591 (diagram).
- <sup>13</sup> The discussion of delivery characteristics draws significantly from Berki and Ashcraft's "HMO Enrollment: " pp. 596-603.
- <sup>14</sup> In a study of the health choice made by new employees of a university, employees were asked to rank choice criteria. The belief that the doctor's primary concern was your health was ranked as "very important" by 72 percent of the respondents; 65 percent said that feeling that your doctor's concern for your health outweighed a concern for limiting costs was "very important." The only item rated as more important was the ability to get an appointment quickly. See David Mechanic, Therese Ettel, and Diane Davis, "Choosing Among Health Insurance Options: A Study of New Employees," *Inquiry*, Spring 1990, p. 17.
- <sup>15</sup> There are two primary types of HMO's: group/staff models and individual practice associations. Group/staff HMO's provide services at a central facility. Individual practice associations are made up of individual providers who operate from their own offices.
- 16 Both HMO's and PPO's have inherent managed care features. Data from

the Employee Benefits Survey give testament to this. For example, in 1993 two-fifths of medium and large establishment employees enrolled in fee-for-service plans were required to seek a second surgical opinion, while

nearly all HMO enrollees were required to do so. See Employee Benefits in Medium and Large Private Establishments, 1993, Bulletin 2456 (Bureau of Labor Statistics, November 1994.)

## APPENDIX: Determining the choice in health plans

Three groups of data were extracted from the Employee Benefits Survey's database for this article: the percent of establishments offering health plans, the percent of employees offered health plans, and the percent of employees participating in health plans.

Data on the types of health plans chosen by employees are routinely collected and published by the Bureau. However, for this study, the options available to the employee had to be determined in addition to their final choice. This was accomplished by placing establishments into groups depending on the types of plans offered to the occupations within that establishment (fee-for-service only, fee-for-service plus HMO, and so forth), then determining the number of employees in the establishment (to determine the number of employees offered that combination), and finally determining what plans the employees actually chose.

Several assumptions were made concerning the data. First, it was assumed that all plans offered by an establishment were offered to all employees in that establishment. However, it may be true that certain occupations or groups of workers are not offered certain plans, and therefore workers in those groups should not be counted as being offered these plans. For example, an establishment may offer two separate plans, an HMO for salaried employees only and a fee-for-service plan for hourly employees only. Under the assumption on counting workers in certain occupations, both the salaried and hourly employees would be shown as being offered a choice between a fee-for-service plan and an HMO.

To determine the effect of this assumption, the data were studied in two different ways. First, all occupations were assumed to have been offered a plan if at least one employee in the establishment was in the plan. The data were then tabulated using this assumption. A second test assumed that any occupation that had no participants in a given plan was not offered that plan. The results of these two tests were nearly identical, which show that making this assumption did not significantly alter the data.

The second assumption involved imputed plan participation and provisions. When an establishment is unable to provide a reliable estimate of the number of employees who participate in a health plan, the survey must estimate the number of employees participating in the plan(s) offered by the establishment. Each of these participant values is imputed by randomly selecting a plan of the same type from a similar establishment. The participant rate from this randomly selected plan is then used to approximate the number of participants for the plan that is missing a participation value.<sup>2</sup> Similarly, when an establishment is unable to provide detailed plan provision information, provision data from similar plans are used.

This assumption also presented potential problems. Although participation data are drawn from similar establishments, it is possible that the behavior exhibited by employees of one establishment may not be mirrored by employees in another comparable establishment. As a result, the data were again examined using two different hypotheses. The dataset containing both imputed and nonimputed participation data was compared with the dataset with nonimputed data only. As with the previous test, both datasets provided similar findings.<sup>3</sup> Thus, findings shown in this article include both imputed and unimputed data.

#### Footnotes to the appendix

¹ Estimates from the Employee Benefits Survey are calculated from data on the benefits characteristics of employees in selected occupations, not the benefit characteristics of establishments. Data are collected after randomly selecting occupations within each surveyed establishment. The availability of a certain benefit is then determined by whether or not the benefit is offered to the employees in these particular occupations. It is possible that the occupations that are selected may not have certain types of benefits offered to them while other, nonselected, occupations may be offered such benefits. It is also possible that a plan may be offered, but no employees participate in it. When the latter situation occurs, the Employee Benefits Survey would not register the existence of this plan. The prob-

ability selection of occupations across a nationwide sample limits the effect of such an occurrence. For more information, see Appendix A: Technical Note in *Employee Benefits in Medium and Large Private Establishments, 1993*, Bulletin 2456 (Bureau of Labor Statistics, November 1994).

<sup>2</sup> For more information, see the appendices in *Employee Benefits in Small Private Establishments*, 1992 (Bureau of Labor Statistics, May 1994) and *Employee Benefits in Medium and Large Private Establishments*, 1993.

<sup>3</sup> This may be expected because the imputed data are created from the nonimputed data.