Employer-sponsored dental insurance eases the pain

Dental care plans grew in prominence from 1980 to 1986; plan cost control measures, as well as plan benefits, kept pace with the rising cost of dental care

RITA S. JAIN

In recent decades, dental insurance plans have been one of the fastest-growing items on the employee benefits scene. Between 1967 and 1985, the number of persons in the United States with dental coverage grew from 4.6 million to nearly 100 million,[1] largely because of the adoption of worksite-based group plans. In 1986, 68 percent of all full-time employees in medium and large firms participated in dental plans financed wholly or partially by their employers.

These plans provide a variety of services, ranging from routine examinations to more expensive treatments such as orthodontia and restorative procedures. But more often emphasis is on preventive care.

This article examines several key features of dental plan design, including benefits provided, methods of reimbursement, funding arrangements, and employee contributions to plan premiums. It is based on data from the Bureau of Labor Statistics' 1980–86 surveys of benefits for full-time employees in medium and large firms. The 1986 survey studied a sample of 1,500 establishments, which represented approximately 46,000 business establishments employing 24 million workers; the coverage of the 1980–85 surveys was virtually the same.[2] Data were tabulated for three broad occupational groups: professional and administrative workers, technical and clerical workers, and production workers. The first two groups are considered white-collar workers, in contrast to blue-collar or production workers.

The 1986 survey studied approximately 1,900 plans providing dental benefits. (Plans with dental benefits limited to oral surgery or other services necessitated by accidental injury were not classified as dental plans.) Included in the study were both comprehensive plans combining dental and other health benefits and dental plans that were independent of plans providing hospital, surgical, medical, and related health benefits. In 1986, five-eighths of the participants had dental coverage that was separate from their main health insurance plan.

Rita S. Jain is an economist in the Division of Occupational Pay and Employee Benefit Levels, Bureau of Labor Statistics.

Dental plan participation: 1980–86

According to the 1986 Employee Benefits Survey, dental coverage, wholly or partially financed by the employer, was available to 71 percent of full-time employees with health insurance in medium and large firms—a 27-percent increase in the proportion recorded for 1980. Coverage rose 28 percent for white-collar workers and 21 percent for blue-collar workers.

However, the rise in dental plan participation was uneven throughout the 1980–86 period. Participation grew gradually, reaching a peak in 1984; since then, there has been a small decline for all occupational groups. The slowdown in the growth of dental insurance participation may be traced to several factors. Employment declines in some industries, such as basic steel, which traditionally provided dental benefits, affected overall participation rates. Efforts to control health care costs have caused some companies to reconsider expanding their benefit programs to include dental care. Additionally, flexible benefits programs enabled employees to switch insurance plans in favor of other benefits. The following tabulation shows the percent of full-time health insurance participants with dental benefits in medium and large firms during the 1980–86 period:

Years	*All participants*	*Professional and administrative*	*Technical and clerical*	*Production*
1980	56	60	55	56
1981	61	67	60	59
1982	68	76	68	64
1983	74	79	72	72
1984	77	79	75	76
1985	76	79	76	73
1986	71	75	72	68

Extent of coverage

In 1986, 98 percent of the participants were in dental plans with provisions that covered all family members. Employees were more likely to share in plan costs if coverage was extended to their dependents. One percent were in plans that covered the employee only; an additional 1 percent had coverage for only the employee and the spouse. Less than 0.5 percent of the participants were in plans providing dental benefits only for dependent children.

Nearly all dental plans covered a wide range of services, including preventive care, such as examinations and x rays; restorative procedures, such as fillings, inlays, and crowns; dental surgery; and periodontal care (treatment of tissues and bones supporting the teeth). Plans paying all or part of the cost of orthodontic services, at least for dependent children, covered 75 percent of dental participants in 1986, up from 62 percent in 1980. Aside from the growth in orthodontic benefits, there was little change in the incidence of services covered during the period studied. The following tabulation is illustrative:

Procedure	*Percent of plan participants*		
	1980	*1983*	*1986*
Examinations	100	99	100
Fillings	100	100	100
Crowns	97	99	98
Orthodontia	62	73	75

Table 1. Percent of full-time participants in dental plans with scheduled cash allowances by maximum payable for selected dental procedures, medium and large firms, 1986

Procedure	All participants	Professional and administrative participants	Technical and clerical participants	Production participants
Examinations:				
Total	100	100	100	100
$10 and under	2	—	1	5
$11–15	5	2	2	9
$16–20	14	10	6	21
$21–25	19	19	23	16
$26–30	11	8	6	17
$31–35	15	17	20	11
$36–40	9	9	11	9
$41–50	22	31	30	11
More than $50	1	1	2	[1]
Not determinable	1	2	[1]	[1]
Fillings:				
Total	100	100	100	100
$10 and under	14	10	6	21
$11–15	36	37	34	36
$16–20	42	42	51	36
$21–25	7	8	6	6
More than $25	1	1	1	1
Not determinable	1	2	[1]	1
Dental surgery to repair fracture of the mandible:				
Total	100	100	100	100
$25 and under	6	4	3	8
$26–50	13	12	10	16
$51–75	22	28	25	16
$76–100	11	11	11	11
$101–125	24	21	33	22
$126–150	4	5	6	4
$151–175	4	4	3	4
$176–200	2	3	2	—
More than $200	9	6	4	15
Not determinable	5	6	3	9
Crowns:				
Total	100	100	100	100
$100 and under	6	4	6	8
$101–150	22	18	13	29
$151–200	31	32	31	30
$201–300	40	44	48	32
$301–400	1	1	1	[1]
Not determinable	1	2	[1]	[1]

[1] Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dashes indicate no employees in these categories.

Methods of reimbursement

Dental plans pay for covered services in one of four ways: (1) full or partial payment of usual, customary, and reasonable charges (UCR)[3]; (2) payment according to a schedule (list) of cash allowances; (3) incentive payment schedules; and (4) copayment methods. The methods used varied somewhat in 1986 by the type of dental proce-

dure, as the following tabulation shows:

Procedure	Percent of plan participants covered for procedure				
	Total	UCR	Schedule of cash allowances	Incentive schedule	Copayment method
Examinations	100	80	17	3	*
Fillings	100	69	27	3	1
Crowns	100	70	27	1	2
Orthodontia	100	77	20	—	3

* Less than 0.5 percent.

Dash indicates no participants in this category.

Over the 1980–86 period, little change was noted in the prevalence of the reimbursement methods.

For all procedures examined, the most common type of reimbursement was through the UCR method. However, the portion of UCR charges paid for by dental plans often varied by the type of procedure. To encourage preventive care, less costly diagnostic and preventive procedures were usually covered at 80 percent or 100 percent. (It is assumed that participants who seek preventive care are less likely to require more expensive restorative work in the future.) Fillings, surgery, and periodontal care were most likely to be covered at 80 percent; while the most costly procedures—inlays, crowns, and orthodontia—were often reimbursed at 50 percent of UCR charges. The following tabulation shows reimbursements for 1986:

Procedure	Percent of plan participants				
	Total	Charges covered at 50%	80%	100%	Other %
Examinations	100	1	23	71	5
Fillings	100	6	55	13	26
Crowns	100	50	18	6	26
Orthodontia	100	81	5	5	9

During the 1980–86 period, there was little change in the proportion of UCR charges paid for by the plans studied.

In 1986, about one-fourth of the dental plan participants were reimbursed based on a schedule of cash allowances. In this arrangement, dental services are paid for up to a maximum dollar amount specified for each procedure. Restorative procedures, such as fillings, dental surgery, and crowns, were more likely to be subject to this type of schedule than preventive procedures (examinations and x rays).

Table 1 shows the range of cash allowances that plans had specified for selected dental procedures. In 1986, plans typically paid from $15 to $50 for most routine dental examinations, while simple fillings were seldom reimbursed for more than $25. However, coverage for dental surgery to repair a fracture of the mandible (jaw) usually allowed payments up to $125; and payments for more expensive crowns commonly ranged from $150 to $300.

Unlike the UCR reimbursement method, scheduled allowances do not automatically change in tandem with prices for dental services. However, survey data reveal that plan sponsors revise scheduled allowances, on average, to reflect increases in the price of dental care. The following tabulation shows that, for selected procedures, average allowances increased 11 to 49 percent from 1983 to 1986. During this period, the dental services component of the Consumer Price Index for All Urban Consumers rose 19 percent.

Procedure	Average maximum benefit payment		Percent increase
	1983	1986	
Examinations	$27	$30	11
Fillings	13	15	15
Dental surgery to repair fracture of the mandible	81	121	49
Crowns	166	194	17

Three percent of dental plan participants had services covered by an incentive schedule in 1986. To encourage participants to seek preventive care, under this method of reimbursement the percentage of dental expenses paid by the plan increases each year if the participant is examined regularly by a dentist. For this reason, preventive procedures were more likely to be subject to incentive schedules than complex restorative and orthodontic procedures.

Table 2. Percent of full-time participants in dental plans by type of deductible and method of reimbursement, medium and large firms, 1986

Method of reimbursement[1]	Total	With dental deductibles—			No deductible
		Separate deductible		Overall plan deductible	
		Annual	Lifetime		
Examinations:					
Total	100	15	2	4	79
Scheduled cash allowance	100	7	1	1	92
UCR	100	17	2	4	77
Incentive schedule	100	6	25	—	70
Fillings:					
Total	100	54	7	3	35
Scheduled cash allowance	100	44	17	1	38
UCR	100	60	2	5	32
Incentive schedule	100	22	25	—	53
Dental surgery:					
Total	100	55	7	3	35
Scheduled cash allowance	100	47	19	1	34
UCR	100	59	2	4	34
Incentive schedule	100	25	28	—	47
Crowns:					
Total	100	58	5	4	33
Scheduled cash allowance	100	46	16	1	37
UCR	100	65	1	5	29
Incentive schedule	100	38	30	—	32
Orthodontia:					
Total	100	24	13	3	61
Scheduled cash allowance	100	22	19	—	58
UCR	100	25	11	4	60
Incentive schedule	—	—	—	—	—

[1]Services reimbursed through the copayment method were not subject to deductibles.

NOTE: Because of rounding, sums of individual items may not equal totals. Dashes indicate no employees in these categories.

Table 3. Percent of full-time participants in dental plans with deductibles by type of deductible, medium and large firms, 1986

Type of deductible	Preventive, restorative, and orthodontic	Preventive and restorative	Restorative and orthodontia	Preventive only	Restorative only	Orthodontia only
Subject to basic dental deductible	10	26	24	(1)	43	10
Yearly deductible:						
Total	9	23	18	(1)	41	1
Under $25	(1)	1	—	—	—	—
$25	4	7	6	(1)	18	—
$26–49	(1)	1	(1)	—	(1)	—
$50	5	12	11	(1)	20	1
$51–99	(1)	(1)	1	—	1	—
$100	(1)	1	1	—	1	—
More than $100	—	(1)	—	—	(1)	—
Lifetime deductible:						
Total	(1)	3	6	—	2	9
Under $25	—	(1)	—	—	—	—
$25	—	(1)	—	—	—	—
$26–49	—	—	—	—	—	—
$50	(1)	(1)	6	—	2	8
$51–99	—	2	—	—	—	1
$100	—	(1)	—	—	—	(1)
More than $100	—	—	—	—	—	(1)
Subject to both	—	—	—	—	(1)	—

[1]Less than 0.5 percent.

NOTE: Because of rounding and the existence of multiple deductibles in a plan, sums of individual items may not equal totals. Dashes indicate no employees in these categories.

One to three percent of dental plan participants in 1986 were required to make copayments, a reimbursement method that was not found in the 1980 survey. Under this arrangement, the employee pays a specified amount (such as $10) for a dental procedure, and the plan pays the balance. It is essentially the opposite of the scheduled cash allowance method. Restorative procedures and more expensive procedures, such as orthodontia, were more likely to be paid for under this method than were preventive procedures.

Deductible requirements

Participants were commonly required to pay a specified amount of dental expenses (deductible) before the plan paid any benefits. The most common requirement was a $25 or $50 deductible each year. However, some plans called for the participant to pay a "lifetime" deductible (usually $50) only once while a member of the plan, rather than every year. White-collar workers were more likely than blue-collar workers to have plans with deductible requirements, a pattern that has remained essentially the same since first studied in 1980.

Deductibles were found in combined hospital-medical-dental plans and also in separate dental plans. In the combined plans, the deductible almost always applied specifically to dental charges and not to all health care expenses.

Four percent of dental plan participants were subject to overall health insurance plan deductibles. In these plans, dental expenses were included along with other types of medical expenses in meeting an overall deductible. For example, if the health insurance plan deductible was $200, the participant would have to pay $200 in dental or other medical care expenses before the plan would pay any benefits.

The following tabulation shows that separate dental deductibles have become somewhat more common since 1980. However, the amounts of the deductibles have changed little: in all 3 years, annual deductibles were evenly divided between $25 and $50 amounts, while $50 was the most common lifetime deductible. This is in marked contrast to the rise in overall health insurance deductibles.[4] The data exclude separate deductibles for orthodontic procedures.

	Percent of plan participants		
Deductible requirement	*1980*	*1983*	*1986*
Deductible applies only to dental expenses	53	61	63
Deductible applies to medical and dental expenses	5	8	4
Without deductible	42	32	32

When dental deductibles were specified, they did not necessarily apply to all procedures. As shown in table 2, only 17 percent of participants in 1986 had to satisfy a separate dental deductible before receiving reimbursement for preventive care, compared with about 60 percent for more expensive treatments—fillings, dental surgery, and crowns. Deductibles are less commonly applied to preventive procedures to avoid discouraging participants from getting regular checkups.[5]

Orthodontic services, which are likely to be the most costly dental procedures, were subject to separate dental

deductibles for nearly two-fifths of the participants. Because orthodontic work often continues beyond 1 year and is not likely to recur, lifetime—rather than annual—deductibles were more common than for other procedures. For the same reasons, deductibles—which are designed to eliminate multiple small claims—are often not applied to orthodontic expenses.[6]

Table 2 also shows the relationship between the method of reimbursement and deductibles. Except for examinations, there was no appreciable difference in the incidence of deductibles among plans basing payments on the UCR and scheduled allowances methods; in UCR-based plans, lifetime deductibles were less likely to appear than in plans based on scheduled allowances.

Deductible expenses, for the most part, apply to groups of dental expenses rather than to all procedures or to each separate procedure. Table 3 examines the relationship between the type and amount of deductibles and the dental procedures to which they applied. Deductibles were most commonly applied to restorative care alone, and were evenly split between $25 and $50 annual amounts. In plans in which either preventive or orthodontic expenses were included under the same deductible, an amount of at least $50 was specified more frequently. When a separate deductible applied to orthodontic expenses, it was usually a single lifetime deductible of $50 per individual.

Maximum benefit limits

Nearly all participants in 1986 were in plans with a ceiling on total payments for dental care. Maximum limits on nonorthodontic care were applied on a yearly basis, while orthodontia was subject to separate lifetime limits.[7]

In 1986, maximum annual limits for nonorthodontic services applied to 88 percent of dental plan participants. The most common limit was $1,000; few exceeded $1,500. The trend since 1980, however, has been to raise the annual ceilings. Ceilings greater than $1,000 applied to 19 percent of plan participants in 1986, up from 11 percent in 1983, and 6 percent in 1980.[8]

Orthodontic care was usually subject to a separate lifetime cap on payments from the plan. In 1986, maximum lifetime limits applied to 94 percent of participants in plans that covered orthodontia. The most common lifetime ceiling was $1,000. Over the 1980–86 period, orthodontic maximums increased significantly. Limits of $1,000 or more applied to 17 percent of participants in 1980, 35 percent in 1983, and 50 percent in 1986.

Funding arrangements

Considerable change has taken place since 1980 in the financial arrangements for providing dental care. As the following tabulation shows, there has been a marked shift from providing benefits through commercial insurance carriers to self-funded arrangements. Commercial carriers provided benefits to half of the participants in 1986, down from three-quarters in 1980; while the incidence of self-funded plans (those self-insured by employers) more than doubled, covering two-fifths of the participants in 1986, up from one-fifth in 1980. Coverage through Blue Cross-Blue Shield plans was relatively unchanged; but other arrangements for providing dental care, such as health maintenance organizations (HMO's), preferred provider organizations (PPO's), and dental societies, increased their share of participants during the period studied.[9] This parallels the shift to providing medical services through self-funded arrangements, HMO's, and PPO's.[10]

	Percent of plan participants		
Funding medium	*1980*	*1983*	*1986*
Total	100	100	100
Blue Cross-Blue Shield	5	5	6
Commercial carrier	77	66	48
Self-funded	18	23	39
HMO and other	2	5	8

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

Table 4. Percent of full-time participants in separate dental plans by provisions for deductibles and employee contributions, medium and large firms, 1986

Employee contributions	Percent of participants, 1986							
	Total	Total with deductible	Yearly deductible				Lifetime deductible	No deductible
			$25	$50	$100	Other		
Noncontributory plans[1]	100	65	24	28	2	2	16	35
Contributory plans[2]	100	88	28	45	4	7	11	12
Monthly employee contribution:[3]								
Less than $1.99	100	90	33	54	—	—	3	10
$2–3.99	100	87	23	29	11	23	24	13
$4–5.99	100	97	33	59	2	3	—	3
More than $5.99	100	64	7	57	—	—	—	36

[1]Premiums are fully financed by the employer.

[2]Employees are required to contribute toward plan premiums.

[3]Monthly premiums are shown only where fixed monthly rates applied.

NOTE: Because annual and lifetime deductibles sometimes existed in the same plan, sums of deductibles may exceed 100 percent. Dashes indicate no employees in these categories.

The growth in participation in HMO's has not, however, had as large an effect on how dental services are financed as it has had on other types of medical services. The main reason for this is that only 7 percent of the HMO enrollees studied in 1986 were in plans that also provided dental care and, when dental care was covered under HMO's, it was almost always limited to preventive services (examinations and x rays). The most common practice for HMO's (as well as for fee-for-service medical plans) is to be supplemented by separate employer-financed dental plans.[11]

Employee contributions to plan premiums

A majority of the participants in dental insurance plans in 1986 received coverage paid for entirely by their employers. (See table 4.) The incidence of these fully paid plans was greater for three-eighths of participants in combined hospital-medical-dental plans than for the five-eighths in separate dental plans. (All told, 99 percent of the dental plan participants also had health insurance coverage.)

For participants in comprehensive health insurance plans, employee premium payments were usually specified for the health care plan as a whole, and it was not possible to determine the portion intended to help finance dental benefits. Total employee contributions in these plans, on average, differed little when plans with dental care benefits were compared to those without such benefits (table 5).[12]

Among the employees who were covered by separate dental care plans, about one-fourth contributed to the cost of their own coverage and nearly one-half helped finance family coverage. Monthly contributions for individual coverage averaged about $3, while contributions for family coverage averaged about $10.

Table 5. Percent of full-time participants in dental plans by provisions for employee contributions, medium and large firms, 1986

Item	Regular health plan		Separate dental plans
	Without dental benefits	With dental benefits	
Individual coverage			
Percent of participants in—			
Contributory plans[1]	42	34	27
Noncontributory plans[2]	58	66	73
Average employee monthly contribution[3]	$13	$13	$3
Family coverage			
Percent of participants in—			
Contributory plans[1]	63	46	45
Noncontributory plans[2]	37	54	55
Average employee monthly contribution[3]	$42	$37	$10

[1]Employees are required to contribute toward plan premiums.

[2]Premiums are fully financed by the employer.

[3]Average monthly contributions were computed only for plans that specified a fixed monthly premium.

The relationship of employee premium payments and dental plan deductibles was also studied. Both ways encourage employees to share plan costs. As shown in table 4, noncontributory plans were less likely to apply deductibles than contributory plans. Among contributory plans, deductibles of $50 or more tended to be more prevalent—compared to $25 deductibles—as the employee's monthly premium increased. Thus, both methods of cost-sharing exist in tandem, rather than to substitute for each other. □

FOOTNOTES

[1]See *1986–1987 Source Book of Health Insurance Data* (Washington, Health Insurance Association of America, 1987), table 1.6.

[2]*Employee Benefits in Medium and Large Firms, 1986*, Bulletin 2281 (Bureau of Labor Statistics, 1987). The 1980–85 survey results are reported in the following bulletins: 1980 survey (Bulletin 2107); 1981 survey (Bulletin 2140); 1982 survey (Bulletin 2176); 1983 survey (Bulletin 2213); 1984 survey (Bulletin 2237); 1985 survey (Bulletin 2262).

[3]The usual, customary, and reasonable rate (UCR) is a rate that is not more than the dentist's usual charge; within the customary range of fees in the locality; and is reasonable, considering the circumstances.

[4]The proportion of major medical insurance plan participants subject to deductibles of $150 or more rose from 8 percent in 1980 to 36 percent in 1986. During the same years, the proportion of participants with major medical deductibles of $50 or less declined from 28 percent to 12 percent. See *Employee Benefits, 1986*, p. 28. For details on dental deductibles, see *Employee Benefits, 1980*, p. 20; *Employee Benefits, 1983*, p. 36; and *Employee Benefits, 1986*, p. 44.

[5]See, for example, Ronald L. Huling and John T. Lynch, "Dental Plan Design," in Jerry S. Rosenbloom, ed., *The Handbook of Employee Benefits: Design, Funding, and Administration* (Homewood, IL., Dow Jones–Irwin, 1984), p. 190.

[6]Huling and Lynch, pp. 189–90.

[7]Nonorthodontic services were rarely subject to lifetime limits; similarly, yearly limits were infrequently observed for orthodontic charges, usually only when one maximum limit applied to all types of dental services.

[8]*Employee Benefits, 1980*, p. 21; *Employee Benefits, 1983*, p. 36; and *Employee Benefits, 1986*, p. 44.

[9]Health Maintenance Organizations provide comprehensive health care on a prepayment rather than fee-for-service basis. Preferred Provider Organizations are groups of hospitals, physicians, and dentists who contract to provide comprehensive health care services. To encourage the use of these provider members, the PPO limits reimbursement rates when participants use nonmember services.

[10]For example, HMO's provided hospital care to 13 percent of health care participants in 1986, up from 2 percent in 1980. For further details, see *Employee Benefits, 1980*, p. 23; and *Employee Benefits, 1986*, p. 48.

[11]For additional information on HMO's, see Allan Blostin and William Marclay, "HMO's and other health plans: coverage and employee premiums," *Monthly Labor Review*, June 1983, pp. 28–33.

[12]Of course, other variables, such as the plan sponsor's policy towards cost control and differences in coverage of the underlying health insurance plan could account for these relationships. These variables, however, were not examined in this study.