

Method of payment for children's dental services by practice type and geographic location

Carole McKnight-Hanes, DMD David R. Myers, DDS, MS
Jennifer C. Dushku, BA

Abstract

The purpose of this project was to evaluate practice type and geographical differences in methods of payment accepted for children's dental services. A survey was mailed to 2000 general dentists and 1000 pediatric dentists randomly selected to provide representation from the 50 United States. Dentists were asked to specify the type of practice and the state in which they primarily practice. The survey included Medicaid, dental insurance, preferred provider organizations (PPO), and self-payment as payment options. Dentists were asked to indicate whether they never, occasionally, or frequently accepted each option of payment for children's dental services. Responses were received from 1245 (42%) dentists, including 723 general dentists and 522 pediatric dentists. Chi-square statistical analysis revealed significant practice type and regional differences in the acceptance of Medicaid for payment. Pediatric dentists accept Medicaid more frequently than general dentists ($P < 0.001$). Most dentists accept dental insurance and self-payment, while few indicate involvement with a PPO. The study revealed significant practice type differences only in the acceptance of Medicaid as payment for children's dental services. On a geographic basis, there were significant differences in the acceptance of Medicaid and dental insurance. (Pediatr Dent 14:338-41, 1992)

Introduction

In 1990, a national survey requesting information about dental treatment for children and the methods of payment accepted was mailed to a random sample of dentists. The treatment recommendations for primary teeth with interproximal carious lesions have been reported.¹ This article describes the data collected related to methods of payment accepted for children's dental services. Dental patients historically have provided self-payment to practitioners for dental services. However, during the past two decades, a variety of third-party payment plans, including dental insurance, Medicaid, and preferred provider plans (PPO) have become an increasingly important part of the payment for dental services.

Dental indemnity insurance plans are widely available as part of employee health care benefits packages. An estimated 37% of dental expenditures were financed by private dental insurance in 1987.² Medicaid became available in 1965 as part of Title XIX of the Social Security Act.³ Medicaid, an entitlement program intended to provide health care for low-income individuals, is financed with both state and federal funds. States must participate and include certain mandated programs. Eligibility requirements and the scope of services provided are determined by each state, but practitioner participation is voluntary.⁴ Dental Medicaid programs allocate most of their resources for children's dental care. Approximately 2% of all dental expenditures were paid by Medicaid or other government programs in 1987.² PPOs are structured to provide cost savings for health care services for a defined population by contracted professionals, and may include dental benefits.⁴

Children 5-14 years old have one the highest utilization rates for dental services among all age groups.⁵ General dentists and pediatric dentists provide most of the dental services for children in the United States. The purpose of this study was to determine whether there are practice type and regional differences in the methods of payment accepted for dental services provided for children.

Materials and Methods

In the fall of 1990, a survey was mailed to 2000 general dentists and 1000 pediatric dentists selected from the American Dental Association membership roster. The selection assured random representation of dentists from all 50 of the United States. The dentists were asked to specify the type of practice and the state in which they primarily practice. A portion of the survey related to payment for dental services and included dental insurance, Medicaid, PPO, and self-payment as payment options. Dentists were asked to indicate whether they never, occasionally, or frequently accepted each option as payment for children's dental services. No quantitative parameters were assigned to the categories of payment frequency. Evaluation of the data was by practice type and region. The regions used in this report were the same as those in the NIDR National Caries Prevalence Survey, and represent a balance between urban and rural areas.⁶ The seven regions were: I — New England, II — Northeast, III — Midwest, IV — Southeast, V — Southwest, VI — Northwest, and VII — Pacific including Alaska and Hawaii (Figure, page 339). Chi-square statistical analysis was applied to the data.

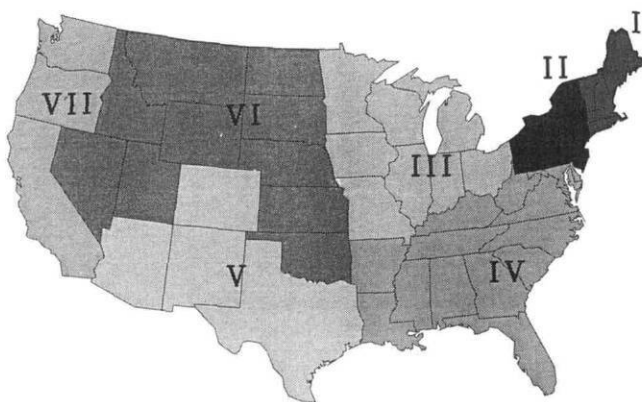


Figure. The seven geographic regions utilized.

Results

Responses were received from 1245 (42%) of the 3000 dentists, including 723 (36%) general dentists and 522 (52%) pediatric dentists. The respondents are distributed across geographic regions (Table 1).

Table 1. Distribution of respondents by region

Region	Respondents
I	89
II	157
III	282
IV	315
V	119
VI	56
VII	187

The rate of acceptance of Medicaid by practice type is shown in Table 2. Responding pediatric dentists accept Medicaid more frequently than do responding general dentists ($P < 0.001$). Seventy per cent of the pediatric dentists, as compared to 40% of the responding general dentists, either frequently or occasionally accept Medicaid as payment for children's dental services. Sixty per cent of the general dentists and 30% of the pediatric dentists report they do not accept Medicaid.

The regional rate of acceptance of Medicaid combining both types of dental practice is shown in Table 3 (page 340). There were statistically significant differences between the geographical regions in the acceptance of Medicaid ($P < 0.001$). The highest rates of acceptance of Medicaid were in the Northwest region, where 65% of respondents occasionally or fre-

quently accept Medicaid and in the New England region, where 64% of practitioners occasionally or frequently accept Medicaid. Sixty-one per cent of respondents in the Southwest region and 60% in the Northeast region report they never accept Medicaid. In contrast, only 43% of the respondents in the Midwest region and 36% in the New England region report they never accept Medicaid.

There were no significant practice type differences in the acceptance of dental insurance, PPOs, or self-payment (Table 2). However, there were significant regional differences in the acceptance of dental insurance (Table 3). There were no significant regional differences in the acceptance of PPOs or acceptance of self payment (Table 3).

Discussion

The response rate was less than desired, but because of the number and distribution of the respondents was felt to be adequate to minimize nonresponder bias in a well-educated, homogenous population.⁷ This response rate is comparable to a twice-mailed survey of Michigan dentists regarding Medicaid acceptance.⁸

Dental practitioners responding to the survey accept a variety of methods of payment for children's dental services. There were significant practice type and regional differences in the acceptance of Medicaid. Pediatric dentists who responded accept Medicaid more frequently than the general dentists. Twice the percentage of general dentists as pediatric dentists report never accepting Medicaid. The fact that pediatric dentists accept Medicaid more frequently than do general dentists suggests that there may be differences in the populations of patients treated by the two types of practitioners. Since pediatric dentists' practices are limited to children, they may be more willing to accept Medicaid than general dentists, whose patient pool may comprise a limited number of children.

Two geographically diverse regions, the Northeast and the Southwest, had the lowest percentage (39%) of

Table 2. Percentage distribution of methods of payment accepted across practice type

Payment Methods	Pediatric Dentists			General Dentists			P value
	N	O	F	N	O	F	
Medicaid	30	39	31	60	31	9	< .001
Dental insurance	2	6	92	<1	7	93	0.22
Preferred provider	73	22	5	78	17	5	0.07
Self-payment	<1	14	86	<1	12	87	0.61

N = Never, O = Occasionally, F = Frequently.

Table 3. Percentage distribution of methods of payment accepted across regions

Regions	Medicaid			Dental Insurance			PPO			Self-Payment		
	N	O	F	N	O	F	N	O	F	N	O	F
New England (I)	36	45	19	0	3	97	74	19	7	1	9	90
Northeast (II)	60	29	10	3	11	86	84	12	4	1	13	86
Midwest (III)	43	36	21	<1	4	95	69	24	8	<1	15	85
Southeast (IV)	45	31	23	2	8	90	76	19	5	<1	8	91
Southwest (V)	61	19	20	<1	11	88	79	16	5	1	14	85
Northwest (VI)	35	41	24	0	9	91	81	14	4	1	7	91
Pacific (VII)	46	43	11	<1	2	98	78	19	3	<1	18	82
P value	< 0.001			< 0.01			0.09			0.12		

N = Never, O = Occasionally, F = Frequently.

dentists accepting Medicaid. The other five regions had Medicaid acceptance rates ranging from 54 to 65%. The regional differences suggest that the Medicaid policy for reimbursement in a particular state may influence the practicing dentists' willingness to participate.⁹ Substantial variation in the rate of reimbursement for Medicaid services between states has been reported.^{9,10} Previous reports also have demonstrated differences in Medicaid acceptance based on geographic location.⁹ For example, the state of New York has one of the highest percentages of dental Medicaid recipients, yet the number of participating dentists continues to decline, partly due to an out-of-date schedule of allowances.⁹

The results of this national survey suggest that each state should analyze methods of payment practitioners accept for dental services to determine the accessibility of dental care for children. The results are similar to other studies demonstrating that dentists prefer to accept patients whose services are paid for by private insurance or self-payment rather than Medicaid.^{8, 11} For example, when possible, dentists tend to replace government-sponsored patients with private insurance patients, or to give preference to scheduling non-Medicaid patients.¹¹ It has been suggested that in areas with a high prevalence of dental insurance, Medicaid patients' access to care will be limited.⁹ In this study, virtually all of the responding dentists accept dental insurance regardless of whether or not they accept Medicaid.

There were statistically significant regional differences in the acceptance of dental insurance. Ninety-five per cent or more of the respondents in New England, the Midwest, and the Pacific regions indicate frequent acceptance of dental insurance compared to 86–91% for the other four regions. However, most of the respondents in all regions indicate that they accept dental insurance. There were no significant practice type or

regional differences in the acceptance of self-payment or preferred provider plans. Most responding dentists — regardless of practice type or location — accept dental insurance and self-payment, and few indicate participation in a preferred provider plan.

The survey revealed significant practice type differences only in the acceptance of Medicaid as payment for children's dental services. On a regional basis, there were differences in the acceptance of Medicaid and dental insurance.

The results suggest there is a need to review the relationship between methods of payment accepted and dental services provided for children at the state level to determine whether the dental needs of children are being met regardless of the method of payment. For future studies, assigning quantitative values to the categories of payment methods would provide more precise information.

Dr. McKnight-Hanes is associate professor, Department of Pediatric Dentistry, Dr. Myers is dean and Merritt professor of Pediatric Dentistry, School of Dentistry, and Ms. Dushku is programmer, Analyst II, Office of Biostatistics, Medical College of Georgia, Augusta.

1. McKnight-Hanes C, Myers DR, Dushku JC: The influence of practice type, region and age on treatment recommendations for primary teeth. *Pediatr Dent* 14:240–45, 1992.
2. Letsch SW, Lovit KR, Waldo DR: National health expenditures, 1987. *Health Care Fin Rev* 10:109–22, 1988.
3. Oberg CN, Polich CL: Medicaid: Entering the third decade: *Health Aff (Millwood)* 7:83–96, 1988.
4. Beatrice DF: Managed Health Care Systems and Medicaid Reform. In *The New Health Care Market: a Guide to PPOs for Purchasers, Payors, and Providers*. P Boland ed. Homewood, IL: Dow Jones-Irwin, 1985, p 633–50.
5. Jack SS, Bloom B: Use of dental services and dental health: United States, 1986. USDHHS, NCHS, DHHS Pub No. (PHS) 88-1593, *Vital Statistics and Health Series* 10, No. 165, Washington, DC: US Govt Print Office, 1988.
6. National Institute of Dental Research: *Oral Health of United States Children: The National Survey of Dental Caries in United States School Children: 1986–1987*, Pub No. 89–224, 1989.

-
7. Hovland EJ, Romberg E, Moreland RF: Nonresponse bias to mail survey questionnaires within a professional population. *J Dent Educ* 44:270-74, 1980.
 8. Lang WP, Weintraub JA: Comparison of Medicaid and non-Medicaid dental providers. *J Public Health Dent* 46:207-11, 1986.
 9. Waldman HB: Limitations of Medicaid dentistry in the 1980s. *Ill Dent J* 59:603-8, 1990.
 10. Waldman HB: Improving conditions for pediatric dental practice are part of the changing environment for dentistry. *ASDC J Dent Child* 56:262-66, 1989.
 11. Capilouto E: The dentist's role in access to dental care by Medicaid recipients. *J Dent Educ* 52:647-52, 1988.
-

The American Board of Pediatric Dentistry

Announcement

All Diplomates interested in being considered for service as a Proctor or Consultant for the 1994 examinations are encouraged to request a Proctor/Consultant Questionnaire Form **before November 1, 1992** from:

James R. Roche, DDS
Executive Secretary-Treasurer
American Board of Pediatric Dentistry
1193 Woodgate Drive
Carmel, IN 46033-9232