

1999 JCO Orthodontic Practice Study

Part 3 Practice Growth and Other Variables

EUGENE L. GOTTLIEB, DDS
ALLEN H. NELSON, PHD
DAVID S. VOGELS III

Parts 1 and 2 in this series of reports on the 1999 JCO Orthodontic Practice Study have covered trends in orthodontic economics and practice administration, as well as factors that seem related to success in terms of net income and case starts. This month, in our concluding installment, we will report on the growth that has occurred since the 1997 Study. We will also, for the first time, provide some statistical comparisons of male orthodontists to female orthodontists and of practices affiliated with management service organizations to traditional practices.

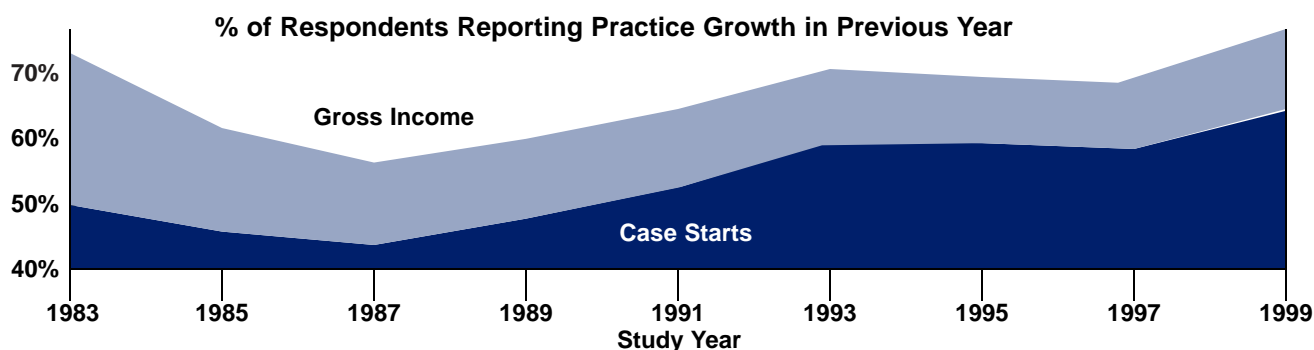
The methodology of this 10th biennial survey of U.S. orthodontists was described in Part 1 (JCO, October 1999). The complete results, methodology, and questionnaire are published

separately (*1999 JCO Orthodontic Practice Study*, Index Publishers Corp., Boulder, CO, 1999).

Practice Growth

Respondents to the Practice Study were asked, as they have been since 1983, whether their practices' case starts and gross income increased, decreased, or stayed the same from the previous year. In this case, they were comparing their data from 1998 to their 1997 figures.

As one might expect from the substantial increases in cases and income shown in Part 1, orthodontists reported record levels of growth over the period since the 1997 Study (Table 17).



Dr. Gottlieb is Senior Editor and Mr. Vogels is Managing Editor of the *Journal of Clinical Orthodontics*, 1828 Pearl St., Boulder, CO 80302. Dr. Nelson is Director and Research Consultant, Nelson Associates, Nederland, CO.



Dr. Gottlieb



Dr. Nelson



Mr. Vogels

**TABLE 17
PRACTICE GROWTH IN PREVIOUS YEAR**

	Case Starts		Gross Income	
	Increase	Decrease	Increase	Decrease
1983 Study	49.6%	24.6%	73.6%	11.2%
1985 Study	46.0	29.7	62.1	19.7
1987 Study	43.6	34.8	56.6	23.7
1989 Study	47.9	29.7	60.9	20.6
1991 Study	53.4	23.5	65.5	17.1
1993 Study	60.4	20.1	71.2	15.3
1995 Study	59.4	20.5	70.1	14.3
1997 Study	58.1	19.0	69.0	15.2
1999 Study	65.7	13.0	77.1	10.1

Percentages of respondents who "stayed the same" are not shown.

**TABLE 18
PRACTICE GROWTH BY SELECTED VARIABLES**

	Case Starts			Gross Income		
	Increase	Decrease	Same	Increase	Decrease	Same
<i>Years in Orthodontic Practice</i>						
2-5 years	80.4%	3.9%	15.7%	92.2%	3.9%	3.9%
6-10 years	82.8	5.7	11.5	92.5	2.5	5.0
11-15 years	74.1	15.2	10.7	80.0	10.9	9.1
16-20 years	60.8	12.4	26.8	76.3	11.3	12.4
21 or more years	54.8	16.4	28.8	68.0	12.9	19.1
<i>Legal Status</i>						
Sole proprietorship	67.5	13.1	19.4	76.0	11.4	12.6
Professional corporation	64.2	12.4	23.4	78.2	8.6	13.2
<i>Child Fee (permanent dentition)</i>						
Low (less than \$3,600)	61.1	13.9	25.0	69.4	11.1	19.4
High (more than \$4,250)	68.0	11.7	20.3	80.5	7.8	11.7
<i>Net Income</i>						
Low (\$25,000-200,000)	54.7	16.0	29.3	67.8	14.1	18.1
Moderate (\$240,000-340,000)	70.3	13.6	16.1	78.2	10.9	10.9
High (more than \$420,000)	80.5	6.8	12.8	91.7	3.8	4.5
<i>Community Size</i>						
Rural (under 20,000)	62.6	18.2	19.2	74.7	10.1	15.2
Small city (20,000-50,000)	68.5	9.0	22.5	82.0	7.2	10.8
Large city (50,000-500,000)	65.0	14.3	20.7	76.3	10.6	13.1
Metropolitan (over 500,000)	65.2	12.4	22.4	73.1	12.5	14.4
<i>Geographic Region</i>						
New England	62.9	22.9	14.3	74.3	11.4	14.3
Middle Atlantic	67.3	11.2	21.5	74.8	11.2	14.0
South Atlantic	67.2	12.8	20.0	77.6	11.2	11.2
East South Central	65.7	20.0	14.3	74.3	11.4	14.3
East North Central	63.3	12.8	23.9	77.3	10.9	11.8
West North Central	68.2	2.3	29.5	80.0	4.4	15.6
Mountain	74.5	7.8	17.6	84.3	5.9	9.8
West South Central	70.3	9.4	20.3	85.7	6.3	7.9
Pacific	64.2	14.6	21.1	72.5	11.7	15.8
COMPOSITE	65.7	13.0	21.3	77.1	10.1	12.7

TABLE 19
EXPECTATIONS FOR 1999 BY 1998 PRACTICE GROWTH

	Expected Case Starts			Expected Gross Income		
	Increase	Decrease	Same	Increase	Decrease	Same
<i>1998</i>						
Increased	77.5%	4.7%	17.8%	79.5%	5.4%	15.1%
Decreased	45.2	28.0	26.9	52.8	23.6	23.6
Stayed the Same	30.3	15.5	54.2	34.1	9.9	56.0

TABLE 20
EXPECTATIONS FOR PRACTICE GROWTH BY SELECTED VARIABLES

	Case Starts			Gross Income		
	Increase	Decrease	Same	Increase	Decrease	Same
<i>Years in Orthodontic Practice</i>						
2-5 years	89.3%	1.8%	8.9%	91.1%	1.8%	7.1%
6-10 years	82.0	4.9	13.1	88.4	1.7	9.9
11-15 years	70.3	8.1	21.6	78.9	6.4	14.7
16-20 years	57.7	11.3	30.9	71.1	7.2	21.6
21 or more years	50.2	13.8	36.0	58.1	12.1	29.8
<i>Legal Status</i>						
Sole proprietorship	66.3	8.7	25.1	73.5	6.3	20.2
Professional corporation	59.8	10.9	29.3	68.4	8.8	22.7
<i>Child Fee (permanent dentition)</i>						
Low (less than \$3,600)	61.1	12.5	26.4	67.8	9.8	22.4
High (more than \$4,250)	61.4	8.7	29.9	73.2	6.3	20.5
<i>Net Income</i>						
Low (\$25,000-200,000)	62.0	9.3	28.7	69.1	8.1	22.1
Moderate (\$240,000-340,000)	61.2	11.6	27.3	71.7	5.0	23.3
High (more than \$420,000)	63.6	9.1	27.3	72.7	6.1	21.2
<i>Community Size</i>						
Rural (under 20,000)	56.6	17.0	27.0	66.7	15.2	18.2
Small city (20,000-50,000)	63.4	11.2	25.4	70.2	8.0	21.8
Large city (50,000-500,000)	66.4	7.1	26.5	73.5	6.0	20.5
Metropolitan (over 500,000)	62.8	7.9	29.3	71.0	5.6	23.5
<i>Geographic Region</i>						
New England	52.9	20.6	26.5	64.7	20.6	14.7
Middle Atlantic	55.1	11.2	33.6	63.2	9.4	27.4
South Atlantic	66.4	9.6	24.0	76.6	5.6	17.7
East South Central	62.3	14.3	22.9	65.7	11.4	22.9
East North Central	63.6	10.0	26.4	73.6	6.4	20.0
West North Central	59.6	8.5	31.9	70.2	8.5	21.3
Mountain	73.1	9.6	17.3	78.8	3.8	17.3
West South Central	70.8	9.2	20.0	74.2	8.1	17.7
Pacific	63.4	5.7	30.9	67.2	7.4	25.4
COMPOSITE	63.3	9.9	26.8	71.1	7.7	21.1

Furthermore, the percentages of respondents who showed decreases in case starts and gross income were the lowest ever.

As in every Study to date, the newest practices were the most likely to report growth (Table 18). Compared to the 1997 Study, only low net income practices and East South Central orthodontists (74% of whom reported growth in 1997) showed less growth in case starts than the same groups showed two years ago. More than 90% of practices 10 years old or newer and of high net income practices reported growth in gross income.

Expectations for 1999

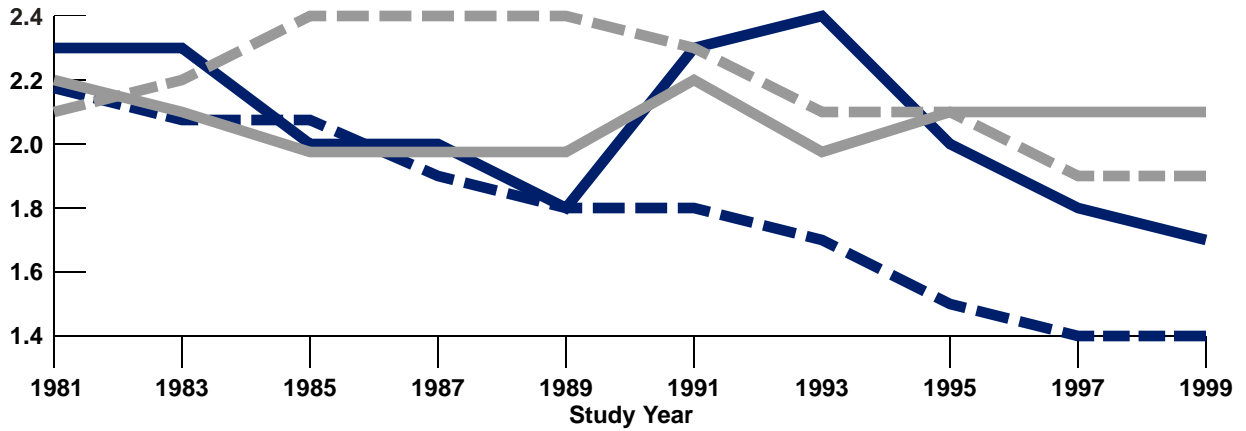
Practices that increased, decreased, or stayed the same in case starts or gross income in the preceding year were much more likely than

other practices to predict the same results in 1999 (Table 19). Still, only a minority of any group—including those who declined in 1998—expected decreased case starts or gross income in 1999.

Even with the unprecedented growth reported by respondents, they were more optimistic in their forecasts of future growth than in any previous Study (Table 20). The only categories with lower percentages predicting growth in both case starts and gross income in 1999 than had been predicted for 1997 were low net income, rural, New England, West North Central, and Pacific orthodontists. The most optimistic groups, with more than 75% expecting growth in 1999, were respondents who had been in practice for 10 years or less (for both case starts and gross income), and respondents in practice 11-15 years and those in the South Atlantic and Mountain regions (for gross income only).

**TABLE 21
DEGREE OF INFLUENCE OF FACTORS
CITED FOR LACK OF GROWTH**

	None (1)	Some (2)	High (3)	Mean Rating
Increased number of orthodontists in your area	18.0%	50.2%	31.9%	2.1
Increased number of dentists doing orthodontics in your area	28.3	52.1	19.7	1.9
Loss of contact with younger dentists	33.8	43.7	22.5	1.9
Low-fee competition	31.1	53.2	15.7	1.8
Local economic conditions	44.9	41.5	13.6	1.7
Managed care (closed-panel) dental programs	40.5	46.0	13.5	1.7
Ineffective practice-building methods	36.1	54.5	9.4	1.7
Advertising dentists in your area	39.4	51.3	9.3	1.7
Personal decision not to increase size of practice	58.1	25.1	16.9	1.6
Ineffective practice management	50.6	45.4	4.1	1.5
Declining number of children in the local population	69.4	24.6	6.0	1.4
Quality of staff	68.5	27.0	4.5	1.4
Retail store clinics	74.1	21.8	4.1	1.3



Local economic conditions
Increased number of orthodontists

Declining number of children
Dentists doing orthodontics

Reasons for Lack of Growth

Practices that did not increase in case starts in 1998 were asked to rate the influence of various factors on their lack of growth, as in previous studies (Table 21). Economic conditions and demographics continued to decline in influence (graph), while competitive factors such as increased numbers of orthodontists and general dentists performing orthodontic services remained steady in their ratings. Low-fee competition, managed-care programs, and advertising dentists were not as troublesome to these respondents as loss of contact with younger referring dentists seemed to be.

Breakdowns by Sex of Orthodontist

The percentage of female practitioners did not increase substantially over the past two years, for the first time since these surveys began, but we felt there were now enough female orthodontists who had been in practice long enough to permit valid statistical comparisons with their male counterparts. As Table 22 shows, women orthodontists were still found largely in the younger practice age categories. Percentages of female practitioners were highest on the East Coast.

With women having relatively newer practices, it is not surprising that female orthodontists generally reported lower income than men did (Table 23). Compared to the 1997 Study, however-

TABLE 22
SEX OF ORTHODONTIST BY
DEMOGRAPHIC VARIABLES

	Male	Female
<i>Years in Orthodontic Practice</i>		
2-5 years	76.8%	23.2%
6-10 years	84.7	15.3
11-15 years	89.5	10.5
16-20 years	93.9	6.1
21 or more years	98.5	1.5
<i>Geographic Region</i>		
New England	94.4	5.6
Middle Atlantic	86.2	13.8
South Atlantic	88.5	11.5
East South Central	94.4	5.6
East North Central	95.5	4.5
West North Central	91.5	8.5
Mountain	96.2	3.8
West South Central	92.8	7.2
Pacific	93.6	6.4

er, the gap appeared somewhat wider. Women reported lower percentages of adult and third-party patients than men did, and they worked slightly fewer hours per week on average. Their fees were not significantly lower.

Smaller practices tend to make less use of management methods than larger practices do (see Part 2), and therefore it might be expected that fewer female orthodontists than male orthodontists would use these methods. It is interesting to note that the only methods used by higher percentages of female respondents involved staff management or patient communications: written

philosophy of practice, office policy manual, written job descriptions, written staff training program, individual performance appraisals, and patient satisfaction surveys (Table 24). Substantially lower percentages of women than of men employed communications supervisors.

Similarly, female orthodontists, having smaller practices on average, would be expected to delegate fewer tasks to staff members. In fact, among the clinical tasks, women were more likely to routinely delegate only insertion of bands and adjustment of archwires (Table 25). In the administrative area, higher percentages of

**TABLE 23
SELECTED VARIABLES (MEANS) BY SEX OF ORTHODONTIST**

	Male	Female
Number of Years in Practice	19.8	12.1*
Number of Satellite Offices	0.7	0.5
Full-Time Employees	5.1	3.1*
Part-Time Employees	1.7	2.1
Total Referrals	354.1	230.8*
Case Starts	233.2	159.1*
Adult Case Starts	23.0%	18.4%
Active Treatment Cases	531.5	358.1*
Adult Active Cases	19.0%	13.6%
Patients Covered by Third Party	45.1%	39.5%
Patients Covered by Managed Care	5.7%	7.9%
Total Chairs	5.5	4.6*
Patients per Day	50.1	37.5*
Emergencies per Day	2.9	2.1
Broken Appointments per Day	3.5	2.4*
Cancellations per Day	2.9	2.4
Gross Income	\$708,928	\$418,310*
Overhead Rate	54%	58%
Net Income	\$342,173	\$222,364*
Child Case Fee	\$3,892	\$3,801
Full-Time Employee Hours/Week	34.5	35.4
Full-Time Employee Weeks/Year	48.2	49.3
Orthodontist-Owner Hours/Week	35.5	32.7
1998 Continuing Education Course Days	5.8	5.9
1998 Continuing Education Meeting Days	5.6	5.2

*Differences between these groups are statistically significant at or below the .01 probability level.

women than of men routinely delegated the fee presentation and financial arrangements, but much lower percentages delegated the patient communication tasks.

Women were more likely than men to use a few of the practice-building tasks listed: change practice location; expand practice hours; participate in community activities; reduced fee incentives; advertising by yellow pages boldface listing, newspaper, and radio; and managed care (Table 26). By contrast, women were much less likely than men to participate in dental society

activities and to perform expanded services such as TMJ and lingual therapy.

Management Service Organizations

With about 10% of responding practices now affiliated with management service organizations, we compared them to traditional practices in several areas. The majority of MSO affiliates had been in practice for more than 20 years, indicating that practice transition was a prime motivating factor for their affiliation (Table 27).

**TABLE 24
USE OF MANAGEMENT METHODS BY SEX OF ORTHODONTIST**

	Male	Female
Written philosophy of practice	48.6%	49.1%
Written practice objectives	30.9	27.3
Written practice plan	19.6	12.7
Written practice budget	17.8	7.3
Office policy manual	72.8	74.5
Office procedure manual	51.6	50.9
Written job descriptions	55.4	58.2
Written staff training program	28.6	34.5
Staff meetings	81.1	74.5
Individual performance appraisals	58.8	65.5
Measurement of staff productivity	16.0	12.7
In-depth analysis of practice activity	32.9	23.6
Practice promotion plan	35.6	29.1
Dental management consultant	19.5	12.7
Patient satisfaction surveys	28.6	32.7
Employee with primary responsibility as communications supervisor	26.9	12.7
Progress reports	44.7	34.5
Post-treatment consultations	37.4	27.3
Pretreatment flow control system	48.9	41.8
Treatment flow control system	25.4	21.8
Cases beyond estimate report	25.4	20.0
Profit and loss statements	74.0	69.1
Delinquent account register	78.7	67.3
Accounts-receivable reports	80.1	70.9
Contracts-written reports	55.3	49.1
Measurement of case acceptance	47.3	38.2

The highest percentages of MSO practices were in the East South Central, West North Central, Mountain, and West South Central regions.

MSO affiliates were fairly close to traditional practices in income, although they did show more referrals and case starts (Table 28). Despite the typical MSO's fee-based marketing approach, these practices' mean child case fees

were less than \$200 below other practices' fees. MSO practices also reported significantly more managed-care patients and broken appointments.

When asked to rate the effects of their affiliation, a majority of MSO practices indicated that they had improved in numbers of referrals, case acceptance, gross income, and efficiency (Table 29). The highest positive rating was for

**TABLE 25
ROUTINE DELEGATION BY SEX OF ORTHODONTIST**

	Male	Female
<i>Record-Taking</i>		
Impressions for study models	88.5%	81.0%
X-rays	92.3	85.5
Cephalometric tracings	42.6	20.0
<i>Clinical</i>		
Impressions for appliances	73.3	60.3
Removal of residual adhesive	40.1	30.5
Fabrication of:		
Bands	55.0	36.7
Bonds	33.1	18.0
Archwires	31.1	17.9
Removable appliances	46.0	32.7
Insertion of:		
Bands	18.8	19.0
Bonds	10.5	3.5
Archwires	48.1	41.4
Removable appliances	16.4	14.3
Adjustment of:		
Archwires	9.5	12.3
Removable appliances	7.6	7.0
Removal of:		
Bands	51.4	37.9
Bonds	49.9	36.2
Archwires	76.0	66.1
<i>Administrative</i>		
Case presentation	20.4	10.3
Fee presentation	60.6	62.1
Financial arrangements	79.6	84.5
Progress reports	22.9	10.2
Post-treatment conferences	16.5	9.5
Patient instruction and education	86.1	74.1

TABLE 26
USE OF PRACTICE-BUILDING METHODS BY SEX OF ORTHODONTIST

	Male	Female
Change practice location	29.4%	29.8%
Expand practice hours:		
Open one or more evenings/week	24.2	31.9
Open one or more Saturdays/month	16.7	17.0
Open a satellite office	36.5	36.2
Participate in community activities	56.0	59.6
Participate in dental society activities	58.2	44.7
Seek referrals from general dentists:		
Letters of appreciation	78.3	70.2
Entertainment	57.8	36.2
Gifts	68.3	66.0
No-charge initial visit	69.2	61.7
Education of GPs	36.7	27.7
Reports to GPs	73.8	66.0
Seek referrals from patients and parents:		
Letters of appreciation	66.9	55.3
Follow-up calls after difficult appointments	66.4	57.4
Entertainment	16.7	12.8
Gifts	32.7	29.8
Seek referrals from staff members	50.4	36.2
Seek referrals from other professionals (non-dentists)	23.5	17.0
Treat adult patients	86.3	80.9
Improve scheduling:		
On time for appointments	75.1	66.0
On-time case finishing	64.4	48.9
Improve case presentation	54.3	38.3
Improve staff management	46.4	29.8
Improve patient education	45.7	36.2
Expand services:		
TMJ	31.7	4.3
Functional appliances	36.1	17.0
Lingual orthodontics	11.4	6.4
Surgical orthodontics	47.2	31.9
Patient motivation techniques	42.2	36.2
Reduced fee incentives	20.5	27.7
More lenient fee payment arrangements	56.2	48.9
Practice newsletter	14.1	12.8
Personal publicity in local media	15.5	8.5
Advertising:		
Telephone yellow pages		
Boldface listing	47.0	59.6
Display advertising	21.4	14.9
Local newspapers	15.7	23.4
Local TV	3.0	2.1
Local radio	4.6	6.4
Direct-mail promotion	8.5	4.3
Managed care (closed-panel contracting)	15.7	19.1
Management service affiliation	7.8	4.3

TABLE 27
MANAGEMENT SERVICE AFFILIATION
BY DEMOGRAPHIC VARIABLES

	Not Affiliated	Affiliated
<i>Years in Orthodontic Practice</i>		
2-5 years	94.5%	5.5%
6-10 years	94.3	5.7
11-15 years	98.2	1.8
16-20 years	88.7	11.3
21 or more years	86.2	13.8
<i>Geographic Region</i>		
New England	94.3	5.7
Middle Atlantic	90.6	9.4
South Atlantic	89.7	10.3
East South Central	86.1	13.9
East North Central	95.4	4.6
West North Central	86.7	13.3
Mountain	82.0	18.0
West South Central	85.3	14.7
Pacific	92.7	7.3

practice efficiency (68.1% of respondents calling the effect of affiliation either highly positive or somewhat positive); the lowest was for referrals (61.2%). Although the highest negative rating was for gross income, only 7.0% of the affiliates felt the MSOs' impact on income had been somewhat or highly negative.

True to their name, management service companies seemed to emphasize management methods, with higher percentages of MSO practices than of traditional practices using virtually every method listed (Table 30). The difference in usage was greater than 20% for: written practice plan, written practice budget, office procedure manual, written staff training program, measure-

TABLE 28
SELECTED VARIABLES (MEANS) BY
MANAGEMENT SERVICE AFFILIATION

	Not Affiliated	Affiliated
Number of Years in Practice	18.6	23.7*
Number of Satellite Offices	0.7	0.8
Full-Time Employees	5.0	5.4
Part-Time Employees	1.8	1.9
Total Referrals	343.5	380.4
Case Starts	226.5	250.3
Adult Case Starts	22.6%	23.8%
Active Treatment Cases	514.6	575.2
Adult Active Cases	18.4%	21.4%
Patients Covered by Third Party	45.2%	38.1%
Patients Covered by Managed Care	4.7%	15.2%*
Total Chairs	5.4	5.7
Patients per Day	48.9	52.8
Emergencies per Day	2.8	3.0
Broken Appointments per Day	3.3	4.3*
Cancellations per Day	2.9	2.9
Gross Income	\$685,497	\$727,884
Child Case Fee	\$3,905	\$3,722*
Full-Time Employee Hours/Week	34.6	34.6
Full-Time Employee Weeks/Year	48.3	48.4
Orthodontist-Owner Hours/Week	35.5	34.8
1998 Continuing Education Course Days	5.9	5.5
1998 Continuing Education Meeting Days	5.4	5.9

*Differences between these groups are statistically significant at or below the .01 probability level.

TABLE 29
EFFECTS OF MANAGEMENT SERVICE AFFILIATION

	Highly Positive	Somewhat Positive	None	Somewhat Negative	Highly Negative	Mean*
Referrals	24.7%	36.5%	32.9%	4.7%	1.2%	2.21
Case Acceptance	43.1	30.6	22.2	2.8	1.4	1.89
Gross Income	44.4	22.2	26.4	5.6	1.4	1.97
Practice Efficiency	50.0	18.1	27.8	4.2	0.0	1.86

*1 = highly positive; 2 = somewhat positive; 3 = none; 4 = somewhat negative; 5 = highly negative.

TABLE 30
USE OF MANAGEMENT METHODS BY
MANAGEMENT SERVICE AFFILIATION

	Not Affiliated	Affiliated
Written philosophy of practice	48.2%	47.9%
Written practice objectives	29.9	35.2
Written practice plan	18.1	28.2
Written practice budget	17.0	21.1
Office policy manual	72.6	76.1
Office procedure manual	49.3	74.6
Written job descriptions	54.4	66.2
Written staff training program	29.0	35.2
Staff meetings	80.0	90.1
Individual performance appraisals	58.9	66.2
Measurement of staff productivity	14.7	28.2
In-depth analysis of practice activity	31.0	47.9
Practice promotion plan	34.9	42.3
Dental management consultant	18.1	28.2
Patient satisfaction surveys	29.3	32.4
Employee with primary responsibility as communications supervisor	25.4	33.8
Progress reports	43.7	49.3
Post-treatment consultations	36.6	40.8
Pretreatment flow control system	48.8	50.7
Treatment flow control system	25.4	26.8
Cases beyond estimate report	23.8	39.4
Profit and loss statements	73.3	80.3
Delinquent account register	77.9	84.5
Accounts-receivable reports	79.0	84.5
Contracts-written reports	54.4	62.0
Measurement of case acceptance	46.1	52.1

ment of staff productivity, in-depth analysis of practice activity, practice promotion plan, dental management consultant, communications supervisor, and cases beyond estimate report.

MSO affiliates were also more likely than other practices to routinely delegate most of the

tasks surveyed (Table 31). The only exceptions were x-rays, impressions, removal of archwires, and case presentation.

The dichotomy was less pronounced in comparing the use of practice-building methods, perhaps in part because the questionnaire didn't

**TABLE 31
ROUTINE DELEGATION BY
MANAGEMENT SERVICE AFFILIATION**

	Not Affiliated	Affiliated
<i>Record-Taking</i>		
Impressions for study models	87.9%	89.9%
X-rays	92.3	91.2
Cephalometric tracings	41.6	41.8
<i>Clinical</i>		
Impressions for appliances	72.4	70.0
Removal of residual adhesive	38.0	47.7
Fabrication of:		
Bands	53.6	58.1
Bonds	31.6	38.7
Archwires	29.3	39.7
Removable appliances	44.9	49.2
Insertion of:		
Bands	16.9	37.7
Bonds	9.7	14.3
Archwires	46.3	58.6
Removable appliances	16.0	20.9
Adjustment of:		
Archwires	9.5	13.0
Removable appliances	7.4	10.1
Removal of:		
Bands	49.7	51.4
Bonds	47.6	54.3
Archwires	75.6	72.5
<i>Administrative</i>		
Case presentation	20.5	12.1
Fee presentation	59.4	75.4
Financial arrangements	79.8	82.4
Progress reports	21.2	31.3
Post-treatment conferences	15.7	22.0
Patient instruction and education	85.3	87.1

TABLE 32
USE OF PRACTICE-BUILDING METHODS
BY MANAGEMENT SERVICE AFFILIATION

	Not Affiliated	Affiliated
Change practice location	30.7%	19.3%
Expand practice hours:		
Open one or more evenings/week	25.1	21.1
Open one or more Saturdays/month	16.1	17.5
Open a satellite office	36.2	38.6
Participate in community activities	59.0	33.3
Participate in dental society activities	58.4	45.6
Seek referrals from general dentists:		
Letters of appreciation	78.4	70.2
Entertainment	57.1	54.4
Gifts	69.1	59.6
No-charge initial visit	68.0	70.2
Education of GPs	36.2	38.6
Reports to GPs	74.1	68.4
Seek referrals from patients and parents:		
Letters of appreciation	66.9	57.9
Follow-up calls after difficult appointments	65.2	70.2
Entertainment	17.0	14.0
Gifts	33.5	22.8
Seek referrals from staff members	49.2	54.4
Seek referrals from other professionals (non-dentists)	23.7	21.1
Treat adult patients	86.0	84.2
Improve scheduling:		
On time for appointments	73.8	78.9
On-time case finishing	62.7	70.2
Improve case presentation	52.7	57.9
Improve staff management	43.6	59.6
Improve patient education	45.1	43.9
Expand services:		
TMJ	29.2	33.3
Functional appliances	35.9	28.1
Lingual orthodontics	10.0	19.3
Surgical orthodontics	46.0	49.1
Patient motivation techniques	40.3	56.1
Reduced fee incentives	20.1	31.6
More lenient fee payment arrangements	54.9	63.2
Practice newsletter	13.5	19.3
Personal publicity in local media	13.5	31.6
Advertising:		
Telephone yellow pages		
Boldface listing	47.3	54.4
Display advertising	20.1	29.8
Local newspapers	14.0	35.1
Local TV	0.9	22.8
Local radio	3.5	17.5
Direct-mail promotion	7.0	21.1
Managed care (closed-panel contracting)	13.1	43.9

ask whether the MSO practices had tried the methods before or after their affiliation (Table 32). In general, non-affiliates seemed more likely to use traditional methods such as changing practice location, evening hours, participation in community and dental society activities, and seeking referrals from general dentists, patients, and parents.

The methods used more by MSO affiliates were: open Saturdays, open a satellite office, no-charge initial visit, education of GPs, follow-up calls after difficult appointments, seek referrals from staff members, improve scheduling, improve case presentation, improve staff management, expand services (TMJ, lingual, and surgical orthodontics), patient motivation techniques, reduced fee incentives, more lenient fee payment arrangements, practice newsletter, personal publicity in local media, all forms of advertising, and managed care.

Conclusion

Overall, orthodontists are in the midst of an economic boom that has now lasted about 12 years and shows no signs of abating, thanks to a healthy economy and a sizable pool of children who have reached orthodontic age. Practitioners continue to be able to raise their fees in step with inflation and to find more efficient ways of managing their practices, as shown by a lower median overhead rate than in any survey since 1987.

General dentists continue to be the most important source of referrals, but marketing to adult patients may become more critical in the years ahead, as baby boomer children grow older. Still, with competitive factors remaining fairly constant, orthodontists are probably realistic in anticipating further growth. □