

# 2009 JCO Orthodontic Practice Study

## Part 4 Additional Breakdowns

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This is the final installment in our four-part report on the 2009 JCO Orthodontic Practice Study. Previous articles have reported on trends in orthodontic economics and practice administration since the first biennial Practice Study was conducted in 1981; factors that appear related to practice success and growth in terms of income and numbers of cases; and staff numbers, salaries, and benefits (JCO, October-December 2009). This month, we will compare figures from male and female orthodontists and examine the effects of affiliation with management service organizations. For the complete Practice Study tables, click on the link from this article in the JCO Online Archive at [www.jco-online.com](http://www.jco-online.com).

The survey questionnaire and methodology were described in Part 1 (JCO, October 2009). We generally report medians rather than means in the tables because they tend to be less affected by extremely high and low responses. In some tables, however, means are used to test the statistical significance of differences among groups. The significance level (“p”) is set at .01, instead of the conventional .05, because the substantial number of variables on the questionnaire increases the likelihood that chance may affect the data. Annual figures, such as income amounts and numbers of cases, refer to the preceding calendar year—in this case, 2008.

### Breakdowns by Sex of Orthodontist

The percentage of female respondents declined for the first time since these surveys began, from about 14% in 2007 to about 12% in the current Study. The percentage of women in the newest practices also dropped since the previous survey, but there was still a spike in the percentage of females owning 11-to-15-year-old practices (Table 28). While the proportion of women in practice for 26 years or longer was the highest ever, it remained below 5%. The highest percentages of female respondents were in the East South Central and South Atlantic regions, and the lowest in the Mountain and East North Central areas.

As in the 2007 Study, the only statistically significant difference between male and female practitioners was in the number of years in practice (Table 29). Women orthodontists reported lower income and numbers of cases and higher overhead rates, but these disparities could all be related to the lower average age of their practices. Men and women worked about the same number of hours per week, but men spent more days attending courses and meetings.

Most of the management methods listed on the questionnaire were used by higher percentages of women than of men (Table 30). The only exceptions were written practice plan, employee

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Dr. Keim



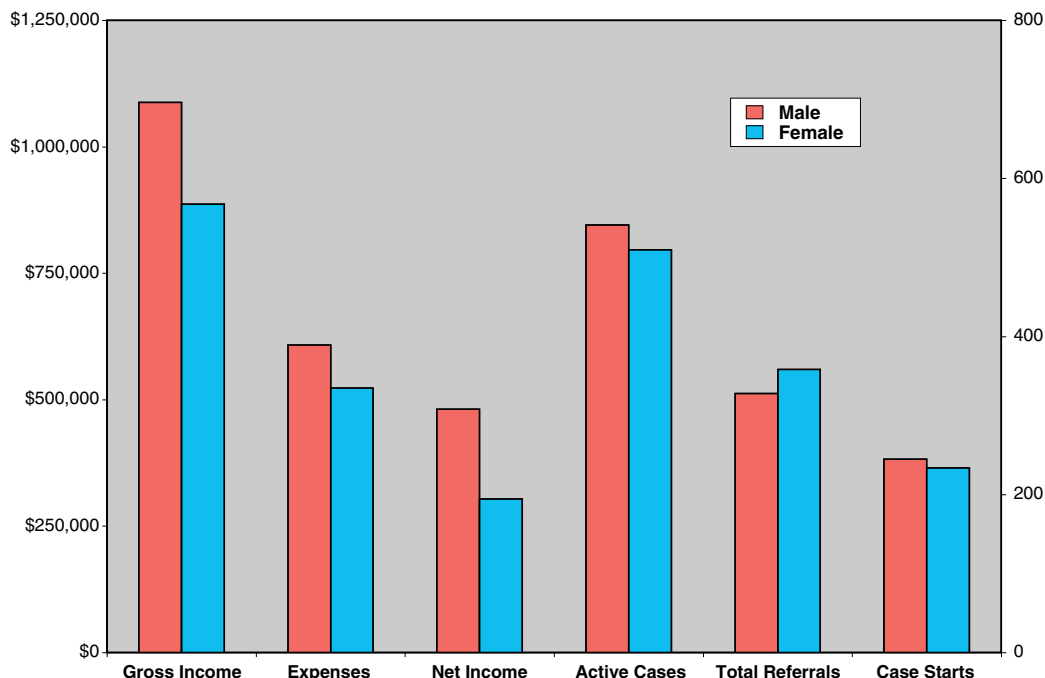
Dr. Gottlieb



Dr. Nelson



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**TABLE 28  
SEX OF ORTHODONTIST BY  
DEMOGRAPHIC VARIABLES**

	Male	Female
<i>Years in Orthodontic Practice</i>		
2-5 years	80.9%	19.1%
6-10 years	84.4	15.6
11-15 years	75.0	25.0
16-20 years	84.7	15.3
21-25 years	89.7	10.3
26 or more years	95.4	4.6
<i>Geographic Region</i>		
New England	87.5	12.5
Middle Atlantic	87.7	12.3
South Atlantic	80.0	20.0
East South Central	73.7	26.3
East North Central	93.3	6.7
West North Central	88.9	11.1
Mountain	93.5	6.5
West South Central	92.7	7.3
Pacific	90.3	9.7

with primary responsibility as communications supervisor (a particularly wide disparity), progress reports, post-treatment consultations, pretreatment flow control system, accounts-receivable reports, contracts-written reports, and measurement of case acceptance.

On the other hand, male and female respondents were almost equally likely to routinely delegate the tasks surveyed (Table 31). Higher percentages of women routinely delegated impressions for appliances; fabrication of bands; insertion of bands, archwires, and removable appliances; adjustment of archwires; removal of bands and archwires; fee presentation; progress reports; and post-treatment conferences.

Practice-building methods were also fairly close in usage between men and women orthodontists (Table 32). Higher percentages of female respondents reported using the following methods: open one or more evenings per week; participate in community and dental society activities; gifts and reports to general dentists; gifts to patients and parents; seek referrals from other professionals; treat adult patients; on time for appointments;

expand services with lingual orthodontics and Invisalign; patient motivation techniques; no-charge initial visit and discount for up-front payment; practice newsletter; personal publicity in local media; advertising in yellow pages, local newspapers, and local radio; and managed care.

### Management Service Organizations

The percentage of respondents who said they were affiliated with management service organizations rose slightly from 2.2% in the 2007 Study to 3.1% in the present survey, but was still considerably less than the 9.8% reported in the 1999 Study (the first time this topic was surveyed). The high-

**TABLE 29  
SELECTED VARIABLES (MEANS) BY SEX OF ORTHODONTIST**

	Male	Female
Number of Years in Practice	22.7	15.8*
Number of Satellite Offices	0.6	0.5
Full-Time Employees	5.6	4.9
Part-Time Employees	1.6	2.1
Total Referrals	327.9	358.4
Case Starts	244.6	233.4
Adult Case Starts	26.3%	23.5%
Active Treatment Cases	541.0	509.6
Adult Active Cases	21.1%	24.5%
Patients Covered by Third Party	46.9%	45.8%
Patients Covered by Managed Care	5.8%	3.0%
Offer Third-Party Financing (such as Orthodontists Fee Plan)	67.5%	73.1%
Total Chairs	5.9	5.9
Patients per Day	50.7	45.9
Emergencies per Day	3.1	4.2
Broken Appointments per Day	3.2	2.9
Cancellations per Day	2.9	2.7
Gross Income	\$1,087,643	\$886,798
Overhead Rate	55.9	59.0
Net Income	\$481,350	\$303,702*
Net Income per Case	\$986	\$695
Child Case Fee	\$5,144	\$5,094
Full-Time Employee Hours/Week	34.3	35.7
Full-Time Employee Weeks/Year	48.2	49.3
Orthodontist-Owner Hours/Week	37.0	37.7
2008 Continuing Education Course Days	6.8	5.8
2008 Continuing Education Meeting Days	6.0	5.1

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

est percentages of MSO affiliates had been in practice for 11-15 years and were located in the Pacific or East South Central regions (Table 33). There were no MSO affiliates responding from the New England, Middle Atlantic, or West North Central regions.

As in previous reports, MSO practices showed higher income, numbers of cases, and numbers of employees than non-affiliates did (Table 34). The differences were statistically significant, however, only for number of full-time employees and percentage of patients covered by managed care.

**TABLE 30  
USE OF MANAGEMENT METHODS BY SEX OF ORTHODONTIST**

	Male	Female
Written philosophy of practice	53.1%	67.3%
Written practice objectives	38.0	50.0
Written practice plan	21.9	21.2
Written practice budget	19.0	25.0
Office policy manual	82.6	92.3
Office procedure manual	59.9	61.5
Written job descriptions	60.9	67.3
Written staff training program	32.8	46.2
Staff meetings	82.8	94.2
Individual performance appraisals	65.6	73.1
Measurement of staff productivity	15.4	17.3
In-depth analysis of practice activity	32.6	32.7
Practice promotion plan	42.2	42.3
Dental management consultant	21.9	28.8
Patient satisfaction surveys	33.9	46.2
Employee with primary responsibility as communications supervisor	25.5	9.6
Progress reports	37.2	32.7
Post-treatment consultations	33.6	23.1
Pretreatment flow control system	46.6	46.2
Treatment flow control system	22.7	30.8
Cases beyond estimate report	33.9	34.6
Profit and loss statements	72.9	78.8
Delinquent account register	78.9	82.7
Accounts-receivable reports	84.1	78.8
Contracts-written reports	51.6	38.5
Measurement of case acceptance	53.1	50.0

Because of their management fees, MSO affiliates showed lower net income per case, even though they charged slightly higher fees. Non-affiliates treated higher percentages of third-party patients, but lower percentages of adult patients, and were less likely to offer third-party financing. Non-affiliates worked

slightly more hours per week, but spent fewer days at courses and meetings.

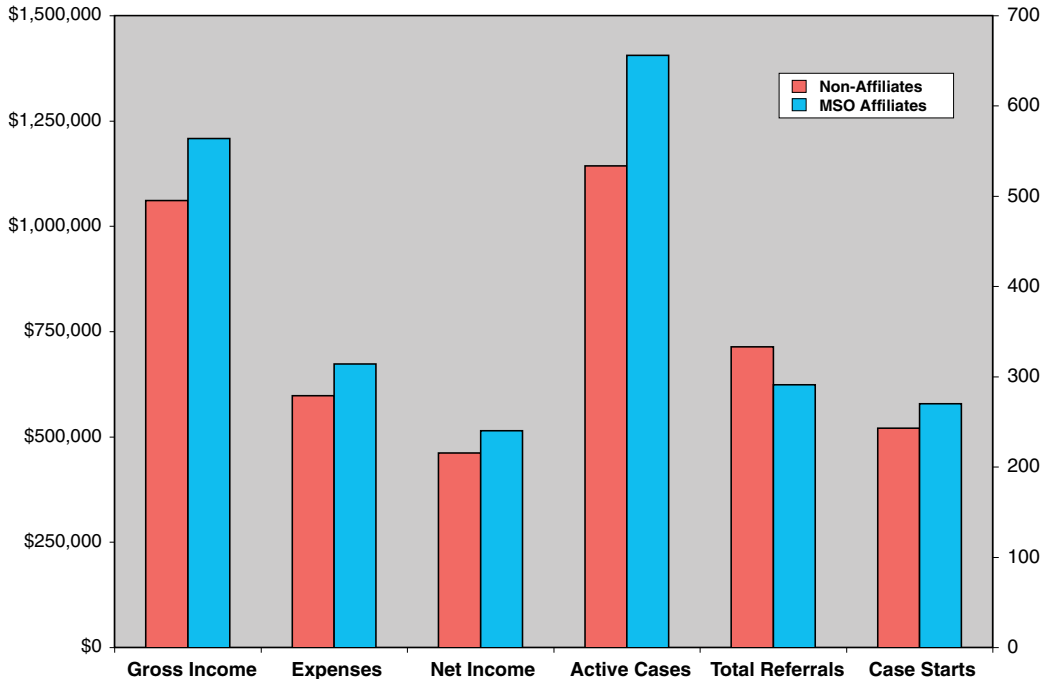
MSO practices were slightly more positive about the effects of affiliation than they had been in the past two surveys, especially in terms of practice efficiency (Table 35).

**TABLE 31  
ROUTINE DELEGATION BY SEX OF ORTHODONTIST**

	Male	Female
<i>Record-Taking</i>		
Impressions for study models	89.2%	88.9%
X-rays	93.6	90.6
Cephalometric tracings	38.3	17.6
<i>Clinical</i>		
Impressions for appliances	79.6	87.0
Removal of residual adhesive	34.0	30.8
Fabrication of:		
Bands	53.1	53.8
Archwires	32.6	31.9
Removable appliances	41.7	38.3
Insertion of:		
Bands	28.3	43.1
Bonds	12.2	4.1
Archwires	60.3	69.2
Removable appliances	23.4	31.4
Adjustment of:		
Archwires	13.1	15.4
Removable appliances	10.4	9.6
Removal of:		
Bands	54.8	60.4
Bonds	53.8	52.8
Archwires	79.6	84.9
<i>Administrative</i>		
Case presentation	24.2	19.6
Fee presentation	74.2	82.7
Financial arrangements	87.3	87.0
Progress reports	25.3	33.3
Post-treatment conferences	18.1	22.9
Patient instruction and education	88.3	86.8

**TABLE 32**  
**USE OF PRACTICE-BUILDING METHODS BY SEX OF ORTHODONTIST**

	Male	Female
Change practice location	29.7%	27.7%
Expand practice hours:		
Open one or more evenings/week	17.1	19.1
Open one or more Saturdays/month	11.1	10.6
Open a satellite office	33.0	29.8
Participate in community activities	61.3	68.1
Participate in dental society activities	59.8	68.1
Seek referrals from general dentists:		
Letters of appreciation	71.2	66.0
Entertainment	58.6	48.9
Gifts	73.6	80.9
Education of GPs	41.7	34.0
Reports to GPs	69.1	70.2
Seek referrals from patients and parents:		
Letters of appreciation	62.5	59.6
Follow-up calls after difficult appointments	68.2	66.0
Entertainment	27.9	25.5
Gifts	44.1	63.8
Seek referrals from staff members	58.0	48.9
Seek referrals from other professionals (non-dentists)	25.5	27.7
Treat adult patients	83.8	93.6
Improve scheduling:		
On time for appointments	76.9	78.7
On-time case finishing	69.4	66.0
Improve case presentation	51.4	38.3
Improve staff management	44.7	44.7
Improve patient education	45.3	44.7
Expand services:		
TMD	25.8	12.8
Functional appliances	30.3	19.1
Lingual orthodontics	17.1	19.1
Surgical orthodontics	44.1	36.2
Invisalign	54.1	66.0
Cosmetic/laser treatment	16.5	10.6
Patient motivation techniques	39.0	48.9
No-charge initial visit	79.3	83.0
No-charge diagnostic records	28.2	23.4
No initial payment	18.0	10.6
Discount for up-front payment	79.9	91.5
Extended payment period	50.2	36.2
Practice newsletter	20.4	27.7
Personal publicity in local media	19.2	21.3
Advertising:		
Telephone yellow pages		
Boldface listing	59.5	63.8
Display advertising	30.3	31.9
Local newspapers	21.0	34.0
Local TV	5.7	4.3
Local radio	6.9	8.5
Direct-mail promotion	18.0	17.0
Managed care (closed-panel contracting)	11.7	23.4
Management service affiliation	2.1	2.1



**TABLE 33  
MANAGEMENT SERVICE AFFILIATION  
BY DEMOGRAPHIC VARIABLES**

	Not Affiliated	Affiliated
<i>Years in Orthodontic Practice</i>		
2-5 years	95.7%	4.3%
6-10 years	95.5	4.5
11-15 years	93.0	7.0
16-20 years	98.6	1.4
21-25 years	98.5	1.5
26 or more years	97.1	2.9
<i>Geographic Region</i>		
New England	100.0	0.0
Middle Atlantic	100.0	0.0
South Atlantic	96.0	4.0
East South Central	94.7	5.3
East North Central	96.0	4.0
West North Central	100.0	0.0
Mountain	95.3	4.7
West South Central	98.1	1.9
Pacific	94.4	5.6

**Conclusion**

With the current recession in full swing at the end of 2008—the year reflected in the income data for this Practice Study—the orthodontic economy was more stagnant than at any time since these surveys began in 1981. Over the past two years, median gross income rose by only 4%, while median net income declined for the first time (see Part 1, JCO, October 2009). As a result, lower percentages of practices reported growth in gross income and case starts than ever before (see Part 3, JCO, December 2009). Furthermore, a higher percentage of respondents than in any previous survey reported being “not busy enough” (Table 36). No one except a few of the newest and oldest practices said they were “too busy to treat all persons requesting appointments”.

When this survey was conducted in early 2009, respondents were more pessimistic about the following year than at any time in the past three decades. This seems to indicate that the overall results of the 2011 Practice Study are unlikely to be much improved over the data in the

**TABLE 34  
SELECTED VARIABLES (MEANS) BY  
MANAGEMENT SERVICE AFFILIATION**

	Not Affiliated	Affiliated
Number of Years in Practice	21.8	20.6
Number of Satellite Offices	0.6	0.8
Full-Time Employees	6.0	6.6*
Part-Time Employees	1.6	1.8
Total Referrals	333.2	290.8
Case Starts	242.7	270.0
Adult Case Starts	26.1%	26.9%
Active Treatment Cases	533.5	655.9
Adult Active Cases	21.5%	23.0%
Patients Covered by Third Party	47.0%	41.0%
Patients Covered by Managed Care	5.1%	17.8%*
Offer Third-Party Financing (such as Orthodontists Fee Plan)	50.0%	71.1%
Total Chairs	5.9	5.8
Patients per Day	49.9	56.4
Emergencies per Day	3.2	2.6
Broken Appointments per Day	3.2	3.4
Cancellations per Day	2.9	2.5
Gross Income	\$1,061,243	\$1,208,326
Overhead Rate	56.3%	55.7%
Net Income	\$461,358	\$514,007
Net Income per Case	\$955	\$851
Child Case Fee	\$5,133	\$5,174
Full-Time Employee Hours/Week	34.4	37.1
Full-Time Employee Weeks/Year	48.3	47.9
Orthodontist-Owner Hours/Week	37.2	35.0
2008 Continuing Education Course Days	6.7	7.8
2008 Continuing Education Meeting Days	5.8	9.0

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

**TABLE 35  
EFFECTS OF MANAGEMENT SERVICE AFFILIATION**

	Highly Positive	Somewhat Positive	None	Somewhat Negative	Highly Negative	Mean*
Referrals	28.6%	35.7%	35.7%	0.0%	0.0%	2.07
Case Acceptance	14.3	42.9	42.9	0.0	0.0	2.29
Gross Income	28.6	57.1	7.1	0.0	7.1	2.00
Practice Efficiency	35.7	50.0	14.3	0.0	0.0	1.79

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



current report.

Still, as in every Study to date, some practices were more successful than others in generating new patients and net income. These tended to be the ones that made the best use of management and practice-building methods and routinely del-

egated chairside and administrative tasks to their staff members (see Part 2, JCO, November 2009). Considering that 89% of all respondents were not busy enough or at least “did not feel overworked”, such methods might provide a template for finding the growth potential within a practice. □

**TABLE 36  
PRACTICE BUSYNESS BY SELECTED VARIABLES**

	<b>Too Busy to Treat All Persons Requesting Appointments</b>	<b>Provided Care to All Who Requested Appointments But Felt Overworked</b>	<b>Provided Care to All Who Requested Appointments —Did Not Feel Overworked</b>	<b>Not Busy Enough</b>
<i>Years in Orthodontic Practice</i>				
2-5 years	2.1%	8.5%	55.3%	34.0%
6-10 years	0.0	9.1	56.8	34.1
11-15 years	0.0	9.3	55.8	34.9
16-20 years	0.0	10.0	61.4	28.6
21-25 years	0.0	10.4	44.8	44.8
26 or more years	1.2	11.1	46.8	40.9
<i>Legal Status</i>				
Sole proprietorship	0.0	15.0	49.1	35.9
Professional corporation	1.1	7.6	52.2	39.1
<i>Community Size</i>				
Rural (less than 20,000)	1.6	7.8	43.8	46.9
Small city (20,000-50,000)	0.0	8.0	57.6	34.4
Large city (50,000-500,000)	1.3	10.3	48.7	39.7
Metropolitan (more than 500,000)	0.0	13.9	51.5	34.7
<i>Geographic Region</i>				
New England	0.0	6.3	50.0	43.8
Middle Atlantic	0.0	16.4	54.5	29.1
South Atlantic	1.3	9.3	52.0	37.3
East South Central	0.0	15.8	52.6	31.6
East North Central	0.0	6.8	52.7	40.5
West North Central	0.0	18.5	48.1	33.3
Mountain	2.3	7.0	53.5	37.2
West South Central	0.0	11.3	62.3	26.4
Pacific	1.4	9.9	38.0	50.7
COMPOSITE	0.7	10.3	51.1	37.9