2007 JCO Orthodontic Practice Study
Part 2 Practice Success

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Last month, in the first of this series of articles on the 2007 JCO Orthodontic Practice Study, we discussed trends in the economics and administration of orthodontic offices since the initial biennial survey was conducted in 1981, and we covered the methodology of these reports (JCO, October 2007). For the complete tables of the 2007 Study, click on the link from this article in the JCO Online Archive on our website, www.jco-online.com.

This month, we will describe factors that seem to be related to practice success in terms of net income and numbers of case starts. Because means are required for tests of statistical significance, most of the tables in this article report means instead of medians, which are used elsewhere in the Practice Study. We have selected the significance level ("p") of .01 rather than the more customary .05, since the large number of variables in this survey increases the likelihood of chance affecting the data.

In these tables, annual figures such as income and numbers of cases refer to the preceding calendar year, which, in the case of the present Study, was 2006. Every practice in this report had a single orthodontist-owner, because practices with multiple owners were excluded from the main survey results.

Net Income Level

The respondents were arbitrarily divided into three net income categories, as in every previous Practice Study, so that we could pinpoint differences for purposes of comparison. To keep about one-fourth of the respondents in each group, the income levels used were slightly higher than in the 2005 Study: high ($600,000 or more), moderate ($325,000-525,000), and low ($25,000-250,000). The remaining one-fourth of the respondents were omitted from these particular tables.

As in previous surveys, high net income practices were able to treat nearly three times as many active patients as low net income practices did, while taking in nearly twice the amount of net income per case (Table 9). High net income practices reported more than twice the number of employees, but significantly lower overhead rates—48% vs. 62%. There were no significant differences among the three groups in their percentages of adult and third-party patients, but low net income practices had significantly higher percentages of patients covered by managed care.

The most productive respondents were those who had been in practice between 16 and 25 years, although the 6-to-10-year group reported the lowest median overhead rate (Table 10). The newest

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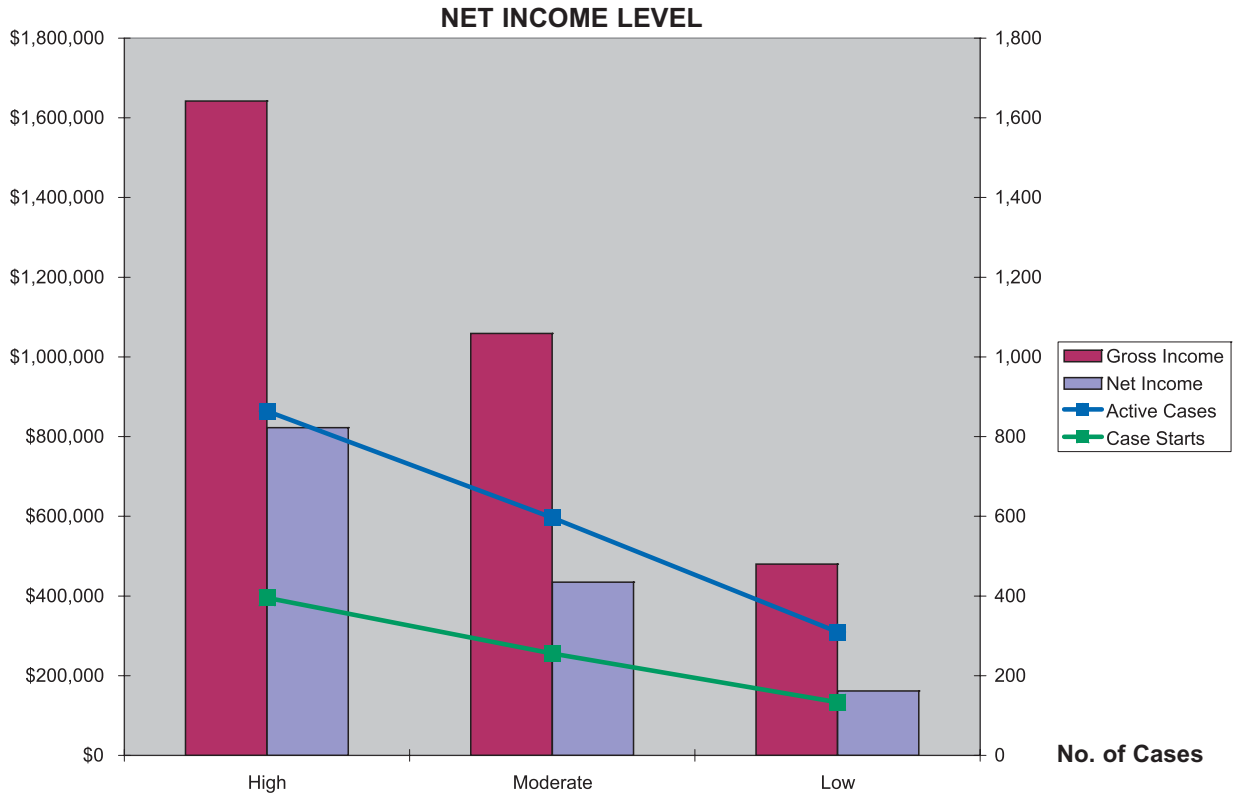


TABLE 9
SELECTED VARIABLES (MEANS) BY NET INCOME LEVEL

	High	Moderate	Low
Number of Satellite Offices	0.8	0.6	0.4*
Full-Time Employees	8.4	6.1	3.2*
Part-Time Employees	1.8	2.1	1.5
Total Referrals	550.4	406.1	184.4*
Case Starts	395.3	255.8	133.4*
Adult Case Starts	24.9%	21.4%	26.0%
Active Treatment Cases	863.8	596.4	309.9*
Adult Active Cases	22.9%	21.9%	22.6%
Patients Covered by Third Party	43.0%	46.8%	46.6%
Patients Covered by Managed Care	3.5%	9.0%	17.8%*
Offer Third-Party Financing Plan	75.9%	77.7%	65.7%
Total Chairs	7.1	6.4	4.8*
Annual Hours	1,659.0	1,634.8	1,564.4
Patients per Day	67.7	53.5	34.3*
Emergencies per Day	3.7	3.6	1.7*
Broken Appointments per Day	4.2	3.4	3.0
Cancellations per Day	3.2	2.8	1.9*
Gross Income	$1,642,420	$1,059,014	$480,224*
Overhead Rate	48.4%	56.0%	62.4%*
Net Income	$822,581	$434,768	$161,573*
Net Income per Case	$1,107	$1,038	$676*

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

TABLE 10
SELECTED VARIABLES (MEDIANS) BY YEARS IN PRACTICE

	Net Income	Gross Income	Overhead Rate	Case Starts	Active Cases
2-5 years	$250,000	$700,000	57%	180*	368*
6-10 years	450,000	960,000	52%	240	500
11-15 years	461,735	1,000,000	58%	262	530
16-20 years	500,000	1,150,000	54%	281	628
21-25 years	500,000	1,200,000	54%	245	500
26 or more years	316,000	696,625	57%	184	377

*Differences between means in these categories are statistically significant at or below the .01 probability level.

TABLE 11
NET INCOME LEVEL BY GEOGRAPHIC REGION

	High	Moderate	Low
New England (CT,ME,MA,NH,RI,VT)	35.7%	35.7%	28.6%
Middle Atlantic (NJ,NY,PA)	46.3	34.1	19.5
South Atlantic (DE,DC,FL,GA,MD,NC,SC,VA,WV)	46.0	31.7	22.2
East South Central (AL,KY,MS,TN)	58.8	17.6	23.5
East North Central (IL,IN,MI,OH,WI)	32.6	37.0	30.4
West North Central (IA,KS,MN,MO,NE,ND,SD)	38.1	23.8	38.1
Mountain (AZ,CO,ID,MT,NV,NM,UT,WY)	10.3	41.4	48.3
West South Central (AR,LA,OK,TX)	17.6	38.2	44.1
Pacific (AK,CA,HI,OR,WA)	27.9	30.2	41.9

TABLE 12
MEAN FEES AND FINANCIAL POLICIES BY NET INCOME LEVEL

	High	Moderate	Low
Child Fee (Permanent Dentition)	$4,984	$5,130	$4,743*
Adult Fee	$5,453	$5,557	$5,080*
2005 Increase (Reported)	4.2%	4.3%	3.4%
2006 Fee Increase (Reported)	4.1%	4.1%	3.7%
Initial Payment	23.8%	24.0%	23.5%
Payment Period (months)	21.2	21.6	22.0

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

and oldest practices, which make up disproportionately high percentages of the low net income category, tended to have the highest overhead rates.

As in the 2005 Study, the highest percentage of respondents in the high net income group was found in the East South Central region (Table 11). The lowest percentage of high net income practices was in the Mountain region, followed by the West South Central region. The lowest percentages of low net income respondents were in the Middle Atlantic, South Atlantic, and East South Central regions.

The high net income practices showed significantly higher fees than the low net income practices did, but the moderate group reported the highest fees (Table 12). High and moderate net income practices also had slightly higher fee increases and initial payments and shorter payment periods than the low net income practices, although the differences were not statistically significant.

Management Methods

More than half the management methods surveyed were associated with significantly greater

TABLE 13
MEAN CASE STARTS BY USE OF MANAGEMENT METHODS

	Used	Not Used
Written philosophy of practice	270.9	229.6*
Written practice objectives	273.0	240.6
Written practice plan	252.4	251.4
Written practice budget	256.9	250.3
Office policy manual	265.2	197.9*
Office procedure manual	259.4	242.0
Written job descriptions	262.8	235.1
Written staff training program	258.2	248.9
Staff meetings	260.3	205.2*
Individual performance appraisals	271.3	213.6*
Measurement of staff productivity	309.1	238.6*
In-depth analysis of practice activity	287.9	232.9*
Practice promotion plan	285.5	232.9*
Dental management consultant	310.4	237.7*
Patient satisfaction surveys	281.9	235.7*
Employee with primary responsibility as communications supervisor	287.4	239.1*
Progress reports	265.8	241.8
Post-treatment consultations	258.9	248.1
Pretreatment flow control system	273.9	232.5*
Treatment flow control system	271.6	245.2
Cases beyond estimate report	275.4	241.6
Profit and loss statements	259.0	227.3
Delinquent account register	262.5	205.0
Monthly accounts-receivable reports	264.3	201.1*
Monthly contracts-written reports	275.0	222.1*
Measurement of case acceptance	278.0	223.5*

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

mean numbers of case starts for users than for non-users (Table 13). Although the differences were not statistically significant for the remaining methods, users still reported more case starts than non-users did in every category.

The use of management methods varied less according to net income level than in any Practice Study to date, with only the measurement of case acceptance showing a statistically significant difference among the three income groups (Table 14). The other management methods that were used more by the high net income respondents than by the practices in the moderate and low net income groups were written practice objectives, office policy manual, office procedure manual, written job descriptions, written staff training program, staff meetings, measurement of staff productivity, in-depth analysis of practice activity, practice promotion plan, dental management consultant, pretreatment flow control system, delinquent account register, monthly accounts-receivable reports, and monthly contracts-written reports.

TABLE 14
USE OF MANAGEMENT METHODS BY NET INCOME LEVEL

	High	Moderate	Low
Written philosophy of practice	58%	61%	43%
Written practice objectives	40	36	32
Written practice plan	25	25	20
Written practice budget	18	29	18
Office policy manual	87	84	72
Office procedure manual	60	58	52
Written job descriptions	64	61	54
Written staff training program	35	28	24
Staff meetings	88	87	78
Individual performance appraisals	68	72	55
Measurement of staff productivity	24	20	11
In-depth analysis of practice activity	43	35	25
Practice promotion plan	40	37	28
Dental management consultant	26	22	12
Patient satisfaction surveys	33	42	30
Employee with primary responsibility as communications supervisor	28	36	21
Progress reports	44	45	35
Post-treatment consultations	29	37	27
Pretreatment flow control system	53	49	38
Treatment flow control system	23	27	28
Cases beyond estimate report	29	30	19
Profit and loss statements	79	80	69
Delinquent account register	88	75	76
Monthly accounts-receivable reports	87	76	75
Monthly contracts-written reports	66	54	48
Measurement of case acceptance	57	51	45*

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

Delegation

Routine delegation, as opposed to delegating occasionally or not at all, was associated with greater mean numbers of case starts for every task listed, as in previous surveys (Table 15). The differences were statistically significant for every task except removal of residual adhesive, insertion of bonds, adjustment of archwires and removable appliances, removal of archwires, and patient instruction and education.

High net income practices delegated every task more routinely than moderate or low net income practices did, except for the fab-

TABLE 15
MEAN CASE STARTS BY DELEGATION

	Routinely Delegated	Not Routinely Delegated
Record-Taking		
Impressions for study models	255.0	155.5*
X-rays	255.1	145.8*
Cephalometric tracings	272.0	234.6*
Clinical		
Impressions for appliances	262.7	186.8*
Removal of residual adhesive	269.7	240.5
Fabrication of:		
Bands	280.3	210.5*
Archwires	275.0	233.4*
Removable appliances	274.3	225.0*
Insertion of:		
Bands	296.3	225.8*
Bonds	288.6	242.9
Archwires	270.8	213.6*
Removable appliances	282.4	238.3*
Adjustment of:		
Archwires	291.4	243.7
Removable appliances	291.3	245.8
Removal of:		
Bands	272.2	213.8*
Bonds	272.1	219.9*
Archwires	256.6	216.0
Administrative		
Case presentation	308.5	228.6*
Fee presentation	267.5	196.5*
Financial arrangements	261.6	167.7*
Progress reports	282.2	236.4*
Post-treatment conferences	308.1	228.4*
Patient instruction and education	255.3	200.5

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

rication of bands and archwires and the adjustment of archwires and removable appliances, which were routinely delegated as much or more by the moderate net income group (Table 16). Differences among the three net income categories were statistically significant in the cases of impressions for study models, cephalometric tracings, impressions for appliances, fabrication of archwires and removable appliances, removal of bonds, case presentation, fee presentation, and financial arrangements.

TABLE 16
ROUTINE DELEGATION BY NET INCOME LEVEL

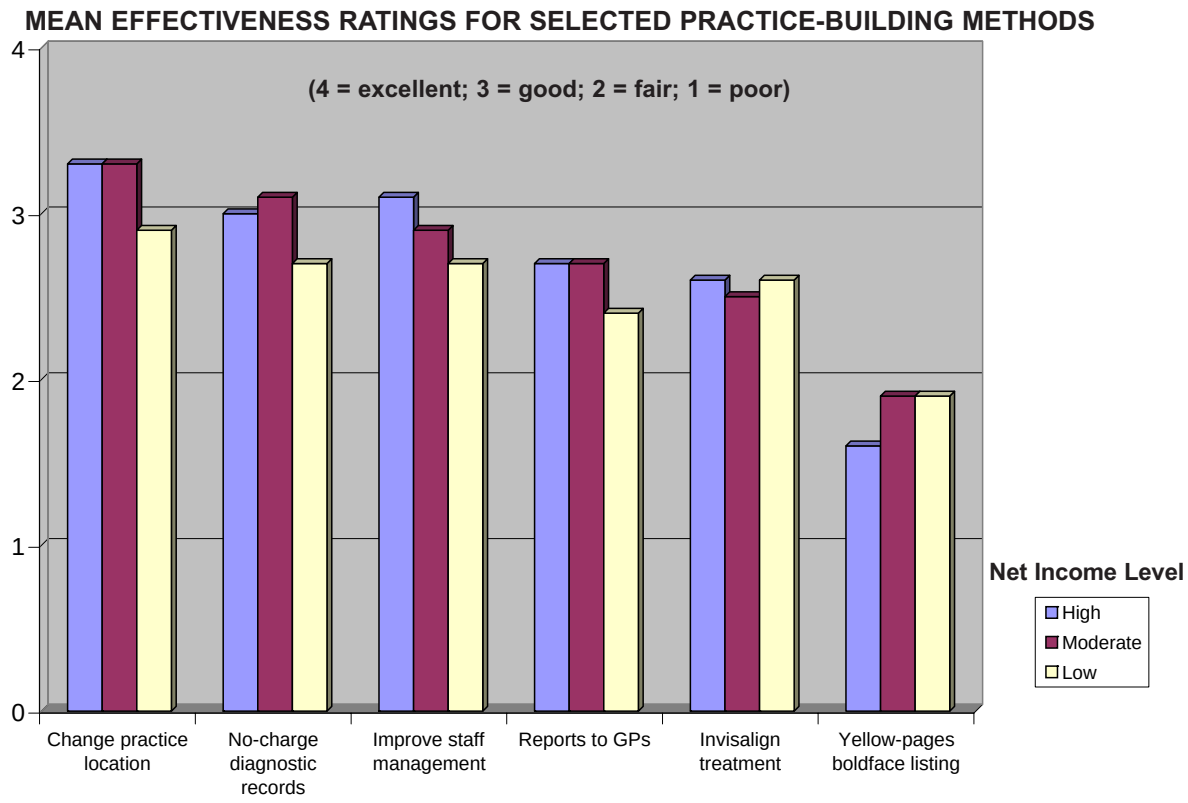
	High	Moderate	Low
Record-Taking			
Impressions for study models	98%	97%	88%*
X-rays	99	97	93
Cephalometric tracings	50	48	29*
Clinical			
Impressions for appliances	93	89	75*
Removal of residual adhesive	41	25	29
Fabrication of:			
Bands	63	65	45
Archwires	39	41	17*
Removable appliances	60	56	32*
Insertion of:			
Bands	36	27	29
Bonds	13	10	11
Archwires	68	64	51
Removable appliances	24	20	15
Adjustment of:			
Archwires	12	13	8
Removable appliances	10	10	8
Removal of:			
Bands	67	61	49
Bonds	65	56	43*
Archwires	88	33	77
Administrative			
Case presentation	35	29	12*
Fee presentation	83	78	54*
Financial arrangements	93	92	73*
Progress reports	32	30	27
Post-treatment conferences	26	21	14
Patient instruction and education	94	92	85

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

TABLE 17
PRACTICE-BUILDING METHODS BY NET INCOME LEVEL

	High		Moderate		Low	
	Used	Rating†	Used	Rating†	Used	Rating†
Change practice location	35%	3.3	31%	3.3	31%	2.9
Expand practice hours:						
Open one or more evenings/week	15	2.7	20	2.7	20	3.0
Open one or more Saturdays/month	8	2.8	11	2.3	14	3.1
Open a satellite office	48	3.3	35	3.3	29	2.9
Participate in community activities	61	2.7	55	2.7	44	2.4
Participate in dental society activities	66	2.4	55	2.3	52	2.0
Seek referrals from general dentists:						
Letters of appreciation	76	2.7	79	2.7	71	2.5
Entertainment	69	2.7	57	2.6	42	2.4
Gifts	85	2.5	79	2.5	75	2.3
Education of GPs	48	2.5	44	2.8	25	2.4
Reports to GPs	79	2.7	80	2.7	69	2.4
Seek referrals from patients and parents:						
Letters of appreciation	58	2.9	66	2.7	63	2.7
Follow-up calls after difficult appointments	74	3.1	71	3.0	60	2.9
Entertainment	31	2.7	22	2.8	11	2.5
Gifts	46	2.7	38	2.8	39	2.6
Seek referrals from staff members	58	2.3	57	2.2	45	2.1
Seek referrals from other professionals (non-dentists)	26	2.0	24	2.0	18	1.9
Treat adult patients	90	2.8	85	2.8	81	2.6
Improve scheduling:						
On time for appointments	77	3.2	70	3.0	73	2.9
On-time case finishing	75	3.1	60	2.8	57	2.9
Improve case presentation	58	3.2	51	3.0	45	2.8
Improve staff management	52	3.1	47	2.9	33	2.7
Improve patient education	44	2.9	49	2.9	38	2.7
Expand services:						
TMJ	30	2.1	26	2.3	14	1.9
Functional appliances	34	2.7	33	2.7	20	2.2
Lingual orthodontics	16	1.8	8	NA	1	NA
Surgical orthodontics	50	2.4	40	2.4	30	2.1
Invisalign treatment	71	2.6	65	2.5	51	2.6
Patient motivation techniques	49	2.6	52	2.6	27	2.5
No-charge initial visit	83	3.0	79	3.0	81	2.8
No-charge diagnostic records	29	3.0	17	3.1	18	2.7
No initial payment	18	2.7	12	2.6	13	2.5
Extended payment period	45	2.8	35	2.6	33	2.8
Practice newsletter	25	2.0	22	2.2	13	2.2
Personal publicity in local media	21	2.7	20	2.4	15	2.5
Advertising:						
Yellow pages						
Boldface listing	64	1.6	60	1.9	67	1.9
Display advertising	34	1.8	33	2.1	30	1.9
Local newspapers	29	2.2	27	1.9	25	1.8
Local TV	11	2.2	8	NA	2	NA
Local radio	9	2.2	9	NA	7	NA
Direct-mail promotion	24	2.3	14	2.5	19	2.4
Managed care	7	NA	13	2.7	23	NA
Management service affiliation	4	NA	4	NA	2	NA

†4 = excellent; 3 = good; 2 = fair; 1 = poor; NA = too few responses to calculate accurately.



Practice-Building Methods

As has been true since the early 1990s, there was no significant association between the use of practice-building methods and net income level (Table 17). Still, the most effective methods might be considered those rated good (3.0) or better by the high net income practices. In the current Study, these methods were (from highest to lowest ratings): change practice location, open a satellite office, on time for appointments, improve case presentation, follow-up calls after difficult appointments, on-time case finishing, improve staff management, no-charge initial visit, and no-charge diagnostic records. Expanding practice hours by opening on evenings or Saturdays now seems to be more popular among low net income practices than among other respondents.

The practice-building methods used by more than 70% of the high net income practices were (in descending order of usage): treat adult patients, gifts to GPs, no-charge initial visit, reports to GPs, on time for appointments, letters of appreciation to GPs, on-time case finishing, follow-up calls after difficult appointments, and Invisalign treatment.

The practice-building methods rated fair (2.0) or worse by the practices with high net income were (from lowest to highest ratings): yellow-pages advertising, lingual orthodontics, seek referrals from other professionals, and practice newsletter.

(TO BE CONTINUED)