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2009 JCO Orthodontic Practice Study
Part 2 Practice Success

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The first article in this four-part series on the 2009 JCO Orthodontic Practice Study (JCO, October 2009) covered trends in orthodontic economics and administration since our first biennial survey in 1981. The questionnaire and methodology were also described. JCO subscribers may review the complete tables from the 2009 Practice Study by visiting the Online Archive at www.jco-online.com.

This month's article discusses practice success in terms of factors that seem to be associated with increased net income and case starts. Annual data refer to the previous calendar year—in this case, 2008. It should be noted that the responding practices were all owned by solo practitioners; practices with multiple orthodontist-owners were excluded from the main results.

Although medians are reported in most of the Practice Study, many tables in this article use means to test the statistical significance of responses. The significance level ("p") is set at .01 instead of the more conventional .05 because the large number of variables in this survey increases the likelihood that the data may be affected by chance.

Net Income Level

As in every Practice Study to date, respondents were arbitrarily divided into three groups according to net income. To highlight the differences among the categories, about one-fourth of the respondents were placed in each group, and the remaining one-fourth were omitted from these particular tables. The net income levels were the same as in the 2007 Study: high ($600,000 or more), moderate ($325,000-525,000), and low ($25,000-250,000).

The disparity between high and low net income practices was not quite as wide as in previous surveys in terms of patient numbers, but the high income respondents still treated more than twice the number of cases as the low income practices while earning more than twice the net income per case (Table 9). Increased efficiency could be the reason, since the high net income practices reported significantly lower overhead rates with about twice the number of employees. There were no significant differences among the three groups in percentages of adult, third-party, or managed-care patients or in the number of annual hours worked.

When respondents were divided by years in practice, the orthodontists who had been in practice for 16-20 or 6-10 years were most likely to fall into the high net income category (Table 10). Respondents who had practiced for 11-15 years

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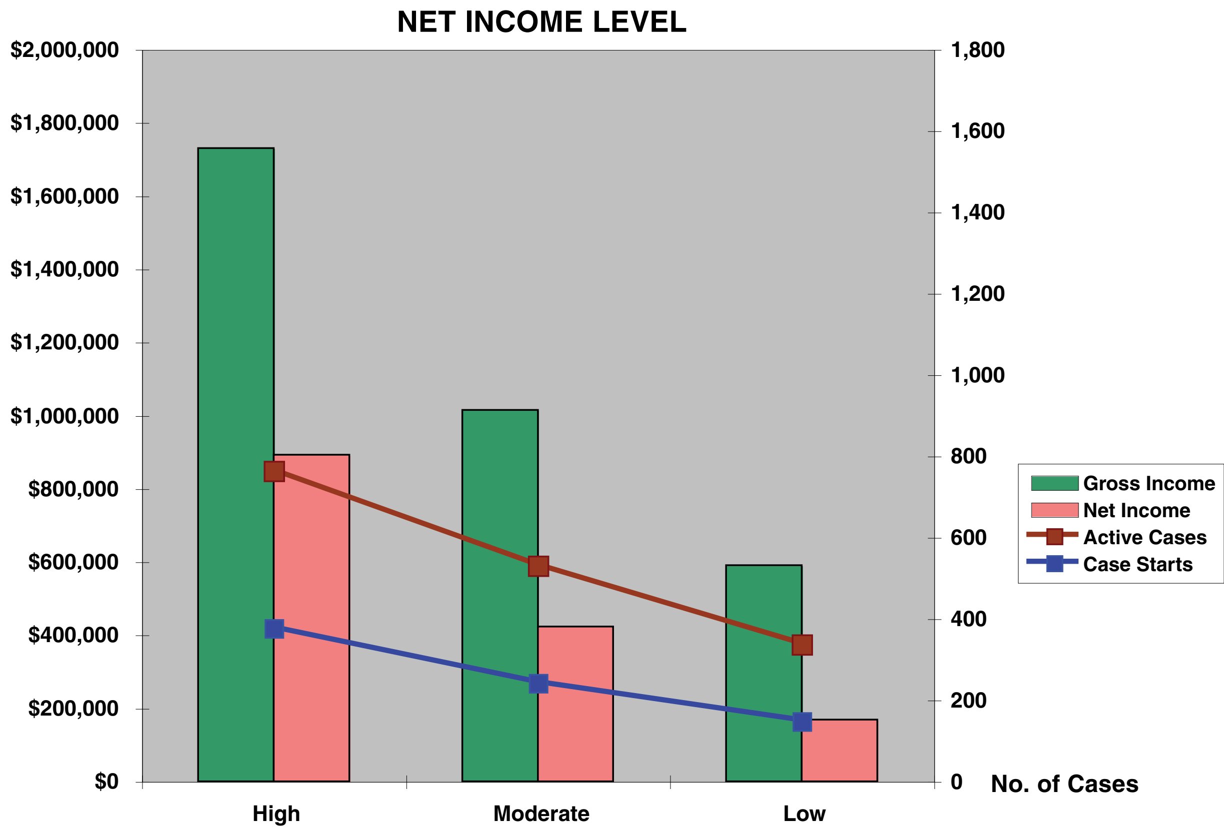


TABLE 9
SELECTED VARIABLES (MEANS) BY NET INCOME LEVEL

	High	Moderate	Low
Number of Satellite Offices	0.8	0.8	0.5*
Full-Time Employees	7.7	5.4	3.6*
Part-Time Employees	2.1	1.5	1.4
Total Referrals	482.0	307.0	218.9*
Case Starts	376.4	241.8	148.0*
Adult Case Starts	27.1%	25.4%	24.9%
Active Treatment Cases	763.8	530.6	337.3*
Adult Active Cases	22.9%	20.5%	20.8%
Patients Covered by Third Party	48.4%	46.4%	47.8%
Patients Covered by Managed Care	6.5%	5.7%	5.6%
Offer Third-Party Financing Plan	70.3%	70.5%	65.9%
Total Chairs	6.8	6.0	5.5*
Annual Hours	1,656.9	1,615.7	1,659.0
Patients per Day	64.6	50.7	37.0*
Emergencies per Day	4.6	3.0	2.6
Broken Appointments per Day	4.2	3.5	2.3*
Cancellations per Day	3.4	3.0	2.1*
Gross Income	$1,730,623	$1,014,387	$590,704*
Overhead Rate	47.5	56.1	66.8*
Net Income	$892,719	$422,471	$168,473*
Net Income per Case	$1,457	$890	$670*

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

TABLE 10
NET INCOME LEVEL BY YEARS IN PRACTICE

	High	Moderate	Low
2-5 years	39.3%	25.0%	35.7%
6-10 years	46.2	34.6	19.2
11-15 years	25.0	21.4	53.6
16-20 years	47.1	33.3	19.6
21-25 years	37.2	34.9	27.9
26 or more years	23.9	34.8	41.3

TABLE 11
NET INCOME LEVEL BY GEOGRAPHIC REGION

	High	Moderate	Low
New England (CT,ME,MA,NH,RI,VT)	20.0%	40.0%	40.0%
Middle Atlantic (NJ,NY,PA)	50.0	21.9	28.1
South Atlantic (DE,DC,FL,GA,MD,NC,SC,VA,WV)	40.5	21.4	38.1
East South Central (AL,KY,MS,TN)	50.0	42.9	7.1
East North Central (IL,IN,MI,OH,WI)	31.9	38.3	29.8
West North Central (IA,KS,MN,MO,NE,ND,SD)	11.8	41.2	47.1
Mountain (AZ,CO,ID,MT,NV,NM,UT,WY)	32.0	28.0	40.0
West South Central (AR,LA,OK,TX)	35.3	32.4	32.4
Pacific (AK,CA,HI,OR,WA)	26.7	37.8	35.6

TABLE 12
MEAN FEES AND FINANCIAL POLICIES BY NET INCOME LEVEL

	High	Moderate	Low
Child Fee (Permanent Dentition)	$5,312	$5,043	$5,009
Adult Fee	$5,727	$5,481	$5,438
2007 Fee Increase (Reported)	4.4%	4.3%	3.8%
2008 Fee Increase (Reported)	3.2%	2.8%	3.0%
Initial Payment	23.1%	23.1%	25.4%
Payment Period (months)	21.0	21.1	21.0

were most likely to be in the low net income group, followed by the oldest and newest practices.

As in the past two surveys, the highest percentage of respondents in the high net income category was in the East South Central region—this time, tied with the Middle Atlantic region (Table 11). East South Central practices also reported the lowest percentage of low net income respondents. The highest percentage of low net income practices was in the West North Central region, followed by the New England and Mountain regions.

There were no significant differences among the three income groups in terms of fees or financial policies, but the high net income practices did report the highest mean fees and two-year fee increases (Table 12).

Management Methods

Users of every management method listed on the questionnaire reported more mean case starts than non-users did (Table 13). The differences were statistically significant for written philosophy

TABLE 13
MEAN CASE STARTS BY USE OF MANAGEMENT METHODS

	Used	Not Used
Written philosophy of practice	263.3	221.9*
Written practice objectives	260.8	234.9
Written practice plan	277.0	236.5
Written practice budget	279.6	236.5
Office policy manual	254.7	197.5*
Office procedure manual	249.3	239.6
Written job descriptions	257.8	223.7
Written staff training program	267.1	233.3
Staff meetings	259.5	175.5*
Individual performance appraisals	271.5	190.9*
Measurement of staff productivity	280.4	238.9
In-depth analysis of practice activity	271.2	232.8*
Practice promotion plan	263.1	232.8
Dental management consultant	315.3	223.8*
Patient satisfaction surveys	273.7	229.8*
Employee with primary responsibility as communications supervisor	257.1	242.0
Progress reports	263.7	234.5
Post-treatment consultations	257.3	239.9
Pretreatment flow control system	263.1	229.7
Treatment flow control system	265.1	239.4
Cases beyond estimate report	256.3	239.5
Profit and loss statements	255.9	212.7*
Delinquent account register	255.3	206.3*
Monthly accounts-receivable reports	257.0	187.9*
Monthly contracts-written reports	263.2	228.1
Measurement of case acceptance	274.4	213.3*

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

of practice, office policy manual, staff meetings, individual performance appraisals, in-depth analysis of practice activity, dental management consultant, patient satisfaction surveys, profit and loss statements, delinquent account register, monthly accounts-receivable reports, and measurement of case acceptance.

Differences in the use of management methods by net income level were somewhat more apparent in the 2009 Study than in 2007 (Table 14). High net income practices were significantly more likely than the other two groups to use individual performance appraisals, in-depth analysis of practice activity, monthly accounts-receivable reports, and measurement of case acceptance. The only management methods used as much or more by low net income practices than by high net income respondents were written staff training program, post-treatment consultations, treatment flow control system, cases beyond estimate report, and profit and loss statements.

TABLE 14
USE OF MANAGEMENT METHODS BY NET INCOME LEVEL

	High	Moderate	Low
Written philosophy of practice	58%	60%	57%
Written practice objectives	43	46	41
Written practice plan	29	21	24
Written practice budget	28	26	21
Office policy manual	90	83	83
Office procedure manual	66	56	64
Written job descriptions	68	61	62
Written staff training program	39	38	40
Staff meetings	89	80	78
Individual performance appraisals	79	75	56*
Measurement of staff productivity	19	13	17
In-depth analysis of practice activity	43	38	22*
Practice promotion plan	47	36	45
Dental management consultant	33	24	17
Patient satisfaction surveys	37	35	35
Employee with primary responsibility as communications supervisor	27	17	20
Progress reports	38	36	31
Post-treatment consultations	26	40	33
Pretreatment flow control system	56	48	47
Treatment flow control system	27	23	27
Cases beyond estimate report	38	42	38
Profit and loss statements	72	83	78
Delinquent account register	86	82	77
Monthly accounts-receivable reports	91	88	76*
Monthly contracts-written reports	63	48	44
Measurement of case acceptance	59	58	38*

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

Delegation

As in previous Studies, routine delegation to staff members (as opposed to delegating occasionally or not at all) was associated with greater mean numbers of case starts for every task listed on the survey (Table 15). These differences were statistically significant for every task except fabrication and adjustment of archwires, financial arrangements, progress reports, post-treatment conferences, and patient instruction and education.

Delegation did not seem to make as substantial a difference in terms of net income as

TABLE 15
MEAN CASE STARTS BY DELEGATION

	Routinely Delegated	Not Routinely Delegated
Record-Taking		
Impressions for study models	252.0	158.7*
X-rays	252.2	165.1*
Cephalometric tracings	270.7	228.2*
Clinical		
Impressions for appliances	257.7	182.8*
Removal of residual adhesive	280.6	224.3*
Fabrication of:		
Bands	272.5	200.0*
Archwires	266.3	229.2
Removable appliances	276.1	223.8*
Insertion of:		
Bands	281.4	225.1*
Bonds	320.1	234.9*
Archwires	269.0	201.6*
Removable appliances	288.9	230.9*
Adjustment of:		
Archwires	284.2	239.2
Removable appliances	312.1	237.1*
Removal of:		
Bands	270.8	208.2*
Bonds	276.6	204.3*
Archwires	258.5	182.8*
Administrative		
Case presentation	292.4	228.9*
Fee presentation	260.6	194.1*
Financial arrangements	251.2	195.9
Progress reports	273.7	234.7
Post-treatment conferences	258.0	235.8
Patient instruction and education	249.3	196.8

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

it did for case starts (Table 16). Differences among the three net income groups were statistically significant only for insertion of removable appliances and removal of bands, bonds, and archwires. On the other hand, the high net income practices were more likely than the other practices to delegate every task routinely except for impressions for appliances; insertion of bands, bonds, archwires, and removable appliances; financial arrangements; progress reports; and post-treatment conferences.

TABLE 16
ROUTINE DELEGATION BY NET INCOME LEVEL

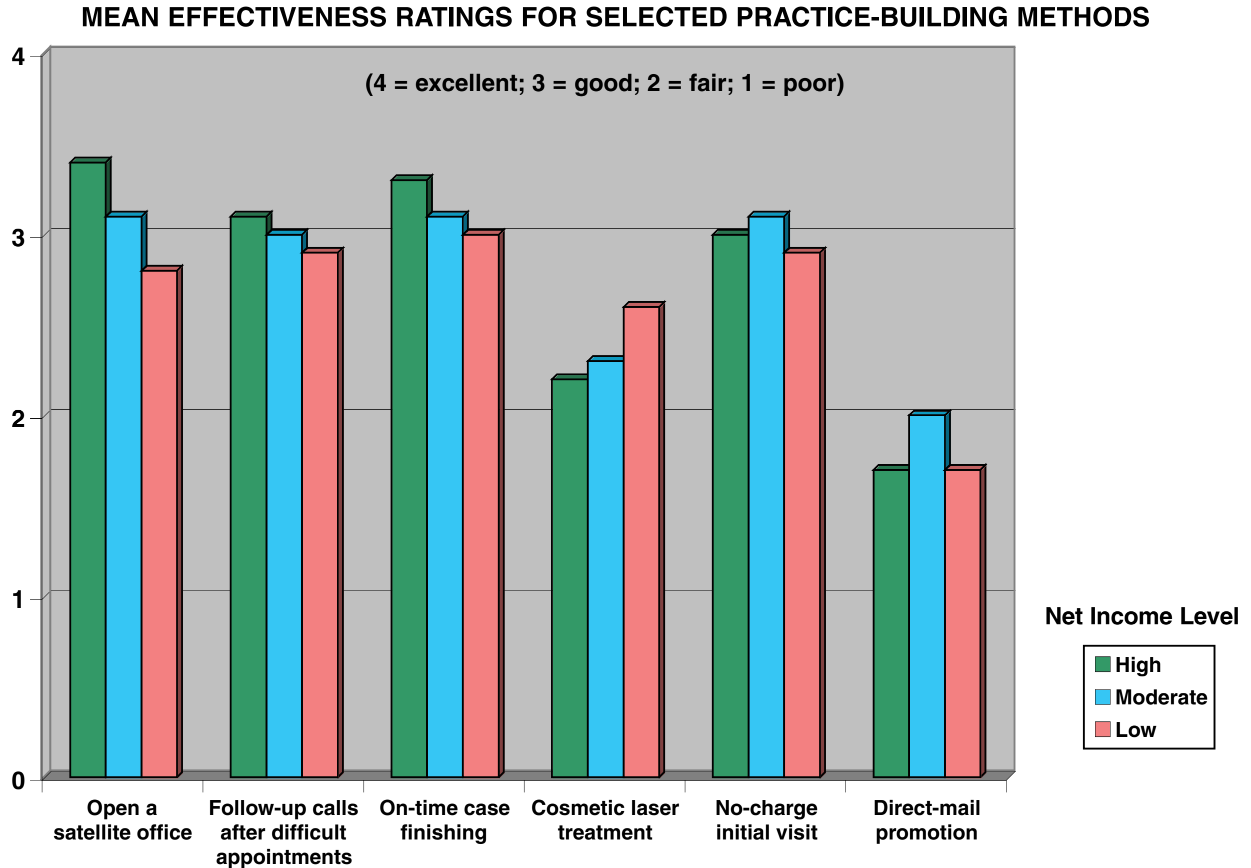
	High	Moderate	Low
Record-Taking			
Impressions for study models	96%	95%	86%
X-rays	97	96	87
Cephalometric tracings	44	37	25
Clinical			
Impressions for appliances	87	90	77
Removal of residual adhesive	40	36	23
Fabrication of:			
Bands	64	58	44
Archwires	35	28	33
Removable appliances	45	43	37
Insertion of:			
Bands	33	38	25
Bonds	14	20	9
Archwires	65	72	51
Removable appliances	27	40	16*
Adjustment of:			
Archwires	19	15	11
Removable appliances	15	14	8
Removal of:			
Bands	71	60	35*
Bonds	70	56	35*
Archwires	90	88	68*
Administrative			
Case presentation	33	25	20
Fee presentation	78	76	71
Financial arrangements	91	91	86
Progress reports	26	34	17
Post-treatment conferences	15	23	16
Patient instruction and education	93	91	86

*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	38%	3.3	32%	3.3	32%	3.3
Expand practice hours:						
Open one or more evenings/week	15	2.9	12	2.4	20	2.3
Open one or more Saturdays/month	14	2.8	12	2.6	11	2.1
Open a satellite office	35	3.4	32	3.1	36	2.8
Participate in community activities	72	2.6	59	2.8	65	2.6
Participate in dental society activities	66	2.1	64	2.2	61	2.0
Seek referrals from general dentists:						
Letters of appreciation	80	2.6	68	2.6	66	2.3
Entertainment	73	2.6	56	2.3	51	2.2
Gifts	81	2.4	73	2.5	78	2.3
Education of GPs	54	2.6	36	2.6	36	2.3
Reports to GPs	73	2.7	72	2.6	71	2.3
Seek referrals from patients and parents:						
Letters of appreciation	70	2.8	68	2.8	55	2.7
Follow-up calls after difficult appointments	76	3.1	68	3.0	74	2.9
Entertainment	35	2.6	32	2.6	25	2.5
Gifts	51	2.7	50	2.8	46	2.6
Seek referrals from staff members	63	1.9	63	1.9	57	1.9
Seek referrals from other professionals (non-dentists)	35	2.0	21	2.0	24	1.9
Treat adult patients	90	3.0	90	2.9	86	2.7
Improve scheduling:						
On time for appointments	90	3.3	78	3.2	80	3.0
On-time case finishing	87	3.3	71	3.1	67	3.0
Improve case presentation	56	3.2	53	3.2	47	3.0
Improve staff management	54	2.9	42	3.2	45	2.8
Improve patient education	53	2.9	49	2.9	47	2.7
Expand services:						
TMJ	23	2.2	22	2.1	30	2.3
Functional appliances	30	2.3	28	2.5	26	2.7
Lingual orthodontics	20	2.0	18	1.8	22	1.7
Surgical orthodontics	52	2.1	38	2.2	38	2.4
Invisalign treatment	70	2.5	46	2.8	53	2.4
Cosmetic laser treatment	27	2.2	15	2.3	12	2.6
Patient motivation techniques	47	2.7	44	2.6	42	2.5
No-charge initial visit	87	3.0	82	3.1	82	2.9
No-charge diagnostic records	32	2.9	27	3.3	26	3.0
No initial payment	18	2.6	15	2.8	20	2.3
Up-front payment discount	84	2.5	76	2.6	82	2.4
Extended payment period	56	2.6	46	2.8	50	2.4
Practice newsletter	30	2.5	13	2.0	20	2.1
Personal publicity in local media	25	2.0	21	2.5	22	2.1
Advertising:						
Yellow pages						
Boldface listing	62	1.4	63	1.9	64	1.5
Display advertising	34	1.6	29	2.3	30	1.7
Local newspapers	20	1.7	17	1.9	34	1.8
Local TV	9	NA	6	NA	4	NA
Local radio	10	1.6	8	NA	8	NA
Direct-mail promotion	19	1.7	21	2.0	20	1.7
Managed care	10	2.8	13	2.7	9	NA
Management service affiliation	5	NA	1	NA	0	NA

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



Practice-Building Methods

There was no significant relationship between the use of practice-building methods and net income level, as in every Study since the early 1990s (Table 17). Practice-building methods used by more than 70% of the high net income practices were (in descending order of usage): treat adult patients, on time for appointments, on-time case finishing, no-charge initial visit, up-front payment discount, gifts and letters of appreciation to GPs, follow-up calls after difficult appointments, entertainment of and reports to GPs, and participate in community activities.

The most effective methods might be considered those rated good (3.0) or better by the high net income practices. These were (from highest to lowest ratings): open a satellite office, change practice location, on time for appointments, on-time case finishing, improve case presentation, follow-up calls after difficult appointments, treat adult patients, and no-charge initial visit.

On the other hand, the practice-building methods rated fair (2.0) or worse by the high net income respondents were (from lowest to highest ratings): yellow-pages advertising, radio and newspaper advertising, direct-mail promotion, seek referrals from staff members and from other professionals, lingual orthodontics, and personal publicity in local media.

(TO BE CONTINUED)