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2011 JCO Orthodontic Practice Study
Part 2 Net Income

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Last month, the first article in this four-part series described trends in economics and administration over the 30 years of JCO Orthodontic Practice Studies. Complete tables from the 2011 Practice Study may be viewed by JCO subscribers in the Online Archive at www.jco-online.com.

Part 2 examines factors that appear to be associated with practice success in terms of increased net income and case starts. Any annual figures presented in these tables refer to the previous calendar year, 2010. Respondents were all solo practitioners, since multiple-owner practices were excluded from the main results (see the survey methodology in Part 1, JCO, October 2011). Many of the tables in this article contain means rather than medians (which are used in most of the Practice Study), since means are required for tests of statistical significance. We use a significance level ("p") of .01 instead of the more common .05 because the substantial number of variables in the survey increases the likelihood that the results could be affected by chance.

Net Income Level

Respondents were subdivided into three groups by net income, as in every previous Practice Study, to help identify differences among practices. Each net income group comprised about one-fourth of the respondents, with the other one-fourth omitted from these tables. Categories were the same as in the last two surveys, except that the lower limit of the low net income group was raised from $25,000 to $50,000. The resulting net income categories were high ($600,000 or more), moderate ($325,000-525,000), and low ($50,000-250,000).

The high net income practices reported about three times the number of case starts and gross income as the low net income respondents, yielding more than twice the net income per case (Table 9). High net income practices also showed significantly lower overhead rates, even with more than twice the number of full-time employees. There were no significant differences among the three income groups in terms of adult, third-party, or managed care patients or in annual hours worked, but the low net income practices were much less likely to offer third-party financing.

The difference in overhead rates could be at least partially explained by practice age, since newer practices tended to have higher expenses compared to income (see Part 1) and had far lower percentages in the high net income category than any other age group (Table 10). On the other hand, the oldest age group showed the highest percentage of low net income practices.

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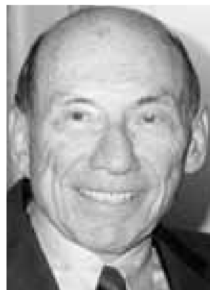
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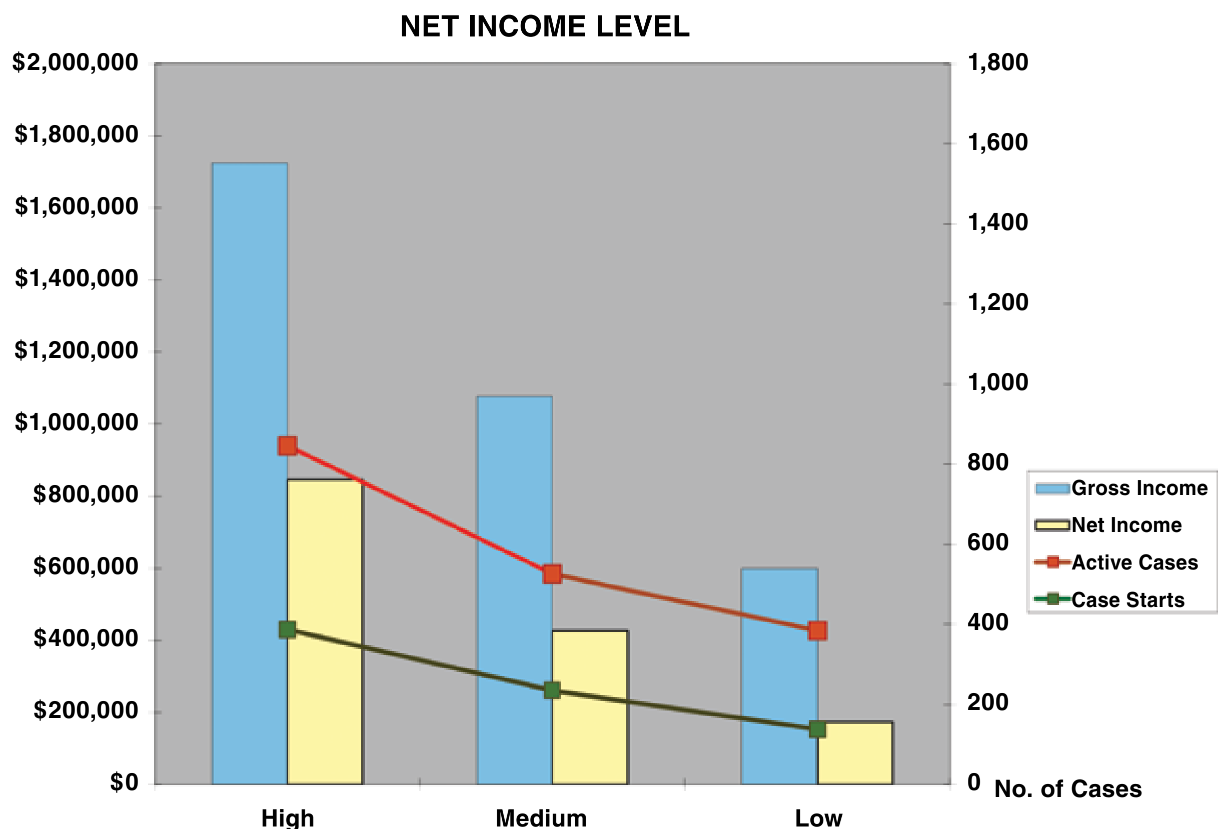


TABLE 9
SELECTED VARIABLES (MEANS) BY NET INCOME LEVEL

	High	Moderate	Low
Number of Satellite Offices	0.9	0.5	0.5
Full-Time Employees	8.0	5.9	3.8*
Part-Time Employees	1.8	1.5	1.3
Total New Patient Consults	576.4	375.6	197.3*
Case Starts	387.9	235.5	138.7*
Adult Case Starts	29.3%	22.1%	27.5%
Active Treatment Cases	846.5	526.4	385.0*
Adult Active Cases	26.1%	17.5%	25.7%
Patients Covered by Third Party	46.1%	47.5%	42.3%
Patients Covered by Managed Care	7.8%	7.6%	6.7%
Offer Third-Party Financing Plan	72.6%	73.3%	52.3%
Total Chairs	6.5	5.9	5.5*
Annual Hours	1,668.2	1,621.8	1,570.7
Patients per Day	62.8	52.1	35.6*
Emergencies per Day	3.4	2.9	2.1*
Broken Appointments per Day	4.2	3.4	2.6*
Cancellations per Day	3.9	3.2	2.1*
Gross Income	$1,723,380	$1,077,190	$598,840*
Overhead Rate	48.7	57.5	66.8*
Net Income	$846,145	$426,761	$173,602*
Net Income per Case	$1,276	$918	$614*

*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	9.1%	45.5%	45.5%
6-10 years	45.0	40.0	15.0
11-15 years	36.0	28.0	36.0
16-20 years	26.1	47.8	26.1
21-25 years	41.9	32.6	25.6
26 or more years	26.9	23.9	49.3

TABLE 11
NET INCOME LEVEL BY GEOGRAPHIC REGION

	High	Moderate	Low
New England (CT,ME,MA,NH,RI,VT)	30.8%	53.8%	15.4%
Middle Atlantic (NJ,NY,PA)	33.3	29.2	37.5
South Atlantic (DE,DC,FL,GA,MD,NC,SC,VA,WV)	34.4	28.1	37.5
East South Central (AL,KY,MS,TN)	75.0	12.5	12.5
East North Central (IL,IN,MI,OH,WI)	35.7	35.7	28.6
West North Central (IA,KS,MN,MO,NE,ND,SD)	41.7	41.7	16.7
Mountain (AZ,CO,ID,MT,NV,NM,UT,WY)	23.5	17.6	58.8
West South Central (AR,LA,OK,TX)	45.0	20.0	35.0
Pacific (AK,CA,HI,OR,WA)	16.1	38.7	45.2

TABLE 12
MEAN FEES AND FINANCIAL POLICIES BY NET INCOME LEVEL

	High	Moderate	Low
Child Fee (Permanent Dentition)	$5,366	$5,155	$5,149
Adult Fee	$5,798	$5,588	$5,474
2009 Fee Increase (Reported)	2.3%	1.9%	2.0%
2010 Fee Increase (Reported)	2.2%	2.3%	2.5%
Initial Payment	20.1%	24.9%	24.7%
Payment Period (months)	21.4	21.4	21.5

Geographically, the highest percentage of respondents in the high net income category was in the East South Central region, as in the past three surveys; as in the 2009 Study, East South Central practices also reported the lowest percentage of low net income respondents (Table 11). The highest percentages of low net income practices were in the Mountain, Pacific, Middle Atlantic, and South Atlantic regions.

High net income practices reported the highest mean fees and the lowest-percentage initial payments, but there were no significant differences in financial policies among the three groups (Table 12).

Management Methods

Respondents who used most of the management methods listed on the questionnaire reported more mean case starts than non-users did, but the differences were statistically significant only for dental management consultant and measurement of case acceptance (Table 13). Compared to past surveys, there may have been fewer significant

TABLE 13
MEAN CASE STARTS BY USE OF MANAGEMENT METHODS

	Used	Not Used
Written philosophy of practice	235.9	236.1
Written practice objectives	246.0	231.7
Written practice plan	215.3	240.8
Written practice budget	233.3	236.5
Office policy manual	237.5	228.8
Office procedure manual	241.9	229.4
Written job descriptions	237.7	233.7
Written staff training program	243.2	232.6
Staff meetings	240.9	207.1
Individual performance appraisals	245.9	221.0
Measurement of staff productivity	286.5	227.6
In-depth analysis of practice activity	266.1	222.6
Practice promotion plan	265.0	222.8
Dental management consultant	285.7	223.8*
Patient satisfaction surveys	264.0	218.4
Employee with primary responsibility as communications supervisor	263.3	225.9
Progress reports	238.7	234.6
Post-treatment consultations	223.7	241.6
Pretreatment flow control system	250.1	223.1
Treatment flow control system	258.3	227.2
Cases beyond estimate report	265.2	219.4
Profit and loss statements	241.7	215.8
Delinquent account register	237.0	231.5
Monthly accounts-receivable reports	236.0	235.5
Monthly contracts-written reports	252.8	216.7
Measurement of case acceptance	259.7	209.5*

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

differences because of a lower response rate; in addition, median case starts declined overall between the 2009 and 2011 Studies, which could further obscure any differences. In the current survey, practices that did not use written philosophy of practice, written practice plan, written practice budget, and post-treatment consultations showed more mean case starts than users did.

There were no significant differences in the use of management methods by net income level, but the high net income practices were more likely than the other two groups to use written practice objectives, office policy manual, office procedure manual, staff meetings, measurement of staff productivity, in-depth analysis of practice activity, practice promotion plan, cases beyond estimate report, profit and loss statements, and measurement of case acceptance (Table 14). On the other hand, low net income practices were more likely than the other two groups to use written practice plan, written job descriptions, written staff training program, patient satisfaction surveys, communications supervisor, post-treatment consultations, pretreatment flow control system, treat-

TABLE 14
USE OF MANAGEMENT METHODS BY NET INCOME LEVEL

	High	Moderate	Low
Written philosophy of practice	52%	53%	53%
Written practice objectives	31	27	27
Written practice plan	14	15	24
Written practice budget	14	17	11
Office policy manual	83	82	82
Office procedure manual	60	42	52
Written job descriptions	59	60	64
Written staff training program	31	25	37
Staff meetings	86	85	85
Individual performance appraisals	60	63	58
Measurement of staff productivity	19	10	12
In-depth analysis of practice activity	41	30	24
Practice promotion plan	36	28	33
Dental management consultant	17	22	15
Patient satisfaction surveys	40	32	41
Employee with primary responsibility as communications supervisor	24	25	35
Progress reports	28	35	30
Post-treatment consultations	24	30	33
Pretreatment flow control system	50	42	53
Treatment flow control system	34	25	35
Cases beyond estimate report	41	32	36
Profit and loss statements	81	78	80
Delinquent account register	78	77	88
Monthly accounts-receivable reports	83	83	91
Monthly contracts-written reports	60	50	61
Measurement of case acceptance	64	47	45

ment flow control system, delinquent account register, monthly accounts-receivable reports, and monthly contracts-written reports.

Delegation

Routine delegation of tasks to staff members (rather than delegating occasionally or not at all) was associated with greater mean numbers of case starts for every task surveyed, as in previous Practice Studies (Table 15). The divergence was not as pronounced as in the past, however, with only impressions for study models, cephalometric tracings, impressions for appliances, removal of resid-

TABLE 15
MEAN CASE STARTS BY DELEGATION

	Routinely Delegated	Not Routinely Delegated
Record-Taking		
Impressions for study models	239.3	134.7*
X-rays	239.9	145.7
Cephalometric tracings	259.3	207.1*
Clinical		
Impressions for appliances	247.2	152.4*
Removal of residual adhesive	262.0	213.6*
Fabrication of:		
Bands	261.8	198.0*
Archwires	247.9	227.7
Removable appliances	256.2	203.6*
Insertion of:		
Bands	268.4	211.0*
Bonds	293.9	221.2*
Archwires	253.9	203.6*
Removable appliances	260.5	225.5
Adjustment of:		
Archwires	260.5	229.1
Removable appliances	273.8	229.0
Removal of:		
Bands	251.0	205.2
Bonds	250.3	205.6
Archwires	241.4	194.6
Administrative		
Case presentation	251.1	226.7
Fee presentation	240.6	207.4
Financial arrangements	237.5	200.8
Progress reports	265.5	218.5
Post-treatment conferences	287.1	222.3
Patient instruction and education	233.1	227.8

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

ual adhesive, fabrication of bands and removable appliances, and insertion of bands, bonds, and archwires showing statistically significant differences.

High net income practices were more likely to delegate routinely than moderate or low net income practices were, but the differences were statistically significant only for insertion of removable appliances and progress reports (Table 16). Low net income practices reported more routine delegation than the other two groups only for insertion of bonds, adjustment and removal of archwires, and patient instruction and education.

TABLE 16
ROUTINE DELEGATION BY NET INCOME LEVEL

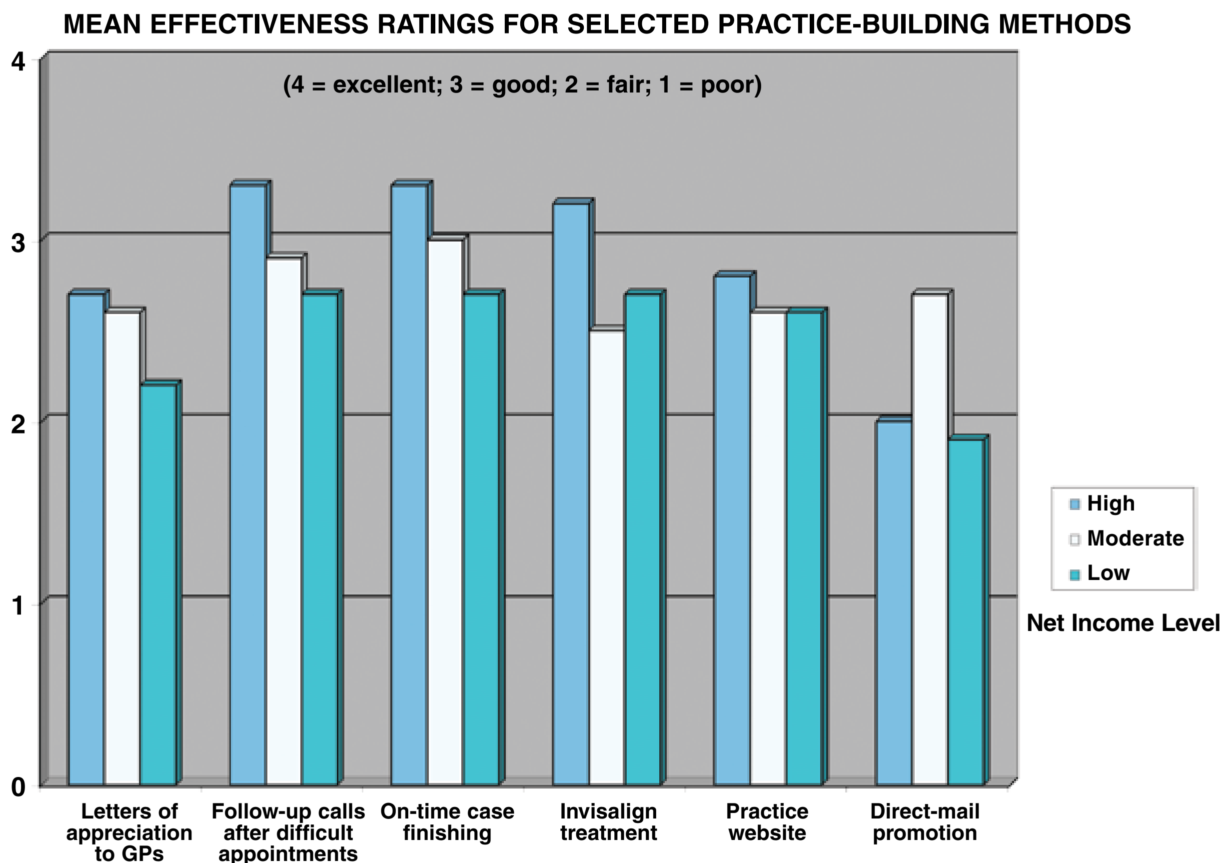
	High	Moderate	Low
Record-Taking			
Impressions for study models	95%	97%	91%
X-rays	95	98	93
Cephalometric tracings	44	46	31
Clinical			
Impressions for appliances	92	89	82
Removal of residual adhesive	36	46	32
Fabrication of:			
Bands	69	65	48
Archwires	42	30	31
Removable appliances	53	54	40
Insertion of:			
Bands	38	37	32
Bonds	14	10	15
Archwires	70	56	55
Removable appliances	31	19	27*
Adjustment of:			
Archwires	16	10	17
Removable appliances	17	3	14
Removal of:			
Bands	61	60	53
Bonds	61	64	53
Archwires	83	82	85
Administrative			
Case presentation	25	25	21
Fee presentation	78	77	75
Financial arrangements	90	90	88
Progress reports	46	25	16*
Post-treatment conferences	23	20	8
Patient instruction and education	93	89	94

*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	25%	3.5	28%	3.5	25%	3.0
Expand practice hours:						
Open one or more evenings/week	18	3.1	16	2.8	18	2.5
Open one or more Saturdays/month	4	3.0	16	3.0	8	2.0
Open a satellite office	33	3.4	36	3.2	18	3.1
Participate in community activities	57	2.5	62	2.4	62	2.5
Participate in dental society activities	41	2.3	60	2.1	62	2.2
Seek referrals from general dentists:						
Letters of appreciation	75	2.7	74	2.6	65	2.2
Entertainment	73	2.4	68	2.5	43	2.2
Gifts	78	2.4	82	2.4	75	2.2
Education of GPs	47	2.6	44	2.9	33	2.5
Reports to GPs	67	2.6	74	2.6	72	2.4
Seek referrals from patients and parents:						
Letters of appreciation	61	3.1	54	2.7	58	2.5
Follow-up calls after difficult appointments	63	3.3	70	2.9	68	2.7
Entertainment	27	2.9	26	2.4	20	2.5
Gifts	51	2.9	46	2.6	53	2.4
Seek referrals from staff members	59	2.2	50	2.1	52	2.0
Seek referrals from other professionals (non-dentists)	27	1.7	24	1.9	30	2.5
Treat adult patients	86	2.9	78	2.9	78	2.7
Improve scheduling:						
On time for appointments	75	3.2	70	3.1	70	2.8
On-time case finishing	71	3.3	60	3.0	62	2.7
Improve case presentation	55	3.3	50	3.0	47	3.0
Improve staff management	55	3.2	36	3.1	40	2.8
Improve patient education	53	3.0	46	2.8	52	2.9
Expand services:						
TMJ	18	1.9	14	NA	30	2.0
Functional appliances	22	2.3	14	NA	30	2.5
Lingual orthodontics	14	2.0	12	NA	15	2.1
Surgical orthodontics	45	2.4	38	2.5	30	2.2
Temporary anchorage devices	37	2.1	48	2.4	35	2.1
Invisalign treatment	65	3.2	64	2.5	60	2.7
Cosmetic/laser treatment	24	2.4	24	2.0	18	2.3
Patient motivation techniques	53	2.7	40	2.6	43	2.6
No-charge initial visit	86	3.0	90	2.9	87	2.8
No-charge diagnostic records	27	2.9	34	2.6	22	2.9
No initial payment	16	2.8	26	2.6	25	2.6
Up-front payment discount	88	2.3	74	2.5	85	2.5
Extended payment period	61	2.8	52	2.8	52	2.7
Practice newsletter	33	2.0	28	2.4	23	1.9
Practice website	84	2.8	78	2.6	67	2.6
Personal publicity in local media	27	2.2	24	1.8	23	2.3
Advertising:						
Yellow pages boldface listing	69	1.8	64	1.5	63	1.5
Yellow pages display advertising	31	1.7	28	1.6	43	1.6
Local newspapers	24	2.0	22	1.9	32	1.9
Local TV	16	2.3	6	NA	10	1.5
Local radio	22	2.6	4	NA	15	1.8
Online advertising	35	2.8	14	NA	23	2.7
Direct-mail promotion	25	2.0	16	2.7	23	1.9
Managed care	27	2.5	16	3.1	28	2.3
Affiliation with mgt. service organization	2	NA	0	NA	3	NA

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



Practice-Building Methods

As in every Practice Study for the past two decades, there were no significant differences among the net income groups in the use of practice-building methods (Table 17). Still, high net income practices were more likely than the other two income groups to report using letters of appreciation to, entertainment of, and education of GPs; letters of appreciation to and entertainment of patients and parents; seek referrals from staff members; treat adult patients; improve scheduling with on-time appointments and case finishing; improve case presentation, staff management, and patient education; expand services with surgical orthodontics and Invisalign treatment; patient motivation techniques; up-front payment discount; extended payment period; practice newsletter; practice website; personal publicity in local media; and advertising with yellow pages boldface listing, local TV and radio, online, and direct mail.

The practice-building methods rated most effective (higher than 3.0) by the high net income respondents were (from highest to lowest ratings): change practice location, open a satellite office, follow-up calls after difficult appointments, on-time case finishing, improve case presentation, on time for appointments, improve staff management, Invisalign treatment, open one or more evenings per week, and letters of appreciation to patients and parents. Conversely, the methods rated least effective (lower than 2.0) by the low net income practices were (from lowest to highest ratings): yellow pages boldface listing, advertising on local TV, yellow pages display advertising, advertising on local radio, practice newsletter, advertising in local newspapers, and direct-mail promotion.

(TO BE CONTINUED)